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**The Effect of Policy on Practice:
An Analysis of Teachers' Perceptions
of School Based Assessment Practice**

**A thesis submitted in partial fulfilment of the requirements for the
degree Master of Educational Administration at Massey University**

**Helen Dixon
1999**

I certify that the thesis entitled **The Effect of Policy on Practice: An Analysis of Teachers' Perceptions of School Based Assessment Practice** and submitted as part of the degree of **Master Of Educational Administration** is the result of my own work, except where otherwise acknowledged, and that this thesis (or any part of the same) has not been submitted for a higher degree to any other university or institution.

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ABSTRACT

Since 1990 the New Zealand education system has undergone a number of radical curriculum and assessment reforms with the official policy for teaching, learning and assessment now outlined in the New Zealand Curriculum Framework (NZCF) (1993). National Curriculum statements provide expanded formulations of this policy and together with the NZCF form the basis of teachers' practice. Contained within these policy documents are implicit and explicit notions related to the purposes and functions of school based assessment including assessment for learning and accountability. Within the New Zealand context there is now a substantial amount of evidence which shows that the implementation of assessment requirements has been problematic for both schools and teachers.

Drawing from the interpretive paradigm this thesis utilised a multi site case study approach, involving several replications of a single case study, to investigate the relationship between policy requirements and teachers' articulations of their assessment practice and the factors which shaped and influenced this practice.

In each of the school's in this study assessment had been both a critical issue for teachers and a focus for school wide professional development as teachers worked together collectively and collaboratively to effect and manage curriculum and assessment change. Dissatisfied with their preliminary attempts to set up assessment systems to support the national curriculum there was some evidence that teachers were attempting to define what constitutes good assessment practice. However professional attempts to initiate change had been tempered by the perceived expectations of external agencies such as the Education Review Office.

In attempting to meet school based requirements teachers engaged in both formative and summative assessment activity. However, while teachers attributed great importance to assessment and its potential to enhance learning, their practice was

dominated by summative activity. The domination of summative assessment activity could be attributed to both teachers' lack of understanding of formative assessment and to the meeting of external demands that were often in conflict with their personal beliefs, but monopolised their time and energy.

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CHAPTER ONE

INTRODUCTION TO THE STUDY

This chapter provides an introduction to the study through a brief examination of the researcher's interest and involvement in the area of assessment. The significance of and justification for the research is outlined and the research questions which guided the research endeavour are presented. The chapter concludes with a brief overview of each of the six chapters which make up the thesis.

The researcher's interest and involvement in the area under investigation

The idea for this thesis arose out of a continued interest and involvement in the area of assessment policy and practice. During twenty seven years spent teaching in the primary, special needs and tertiary sectors of education I had become aware of the complex and ever changing nature of assessment and the increased role it can play in both influencing learning and controlling teaching (Torrance, 1995). As a classroom teacher I held the belief, that if used appropriately, assessment information could play a key role in the enhancement of learning. As an assistant and a deputy principal I had the responsibility for developing and implementing school wide assessment procedures which aimed to enhance learning, monitor progress and report pupil achievement to a range of stakeholders. More recently over the past 7 years, as a lecturer at the Auckland College of Education, my involvement has been in the development and teaching of several assessment courses at both the pre-service and in-service level. Based on the assumption that teachers need to be more than competent practitioners skilled in assessment practice, these courses have addressed theoretical, ideological and methodological assumptions underpinning assessment policy and practice and have critiqued current policy developments in the area.

Additionally my teaching experience in the primary sector and my work with teachers at the in-service level has provided me with a number of close contacts with practising

teachers in a variety of schools in the greater Auckland area. In describing their endeavours to cope with the implementation of the curriculum and assessment reforms outlined in the New Zealand Curriculum Framework (1993), my colleagues provided me with a number of valuable insights into the day to day realities of their situations.

The combination of the following personal experiences: an increase in theoretical knowledge, a greater understanding of the ideological perspectives informing and influencing policy development along with first hand experience in trying to implement policy requirements and discussions with practising teachers, highlighted for me a number of very important issues. These included:

1. the concern voiced by policy makers and practitioners that there was some difficulty in implementing school based assessment requirements;
2. the conceptual difficulties inherent in implementing criterion referenced or standards based assessment as a means by which student achievement is interpreted and reported;
3. the fact that assessment requirements continue to increase as more of the essential learning areas are elaborated into multiple statements of achievement;
4. the fact that by using the results of student achievement to determine the effectiveness of schools, school based assessment had moved from a low stakes to a high stakes situation for teachers and schools.

Significance of and justification for the research

The policy related to curriculum and assessment as outlined in the New Zealand Curriculum Framework (NZCF) (1993), forms the basis of teachers' practice. The framework states that assessment should be an integral part of the curriculum with the primary purpose of school based assessment being to improve students' learning and the quality of the teaching programmes. Using a variety of assessment strategies teachers are required to assess knowledge, skills and attitudes and the learning

processes that children engage in as well as the final product. There is a requirement that the seven essential learning areas and eight essential skills be assessed and reported against achievement objectives. Through an external review process the Education Review Office determines how successful schools have been in assessing student achievement in comparison to the levelled achievement objectives.

However research has shown that the implementation of any policy initiative is dependent on the willingness and commitment of teachers to carry it out (Aikin, 1994), for it is the work of teachers that lies at the heart of successful implementation (Willis, 1994). Within the New Zealand context teachers have been faced with implementing assessment and curriculum policies that at a national level, they had little hand in developing (Sullivan, 1994). An emerging body of literature has shown that while teachers have accepted and taken on board the curriculum changes outlined in the curriculum framework, the new assessment requirements have caused tensions and problems for them (Baker, 1995; Renwick & Gray, 1995).

Therefore it is crucial that teachers have a broad understanding of assessment in its many facets (Broadfoot, 1992; Meadmore, 1995). However a number of studies have shown that ideological and theoretical assumptions underpinning assessment practice have been given scant attention. Rather, the typical focus has been on the development and implementation of a range of assessment methods (Blackmore, 1988; Willis, 1994). Thus in emphasising assessment methodology, teachers concerns are still sited within the classroom context. Yet if teachers are to forge links between learning, teaching and assessment they need to understand fully all aspects of the learning process. A deeper understanding of assessment extends the realms of the practitioner into the wider context within which assessment occurs. For this to occur, teachers must become competent practitioners who are not only able to appreciate the strengths and weaknesses of different forms of assessment but who also comprehend fully the theoretical links between learning, teaching and assessment as well as ideological assumptions informing assessment policy.

The proposed project set out to investigate the relationship between policy requirements

and teachers' articulations of their assessment practice. Teachers' perceptions of their current situation as well as the assessment practices they used were documented and contrasted against the stated purposes of assessment policy. In gathering the information in relation to these broad intentions it was hoped that teachers' understandings of the purposes and functions of school based assessment procedures would be identified as would the factors which shape and influence school based assessment practice.

The specific aims of the project

With regard to school based assessment I wanted to investigate ways in which schools and teachers were implementing current assessment policy requirements. The 3 major questions which underpinned the study were:

1. What do teachers perceive to be the main purposes of school based assessment requirements?
2. What uses are made of assessment information within the school setting?
3. What shapes and influences teachers' practice in the area of assessment?

Organisation of chapters

This thesis is divided into six chapters. Chapter one provides an introduction to the study through a brief examination of the researcher's interest and involvement in the area of assessment. The significance of and justification for the research is outlined and the specific questions which guided the research are identified.

Chapter two provides a critical review of the literature in three key areas: accountability in education, curriculum and assessment reform in New Zealand and the implementation of formative and summative assessment requirements.

The third chapter outlines the research process including both methodological and ethical issues. The methodology which guided this research is explained and justified.

A detailed description of the data collection methods used, their construction and the ways in which the data were analysed are included in this chapter.

In chapter four the results from the questionnaire phase of the data collection are reported. Results are reported both qualitatively and quantitatively under the broad headings of: school information; assessment requirements in schools; collecting, recording and reporting assessment information; implications of assessment requirements and finally, in-service training.

Chapter five is based on data from both the questionnaire and interview phases of the data collection. The data are presented as five themes: the professional development of teachers; competing conceptions of accountability; reflections on practice; the purposes and methods of assessment.

In the final chapter, chapter six, a summary of the major findings is presented. The high stakes nature of school based assessment is discussed, implications for formative practice are identified and recommendations for future research are outlined. Finally, the limitations of the study along with the significance of the research findings are considered.

The next chapter examines critically the research and literature in relation to educational accountability and formative and summative assessment. A brief overview of recent New Zealand educational policy is outlined and critiqued in regard to the theoretical and ideological assumptions underpinning its development and the implications for learning, teaching and assessment.

CHAPTER TWO

REVIEW OF LITERATURE

In this chapter the current study is placed within the wider policy context which has shaped and influenced curriculum development and delivery, and assessment policy and practice, both nationally and internationally. Literature has been reviewed and is presented under three main themes: accountability in education, New Zealand curriculum and assessment reforms and the implementation of formative and summative assessment requirements.

Theme one, accountability in education, examines critically the growth of the accountability movement within education. Several competing and conflicting conceptions of what form and function an accountability framework should take are presented. Finally, accountability is contextualised to the New Zealand situation and the work of the Education Review Office is critiqued.

Theme two provides a summary of recent curriculum and assessment reforms in New Zealand and locates these within wider social, political and economic contexts. Ideological and theoretical assumptions underpinning the reforms and their implications for learning, teaching and assessment form the basis of discussion.

Theme three considers the implications for schools and teachers of implementing formative and summative assessment requirements. It begins by focussing on the key distinction between the two and the role and merits of each. Significant attention is given to formative assessment and the part it can play in the enhancement of learning. The changing roles and responsibilities of teachers and learners within the process of formative assessment are outlined. Finally the ways in which current policy initiatives in this area have been implemented are critiqued and linked to the role of the teacher and the learner.

THEME ONE: ACCOUNTABILITY IN EDUCATION

The reconceptualisation of assessment in education

Over the last two decades assessment has taken on a high profile within the education system (Berlak, 1992; Gipps, 1994) and has been the focus of significant attention. Governments in many Western countries have taken a close interest in the ways in which assessment can both influence learning and control teaching (Torrance, 1993). The development and implementation of specific curriculum and assessment policies, both overseas and in New Zealand during the 1980s and 1990s, has led to a reconceptualisation of the role of educational assessment in teaching and learning. Consequently, assessment is no longer a taken for granted aspect of pedagogy but has been transformed (Dwyer, 1988), resulting in an increased emphasis on assessment practice (Bell & Cowie, 1997). Information gained from assessment is now intended to fulfil a number of purposes for a diverse range of stakeholders (Broadfoot, 1992; Gipps, op.cit.; Nuttall, 1986). Gipps (1994, p. 1) encapsulated this growing interest in assessment when she wrote *“there has been over the last decade an explosion of developments in assessment and a number of key actors have reconceptualised the issues.”*

In both global and local contexts, assessment is now being used as a major force to effect change in education (Codd, McAlpine & Poskitt, 1995; Gipps, Brown, McCallum & McAlister, 1995; Meadmore, 1995; Willis, 1992). Assessment is now considered as a means by which learning and teaching can be supported; as a way in which information can be gained about pupils, teachers and schools; as a selection and certification device; as an accountability procedure and as a mechanism which drives curriculum and teaching (Broadfoot, 1979, 1992; Gipps, 1994; Rowntree, 1989). In this current reconceptualisation it can be argued that assessment is positioned firmly in the domain of the state as assessment practice now yields information not only about the individual but also about the schooling system itself (Meadmore, 1995).

The growth of the accountability movement

In response to increasing economic and political concerns, educational accountability as a notion, has gained considerable international currency in recent years (Blackmore, 1988; Davis, 1998; Elliot, Bridges, Ebbutt, Gibson & Nias, 1981). Prior to World War Two, accountability had no special meaning within the context of education (Lacey & Lawton, 1981). However, a changing world economic climate, a down turn in economic growth and a declining pool of resources to be shared among an ever increasing population, coupled with a heightened concern about the purported aims and purposes of education has underpinned accountability debates. Thus, over the past thirty years, in an attempt to solve some of the problems facing education systems, governments in many Western capitalist societies have attempted to make schools and teachers more accountable (OECD, 1990).

The 1970s saw an erosion of public confidence in the expertise of the educational professionals to initiate and supervise educational reform (Blackmore, 1988). Supported by business corporations (Broadfoot, 1979) and fuelled by media coverage, mounting concern worldwide about the standards of education and the capacity of education systems to meet societal demands accelerated (Elliot et al, 1981). The 'Great Debate' on Education in the United Kingdom, initiated by the then Labour Prime Minister James Callahan, and the growing influence of the accountability movement in the USA, were in direct response to public criticisms of current education systems operating within those countries (Elliot, *ibid*). At the same time, with reference to the New Zealand context, it was noted that accountability as a notion was being introduced "...with increasing frequency into discussions on education." (Ewing 1977, p. 44).

Building on the arguments introduced in the early seventies, successive governments of a number of Western capitalist countries have required that their educational institutions become more accountable. Increased accountability mechanisms have been promoted as a panacea to perceived falling standards in education, failing economic conditions and the needs of a modern industrialised competitive economy

(Davis, 1998). It is well documented in the literature that today more than ever, a more highly educated populace expects more from its teachers and has greater expectations of its schools (OECD, 1990). This has culminated in a growing preoccupation internationally with school inspection and review (OECD, 1995). Furthermore, a more knowledge orientated economy has raised both the costs and benefits of school success with schools being held to account by a variety of stakeholders (Darling-Hammond, 1989; Wagner, 1989), so that currently the issue of educational accountability is arguably the most pressing and problematic issue facing schools today (Darling-Hammond, 1989, 1997).

The problematic nature of accountability

Accountability is now a term which is used widely in the literature about school effectiveness and teacher performance (Newmann, King & Rigdon, 1997). However, it appears that accountability is conceptualised in various ways, arising from diverse ideological perspectives (Blackmore, 1988; Darling-Hammond, 1989, 1997; Darling-Hammond and Falk, 1997). Much has been written in regard to what form and function an accountability framework should take. Various disparate, competing and conflicting conceptions of accountability exist, with little agreement as to the goals of education, much less any consensus on the standards employed in their evaluation (Wagner, 1989).

Blackmore (1988) identified a number of divergent and conflicting notions associated with various accountability frameworks. At one extreme is the notion of accountability associated with professional development, school improvement and collaborative decision making. At the other extreme accountability is affiliated with increased economic efficiency and effectiveness, educational consumerism and improved educational standards. As a result, tension and confusion exists between professional and bureaucratic forms of accountability (Blackmore, *ibid*) with conflicting issues arising associated with professional autonomy and public interest (Renwick, 1983). Accountability debates thus give rise to a series of questions such as: Why be accountable? Accountability to whom? Accountability for what? How can

accountability best be operationalised? (Darling-Hammond, 1989; Elliot et al, 1981; Macpherson, 1988; Wagner, 1989). D'Cruz (1977) has contended that answers to these specific questions provide a detailed picture of the accountability framework to be used.

Links between conceptions of teaching, learning and accountability.

Inextricably linked with one's notion of accountability, are detailed conceptions of what teaching and learning entails (Codd, 1993; Snook, 1993, 1994). Thus the way in which educational accountability is conceptualised, is dependent both on how teachers' work is defined (D'Cruz, 1977; Ingvarson, 1995; Snook, 1994) and on assumptions as to how that work can best be monitored and improved (Elliot et al, 1981; Darling-Hammond & Falk, 1997). Within a technocratic model the notion of pedagogy is construed as the science of teaching or instruction, representing a narrowly scientific view (Codd, 1993). Critics of such a view (Smyth, 1987; Snook, 1992; Tom, 1984) maintain that in reality, teaching is not a matter of following rules; that technical proficiency is not a sufficient basis for accreditation. Rather, they argue that moral and democratic principles must guide action so that teaching is approached in an informed and critical manner. Within the literature these competing and contradictory views of teaching, learning and accountability have often been presented as dichotomies. These include: technocratic-reductionist versus professional-contextual (Codd, 1993), economic versus ethical-professional (Blackmore, 1988), bureaucratic versus professional (Darling-Hammond, 1989, 1997) and managerial-contractual versus professional (Robertson, Thrupp, Dale, Vaughan & Jacka, 1997). While each of these dichotomies is informed by differing theoretical positions and explains a range of phenomena, there is a number of similarities and commonalities which help to explain the purposes of such accountability frameworks and the power relationships which exist between the accountability partners (Macpherson, 1998).

It has been argued that the central purpose of any accountability framework should be to improve teaching and learning (Snook, 1994). However, how this might be achieved within the two competing viewpoints differs markedly as each viewpoint is

underpinned by certain principles which guide and justify action (McDonald, 1990). Embedded within technocratic, economic and bureaucratic models of accountability is the need for schools and teachers to account to an external audience in regard to the outcomes of educational provision (Codd, 1993; Ingvarson, 1995). Integral to a professional or ethical model of accountability, is the assumption that the profession itself, through an internalised professional code of conduct and ethics, will provide an account of what is happening in regard to the processes involved in quality teaching and learning (Rae, 1993; Snook, 1994).

Technocratic, economic and bureaucratic models of accountability

Underpinned by the discourse of economic rationalism, teaching within a technocratic model is viewed as a technical or instrumental activity concerned with the more readily quantifiable, easily specifiable and clearly behavioural aspects of education. The teacher is considered to be a skilled technician, and good practice is reduced to a set of pre-defined skills or competencies with little or no acknowledgement given to the moral dimensions of teaching (Codd, 1993; Ingvarson, 1995). As Codd (*ibid*) has stated, learning is reduced to the observable and measurable with the curriculum designed to produce the attainment of specific learning outcomes. Of prime importance, are the products or outcomes of education (Blackmore, 1988; Rae, 1993; Snook, 1994), which can be by definition, empirically tested and publicly assessed (D'Cruz, 1977). In this way, accountability is associated with the measurement of student learning and is pursued through the rigorous assessment of students (Snook, 1994). Demands for accountability intend to secure, in a publicly demonstrable fashion, the achievement of quantifiable results.

Embedded within technocratic, economic and bureaucratic accountability frameworks, is the requirement that schools and teachers demonstrate their compliance to government policy or management objectives (Ingvarson, 1995). Thus accountability is achieved by inspections and reporting systems which monitor whether or not rules and procedures are being followed. Significantly, there are negative consequences for those schools who do not comply with standard procedures. Advocates of such

accountability models assume that the process of determining compliance will, if efficiently administered, produce the outcomes desired of the education system. Linked with the assumption that teaching is a purely instrumental act, is the belief that solutions to educational problems lie in more precise specification of educational and management processes. Of much lesser significance is the degree and effect to which these policies and procedures are put into practice (Thrupp, 1997). Thus the standard for accountability is compliance rather than effectiveness (Darling-Hammond, 1989) and is dependent upon contractual relationships between hierarchically ordered individuals (Ingvarson and Chadbourne, 1994).

Concerned with 'provider capture' and the ability of the profession itself to monitor its own activities, and coupled with the belief that school improvement will come about only with tighter public and governmental control in certain areas, proponents of such accountability models view external review processes as being the most beneficial to schools and their communities (Thrupp, 1998). The objectivity and independence of the external evaluator is given greater credence and precedence over reviews undertaken by practitioners themselves (Codd, 1993). Thus external review conducted by those in hierarchically superior positions, who by the nature of their work, do not have a vested interest in the outcome of any review process, is considered to be the most effective and efficient way in which schools can be reviewed (Boston, Martin, Palott & Walsh, 1991).

Professional-contextual, ethical-professional models of accountability

Much has been written in criticism of technocratic conceptions of teaching. Writers such as Smyth (1987), Snook (1992) and Tom (1984) have contended that such conceptions are simplistic and fail to take into account the many contingencies that prevail within the classroom and the mediating structures which determine learning. They argue that teaching and learning are complex processes which require teachers to have a broad grasp of schooling in a variety of contexts: social, cultural, moral, political, economic and ideological. Supporters of professional and ethical approaches to teaching and learning believe that teaching must be approached in an informed and

critical way. As Codd (1993) has noted, the early work of Dewey (1933) and more latterly the works of Stenhouse (1975), Schon (1983, 1987) and Elliot (1991) have influenced contemporary educational thought by drawing attention to the relationship between reflective thought processes and action. This has resulted in a move to an advocacy for reflective practice. The reflective practitioner, through a process of critical self evaluation, is expected to integrate theory and practice (Calderhead & Gates, 1993; Codd, 1993; Valli, 1992). This it has been argued, will provide the moral base from which teachers can consider the implications of their professional decision making (Battersy 1988, cited in Turnbull, 1997).

If teaching is conceptualised in this manner, then schools and teachers need to be able to provide an accurate account of their activities. Additionally, they must be willing and able to modify these activities in light of critical discussion that such an account might generate (Elliot, 1992). More specifically, schools should be accountable for such aspects as ethical standards, their treatment of children, the ethos of their schools and classrooms, their professional standards and their ability to enhance teaching and learning (Snook, 1994). Therefore, to be accountable in a professional, ethical or moral sense goes far beyond measuring student learning and complying with standard policies and procedures. As Ingvarson (1995) has stated, aggregated student outcome measures are neither a valid nor useful basis for evaluating the quality of the learning opportunities which schools provide or how they could be improved. Ultimately accountability mechanisms should focus on the quality of the learning teaching experiences a school provides to all students (Ingvarson, *ibid*), for until schools and teachers are able to do this, changes to teaching will not occur (Darling-Hammond & Falk, 1997; Darling-Hammond, Wise & Klein, 1995; Davis, 1998).

Subsumed within a professional accountability model, is the belief that since teachers' work is too complex to be prescribed and controlled hierarchically, it must be structured in a way that enables practitioners to make responsible decisions, both individually and collectively (D'Cruz, 1977). The ongoing review of practice by teachers themselves underpins this model. Of importance, is the need for teachers to engage in continuous dialogue about problems of practice. Additionally, teachers

must be charged with the authority to make decisions based on their collective discoveries. Thus increased accountability will be achieved if structures which allow for meaningful evaluation, multiple opportunities for professional development and ongoing review of practice are in place (Darling-Hammond, 1989, 1997; Newmann, King & Rigdon, 1997).

The New Zealand context: The move toward managerial and contractual accountability frameworks

The 1989 Education Act saw the New Zealand education system radically restructured as specific administrative functions were decentralised and schools became self managing units (Codd, 1998; Jesson, 1995). However, in the decade since, teachers have experienced a greater amount of managerial control and accountability at the school level (Codd, *ibid*) as new forms of surveillance have emerged (Codd, 1993). These new forms of accountability have been in response to criticisms of the teaching profession by groups such as the Treasury, the State Services Commission and the Business Roundtable (Codd, 1998; Sullivan, 1994). Incoming Treasury briefs to three successive governments (1984, 1987 and 1990) were critical of teacher performance arguing that education had become subject to 'provider capture' (Sullivan, 1994). The teaching profession itself was considered to have created a monopoly situation which had insulated them from market forces and consequences which in turn had resulted in inefficiency and underperformance (Sullivan, *ibid*). To combat this notion of 'provider capture,' external review by an independent agency was considered to be the most appropriate way in which the teaching profession could be called to account (Thrupp, 1998).

Established in October 1989 and initially named the Review and Audit Agency, the Education Review Office (ERO) was one of a raft of crown agencies set up under the Tomorrow's Schools reforms to ensure that there would be increased accountability at the pre-tertiary level (Codd, 1998). Charged with the responsibility to monitor and review the performance of educational institutions, the Education Review Office has required schools to undergo external audit as well as develop a series of managerial

checks. In this way a particular conception of accountability, that links to external demands for managerial control has been advocated, which in turn has undermined teacher confidence and has led to the deprofessionalising of teachers (Irving, 1995; Sullivan, 1994).

The Education Review Office

Charged with the responsibility to monitor and review the performance of educational institutions and teachers, ERO has aimed to provide a range of evaluative reports to core stakeholders in education (Austin, Edwards & Parata-Blane, 1998). Nearly a decade after its inception, ERO holds a monopoly position where it is now viewed by a number of these stakeholders as the ultimate arbiter of acceptable practice, and in this way has been the driving force in bringing a managerial / contractual accountability discourse into schools (Clark, 1998; O'Neill, 1998; Robertson, Thrupp, Dale, Vaughan & Jacka, 1997).

Since 1990 the work of ERO has been informed by public sector management strategies, as advocated by the Treasury and the State Services Commission (Codd, 1994). These strategies have been enforced further by legislation, with both the Public Finance Act (1989) and the Public Finance Amendment Bill (1992) specifying particular provisions relating to the accountability of schools. As a number of writers have noted (Codd, 1998; O'Neill, 1998; Robertson et al, 1997) these provisions moved the review of schools from a process orientated procedure to a results orientated one. As Codd (1994) has argued, ERO, under the stewardship of the Chief Executive Officer Dr Aitken, has been strongly influenced by the ideology of economic rationalism. Promoting a technical decontextualised view of what makes an effective school, school performance has been reported in relation to outputs, contractual compliance and the attainment of specific outcomes (Thrupp, 1997). Increasingly, ERO has placed greater emphasis on the relationship between student achievement and school effectiveness (Robertson et al, 1997).

Consistent with the managerial doctrine of the need to account to an external audience

in regard to the outcomes of educational provision, ERO has emphasised the external inspection of schools rather than self review (Thrupp, 1998). During the period 1990 to 1997 this involved two different types of review of school performance: Assurance Audits and Effectiveness Reviews. Both types of review have reflected a technicist discourse (Thrupp, *ibid*), limiting the scope for the exercise of professional judgement and discretion, thus replacing professionalism with managerialism and contractualism (Robertson et al, 1997).

Assurance Audits have required schools to demonstrate their compliance with particular contractual obligations and regulations, including the quality of service delivery, with the focus on the existence of adequate policies rather than how they have been operationalised. Under these terms of reference a 'good' school is one which has documented fully their policies and procedures (Robertson et al, 1997). Of concern to a number of researchers, and indeed some review officers themselves, has been the fact that while assurance audits demonstrate contractual compliance they can not "*... guarantee that the child in the classroom is getting taught properly or that the school is even a safe environment.*" (Thrupp 1997, p.147).

Effectiveness Reviews have required schools to evaluate the impact of their teaching and management practices on student achievement. Prior to a review beginning, as part of the documentary process, schools prepare an achievement statement, identifying what counts as achievement and any barriers to learning that might exist (Austin et al, 1998; Robertson et al, 1997; Thrupp, 1997). During the review visit ERO teams collect evidence of student achievement in terms of both standards and progress, the provision of learning opportunities, the quality of systems, policies and practices and the relationship between these aspects of school performance (Robertson et al, 1997). Again this has been achieved through thorough inspection of records, with only limited observations of actual classroom practice. As Robertson et al (1997) commented, records and limited observations are regarded as sufficient indication that good practice exists and students have received their entitlement. Superior records are equated with superior teaching and the absence of full record keeping indicates that teaching is sub standard. Renwick and Gray (1995), in their

study, found that teachers were perturbed with what they perceived to be ERO's excessive and inappropriate attention to record keeping. This concern was exacerbated by what teachers perceived to be the limited amount of time reviewers spent observing in classrooms. Of concern to these teachers was the tendency of reviewers to comment on the appropriateness of programmes based on planning evidence rather than on evidence gained from the observation of teaching and learning episodes.

A further confounding factor for schools has been ERO's emphasis on the need to provide quantitative rather than qualitative data. Assuming that the central tasks of teaching can be measured and that measurement demonstrates teachers' contributions to pupil achievement, school effectiveness and increased accountability, ERO have been concerned that schools show they have 'made a difference.' Austin et al's (1998) report revealed that many practitioners believed that ERO's fixation with quantitative assessment data was too narrow to evaluate a school's effectiveness in terms of student achievement. Furthermore practitioners were critical of what review officers believed to be valid data in the assessment of curriculum objectives.

The stressful and negative impact of ERO's external inspection practices on teachers' personal and professional lives has been documented in a number of studies (Austin et al, 1998; Renwick & Gray, 1995; Robertson et al, 1997; Yeoman, 1995). In meeting the demands of ERO, schools and teachers have been faced with a number of professional dilemmas, none of which is easily resolved due to the significant impact ERO has on a school's ability to compete in an educational marketplace (Thrupp, 1997, 1998). Within the confines of the school, stress has been created by the perceived need to make the work of teachers visible, often through the provision of a variety of records, and at the expense of improving teaching and learning. Indeed Robertson's work provided some evidence that ERO's approach to school review encouraged schools to direct their energy towards meeting compliance regulations rather than working towards genuine educational improvement, that is as judged in relation to educational rather than managerial criteria. This has resulted in some schools putting on a show that was not typical of their normal activities.

It has been reported in many cases that teachers' apprehension levels have also increased as a consequence of the final report that a school receives, for the report, once confirmed, is public property (Austin et al, 1998) and is often considered to be a signal of the quality of the school (Thrupp, 1997). Based on the belief that the public has a right to know about the performance of schools, ERO has made reports available to a number of interested stakeholders, including the Ministry of Education and the media (Austin et al, 1998; Robertson et al, 1997). As Austin (ibid) noted, lists of confirmed reports are made available to the media at the end of each month. The sensationalisation of reports by the press, who have often reported results in a fragmentary way, emphasising the negative rather than the positive aspects of school performance, has been a major cause of concern and trauma to schools (Austin et al, ibid; Robertson et al, ibid) with a number of schools falling into a spiral of decline as a result (Thrupp, 1997, 1998).

In this way the review of school performance has created an atmosphere of 'fear of failure' rather than the 'demonstration of success' (Robertson et al, ibid) with the publication of final reports having had significant high stakes and long term consequences for school communities. It is, therefore, in a school's interest not to disclose problems and concerns (Thrupp, ibid). Robertson et al (1997) see this model of accountability, as advocated by ERO, as one of low trust; one which fails to take into consideration the ethic of professional responsibility which has been central to New Zealand teaching for more than forty years. As Sullivan (1994) has argued, accountability in itself is not the problem for teachers, rather it is the way in which it is interpreted and the context in which it is set which becomes problematic. The external review of teachers' work and the public reporting of such reviews has generated and amplified a sense of low trust in teachers' work, which in turn, has undermined public confidence in the teaching profession and teachers' confidence in their roles and the values ascribed to them (Irving, 1995; Sullivan, ibid). As a result teachers have experienced a lack of control over what they have traditionally perceived as important and valued aspects of their work. In an attempt to meet current external accountability requirements they have internalised particular discursive practices, many of which they themselves do not consider relevant to the improvement of

teaching and learning, but which they perceive to be imperative to their school's continued survival.

Summary of theme one: Accountability in education

Much has been written in regard to what form and function an accountability framework should take, with various disparate, competing and conflicting conceptions of accountability proposed. Inextricably linked with the notion of accountability are conceptions of what teaching and learning entails, how teachers' work is defined and how that work can best be monitored and improved. At one extreme is the notion of accountability associated with professional development and school improvement. At the other extreme accountability is associated with increased economic efficiency and effectiveness, contractualism, educational consumerism and improved educational standards.

Within the New Zealand context the requirement by the Education Review Office that school performance be reported in relation to outputs, contractual compliance and the attainment of specific outcomes, has limited the scope for professional judgement and has replaced teacher professionalism with managerialism and contractualism. Such a model is one of low trust and fails to take into account the ethic of professional responsibility which has been central to New Zealand teaching for more than forty years.

THEME TWO: NEW ZEALAND CURRICULUM AND ASSESSMENT REFORMS

The 1982 OECD Review of New Zealand Education

A 1982 review of New Zealand educational policy and provision carried out by the OECD, found that generally, parents, citizens, employers and workers were pleased with the compulsory schooling sector. The most significant values informing educational provision and practice appeared to be: equality of treatment,

multiculturalism, consultation and participation, individual freedom and social justice. The report acknowledged and drew attention to the fact that education was considered to be a priority distinct from economic and instrumental values (Dale, 1990). Implicit within the review were assumptions related to what was considered desirable for state education to achieve (mandatory) and what was considered feasible for it to achieve (capacity). In the years following this review many educationalists have argued that there has been a significant narrowing of the scope of state education in New Zealand, with both mandate and capacity to provide being clearly and wittingly reduced (Dale, 1990; Dale & Jesson, 1992; Grace, 1990; Lauder, 1990).

The dual crises of capital accumulation and legitimation

The ascendancy of the political Right in many nations has led to an activist project of conservative politics being implemented. As Apple (1992) has contended, domination by the Right has caused a breakdown in the accord that previously guided a good deal of educational policy. He has argued that powerful groups from the government and the economy have been able to redefine the terms of debate in education, social welfare and other areas of common good, challenging their fundamental purposes. In doing so the Right have been successful in placing the blame for societal ills and economic crises on the education system. In New Zealand the 1984 election of Labour to government, began the rise of economic rationalism which sought to change the relationship between the state, the economy and society (Codd, 1998; Lauder, 1990).

Hargreaves (1989) has maintained that government led strategies for educational reform are the manifestation of wider social crises which direct the state toward particular kinds of policy responses. Thus crises that originate within cultural, political or economic spheres reverberate throughout different parts of the state and in due course produce powerful effects in shaping educational policies. Analyses of the recent reforms in New Zealand, have shown that they have been shaped by crises of political legitimation and economic management (Dale, 1990; Grace, 1990; Lauder, 1990).

The wider policy context

From a critical perspective, policy can be defined as “*any course of action relating to the selection of goals, the definition of values, or the allocation of resources*” (Codd 1988, p.235). Underpinned as it is by particular ideological assumptions, policy is essentially political in nature, for policies often have the purpose of changing social arrangements and contain within them expressions of various values (Jesson, 1995; Sullivan, 1997). Thus the process of selection within a curriculum is a site of political conflict as various groups compete for control over what is to count as official knowledge, what is selected, what is excluded, why certain decisions are made and what frameworks are used (Apple 1993, cited in Mansfield, 1995). In essence policy is about the exercise and legitimisation of power as it is used to develop the ‘desired’ social and political outcomes (Codd, 1988).

Traditionally, policy formation and implementation in New Zealand had been informed by liberal humanist ideological thought (Massey, 1995) and was therefore interventionist by nature (Codd, Gordon & Harker, 1990). However, faced with a crisis of capital accumulation and legitimation, the state endeavoured to address problems of fiscal management and political legitimation. Attempts were made to both reduce and contain government expenditure and produce educational policies which would address legitimation problems. As Dale and Jesson (1992) have noted, post 1984 educational reforms were not in direct response to specific criticisms of the education system. Rather, they need to be viewed as part of wider economic and political reforms which have centred on a programme of widespread economic deregulation and the curtailment or commercialisation of state activities.

Since 1984 the New Zealand Treasury has become the most powerful bureaucratic influence in state policy making, with their advice taking precedence over advice from any other government departments (Codd, 1998; Dale, 1994; Marshall, 1994; Snook 1994b). In education, as in other spheres of policy making, the major impetus for change came from Treasury. The Treasury’s 1987 Brief to the Incoming Government, *Government Management Vol. II: Education Issues*, outlined proposed

policy, specifically in relation to education and as Codd (1993, 1998) has noted, this document was underpinned by the doctrines of economic rationalism. It was argued that 'falling standards' and 'rising mediocrity' in education were threatening the future of the nation; therefore radical changes needed to be made (Olssen & Morris Matthews, 1995). In the promotion of such arguments, it was obvious that the Treasury had embraced all the shibboleths of the New Right: a reduction in state expenditure, increased privatisation of education and increased competition between educational institutions (Lauder, Wylie, Parker & Tauroa, 1990). Underpinning the proposed changes was the assumption that monetarist solutions were the only viable response to the economic problems faced by the government (Jesson, 1988).

Assessment policy directions 1990-1995

Since 1987 the New Zealand education system has undergone a radical change in a number of areas. It has been well established in the literature that these were informed by a range of ideological positions (Blackmore, 1988; Codd, McAlpine & Poskitt, 1991; Willis, 1992). Initially these changes related to the decentralisation of administration with the former bureaucratic structures dismantled and the introduction of independent self managing schools (Codd, McAlpine & Poskitt, 1995). Within this decentralisation there has been particular emphasis on more managerial control and accountability at the school level (Codd, 1998). In addition, from 1990, a second phase of educational reform occurred. Based on certain assumptions about the nature of learning, the role of the teacher and the purposes of assessment, and driven by the National Government's Achievement Initiative, these reforms have been concerned with curriculum and assessment (Codd, McAlpine & Poskitt, 1995).

The policy directions articulated in the Achievement Initiative (1991) and the New Zealand Curriculum Framework (1993), are clear examples of how political and economic conditions have shaped curriculum and assessment policies for compulsory schooling. Underpinned by the discourses of economic rationalism and corporate managerialism (Broadfoot, 1992; Codd, 1998; Meadmore, 1995), these documents illustrate the shift from liberal humanist to technocratic ideology. The language used

in these documents has shifted from an educational discourse focused on the notion of equal opportunity to a discourse emphasising technical notions of efficiency, competition and consumer choice (Massey, 1995).

A number of writers (Ball, 1993; Codd, 1988, 1992, 1993) have argued that language is more than a medium for transmitting ideas; rather it is a form of social practice which produces real social effects. In this way language becomes discourse, shaping what can be said and thought, by whom. In these terms positions are constructed within policies and the only possibilities of response may be through the language, concepts and vocabulary which the discourse makes available. Policy documents produced for and by the state are instances in which language serves a political purpose, constructing particular meanings and signs which work to mask social conflict and foster commitment to the notion of universal public interest (Codd, 1988).

Meadmore (1995) has argued that language and vocabulary are critical to the successful implementation of any policy initiative. She contends that it is crucial that policy statements contain vocabularies for making a programme thinkable and manageable. Language and vocabulary are tactics for the building of desires, the enlistment of cooperation and the adjustment of choice. Indeed the successful implementation of any policy is dependent on the willingness and commitment of teachers to carry it out (Aikin, 1994; Broadfoot, Osborn, Panel & Pollard, 1996; Dwyer, 1998). Aware of this, the Ministry of Education has been careful to ensure that the curriculum and assessment changes outlined in the New Zealand Curriculum Framework, represented a desirable move. The language used has distanced the policy from norm referencing, with the new forms of teaching, learning and assessment introduced under the guise of standards based teaching and criterion referenced assessment (Elley, 1995).

The Achievement Initiative

In 1991, a report entitled 'Upgrading New Zealand's Competitive Advantage' was

released. Funded by the Trade Development Board and supported by the New Zealand Treasury and the Reserve Bank, the report made direct links between New Zealand's economic growth (or lack of it) and the education system. Critical of the liberal humanist ideology which had influenced policy development in the 1970s and 1980s the report considered New Zealanders to lack motivation and the competitive edge necessary for future economic development (Crocombe, Enright & Porter, 1991) Furthermore, the authors of the report believed that there had been a mismatch between those skills needed to upgrade the economy and those provided by the current education system (Codd, McAlpine & Poskitt, 1995). Therefore, it was argued that to recover economically, New Zealand would need to make significant changes to its education system and New Zealanders would need to change their attitudes towards competition and management. This report was to become the ideological buttress for launching the Achievement Initiative (Peters, 1992).

In April 1991 the National Government announced the Achievement Initiative as a key educational policy. This provided the policy umbrella under which the majority of government sponsored assessment and curriculum developments have taken place (Willis, 1992). With the launching of this policy came the claim that the government had made a strong commitment to provide a clear direction for those involved in schooling and to improve levels of achievement in schools (Codd, McAlpine & Poskitt, 1991). The policy identified three main elements:

- 1. the establishment of clear achievement standards for all levels of compulsory schooling, first in the basic subjects of english, mathematics, science and technology, and later other subjects;*
- 2. the development of national assessment procedures at key stages of schooling, by which the learning progress of all students can be monitored in those basic subjects;*
- 3. the allocation of resources to schools to meet particular learning needs. These needs may be of those of underachieving students, or those of exceptional ability. The allocation of resources to schools will include provision for teacher development programmes.*

(New Zealand Education Gazette 1991, p.1)

Assessment was seen as a key component in the successful implementation of this

policy. It was stated explicitly that assessment information would provide essential information, not only about the success of individual students but also about the success of schools in achieving the given objectives. Implicitly stated, was the assumption that achievement levels were below those of other nations, therefore to achieve excellence and raise the standards of educational achievement, schools and teachers needed to be more accountable. Within this framework, assessment was promoted as a panacea; more extensive and systematic forms of assessment would produce higher standards of achievement (Codd, McAlpine & Poskitt, 1995).

The New Zealand Curriculum Framework (NZCF)

As a result of the Achievement Initiative, the New Zealand Curriculum Framework (NZCF) was produced. Launched in April 1993, this document, along with a series of supporting statements, now known as the National Curriculum, is the official policy for teaching, learning and assessment in New Zealand schools, covering all years of schooling from years 1 to 13. Under the terms of the Education Amendment Act (1991), these documents are defined as the national curriculum statements.

The NZCF specifies the seven essential learning areas which describe in broad terms, the knowledge and understanding which all students need to acquire, as well as the eight essential skills to be achieved by all students. Each curriculum document provides a structure of objectives in eight clearly defined levels for each strand of a subject. As Elley (1993) has argued, this is the hallmark of the reformed curricula, a clearly specified progression in each essential learning area. The ideology of economic rationalism has thus produced a technocratic discourse resulting in a reductionist conception of learning and achievement where knowledge is reduced to observable behaviours and student achievement reduced to pre-defined skills and competencies (Clark, 1998). In this limited conception of teaching and learning all areas of learning are designed to produce the attainment of achievement objectives with effective teaching judged against the attainment of those outcomes.

In each of the national curriculum statements the achievement objectives are the levels

of achievement or standard to be reached and teachers are required to assess and report student progress in relation to these. This form of assessment is often referred to as standards based assessment, a particular form of criterion referenced assessment where pupil performance is judged against a pre-specified level of achievement known as a standard (Peddie, 1992).

First advocated by Glaser in the early 1960s, criterion referenced assessment is one of the two basic ways in which pupil performance can be interpreted. Simply, criterion referenced assessment can be defined as assessment which is designed to provide a measure of performance that is interpretable in terms of a clearly defined and delineated domain of learning (Gronlund & Linn, 1990). However while criterion referencing has the advantage of separating a student's performance from his or her peers (Griffin & Nix, 1991) its use can be problematic for a number of reasons. Clearly defining and delineating a domain of learning has often led to criteria being specified in great detail (Gipps, 1994; Griffin & Nix, *ibid*). This in turn has led to the fragmentation of what is to be learned into trivial, often unrelated and incoherent sets of skills which are measurable but may have little relevance to what is being taught and little formative use for either the learner or the teacher (Griffin & Nix, 1991). Furthermore, as writers such as Gipps and Elley have noted many complex cognitive activities are not able to be reduced to clearly defined performances and therefore may be neglected in favour of low order thinking skills which are easier to specify and assess. Darling-Hammond (1994) has provided evidence from the United States which has shown that an emphasis on outcome driven teaching has led to less emphasis on higher level thinking skills.

Popham (1987), one of the greatest advocates of criterion referenced assessment, has retracted most of his former enthusiasm for the clear specification of objectives and now argues in favour of a few broad objectives. Broad objectives however, would have to be by necessity general and thus open to interpretation. This then will limit the validity and dependability of assessment results since the more general criteria the greater difference there will be in interpretation (Gipps, 1994). This is of particular significance if the results of such assessments are to be used for high stakes purposes

(Elley, 1995) such as for comparison between schools, teachers, cohorts or for reporting to stakeholders such as Board of Trustees, the Ministry of Education, the Education Review Office and parents.

Analyses of a number of the current curriculum documents has revealed that many of the achievement objectives are unclear and ill defined and very open to teacher interpretation. As Elley (1995) has noted, the majority of achievement objectives do little more than describe the criteria to be applied and there is little reference to the standard to be attained or to the degree of competency necessary to be accredited with reaching the standard. The decision as to whether or not a pupil has reached the standard is very much left to the teacher's discretion. This can only lead to inconsistent assessment across teachers and schools, affecting the dependability of results (Elley, 1993, 1995).

Finally, the framework outlines five contexts in which assessment will occur: school based, key transition points, records of school achievement, national monitoring of standards and assessment for qualifications. The document states that assessment is to be carried out for a number of purposes, identifying both formative and summative functions. These functions are presented as complementary.

The formative and summative functions of assessment

A number of writers (Broadfoot, 1992; Gipps, 1995) have maintained that the various purposes of educational assessment function in two distinct ways: one which is essentially formative in nature, the other essentially summative. The formative function of assessment is related directly to the cognitive processes involved in learning and is concerned with promoting and enhancing learning as learning occurs. Action and feedback are necessary components of such assessment for it is these components that will improve and accelerate learning (Bell & Cowie, 1997; Sadler 1989; Torrance, 1993). Used formatively, assessment can be utilised for curriculum purposes (Broadfoot, 1992) and aims to provide assessment information for use within the classroom (Gipps, 1995). The primary function of this type of assessment

is to enhance learning and teaching (Codd, McAlpine & Poskitt, 1995) through the creation of a learning environment responsive to student need. To fulfil this formative function assessment must be, by necessity, an indivisible part of the learning teaching process.

Distinct from this formative function, is a summative one where assessment is utilised primarily for communication purposes and is used in more structural terms (Broadfoot, 1992). The summative function of assessment is more concerned with the measurement and reporting of achievement, often to meet certification and accountability requirements (Black, 1986). The focus is on providing information on the outcomes of learning to those stakeholders outside of the classroom who want to know about the success of individuals and groups within the education system (Broadfoot, 1992; Gipps, 1995).

School based assessment

Within the curriculum framework the section on school based assessment (NZCF 1993, p. 24) indicated clearly that it was intended that information gained from assessment was to be used to both enhance learning (the formative function of assessment) and to communicate progress to a range of stakeholders (the summative function of assessment):

“ Assessment of individual students’ progress is essentially diagnostic. Such assessment is integral to the learning and teaching programme. Its purpose is to improve teaching and learning by diagnosing learning strengths and weaknesses, measuring students’ progress against the defined achievement objectives, and reviewing the effectiveness of teaching programmes. This information which teachers record from these assessments enables clear profiles of individual students’ achievement to be built. These profiles are used to inform teachers about each student’s learning and development and to provide the basis for feedback to students and parents.”

(Ibid)

This ignores a body of literature which argues that one set of assessment information used for two or more purposes, causes problems and tensions in the kinds of results and reporting it demands, the use to which results are put and the conditions under

which assessment is administered (Broadfoot, 1988; Crooks, 1988; Gipps, Broadfoot, Dockerell, Harlen & Nuttall, 1992). Such issues are exacerbated when assessment procedures that attempt to combine a formative and summative function are encouraged. In the United Kingdom, where policy promoted the combination of the two, the failure in practice to achieve this aim has been well documented (Davis, 1998).

The impact of the New Zealand Curriculum Framework on teaching, learning and assessment

The implementation of a National Curriculum in England and Wales has been a focus of much educational attention, with a number of studies providing ongoing reports (Gipps, Brown, McCallum & McAlister, 1995; Gipps, McCallum, Brown & McAlister, 1996; McCallum, Gipps, McAlister & Brown, 1995). Cognizant of similarities between the ten level UK model and eight level model outlined in the NZCF, some New Zealand policy makers and advisers (Irving, 1992; NZCF, 1993) believed that New Zealand was well placed to learn from overseas experience and thus avoid some of the pitfalls of over reliance on narrow tests which could trivialise learning and drive the curriculum. Other commentators argued however that the problems and issues that arose in the United Kingdom should be a warning to New Zealand that the way ahead would not be without problems, especially since there had been no substantial research on children's learning to support the level structure (Elley, 1993; Smythe, 1996).

Until recently, there has been little acknowledgement of the relationship between learning and assessment and the effects that each has on the other (Gipps, 1994). Recognising the reciprocal relationship between the two, a number of writers in New Zealand have argued that the NZCF curriculum and assessment model based on successive pre-specified levels of achievement, is behaviourist and reductionist in its approach and will have a negative effect on teaching and learning (Elley, 1993, 1995; Smythe, 1996). In designing a curriculum based on learning progression it has been argued that the curriculum is viewed as a distinct body of knowledge which can be

transmitted to the learner, virtually ignoring the question of how children learn (Brehony 1990, cited in Aikin, 1994). In attempting to define knowledge as a logically sequenced package, curriculum developers have either forgotten or ignored the fact that often an increase in knowledge growth is individual and idiosyncratic to the learner (Elley, 1993; Gipps, 1994).

Behaviourist approaches to learning, teaching and assessment

Traditional instructional theory, based on behaviourist assumptions about learning, assumes that knowledge and skills can be analysed into component parts that function in the same way independent of the context (Resnick, 1989 cited in Gipps, 1994). Furthermore, learning is seen as linear and sequential; complex understandings only occur when pre-requisite learning has been mastered. Critics of such an approach (Gipps, 1994; Shepard, 1991, 1992) have argued its inappropriateness; knowledge learned in such a way has little meaning for the learner, is only retained in the short term and cannot be applied, generalised or retrieved.

A major assumption underpinning the assessment of such a model of learning is that all learning objectives can be specified and measured with mastery of objectives implying mastery of intended skills and concepts. A number of studies (Pryor & Torrance, 1997; Torrance, 1993; Torrance & Pryor, 1995) have shown that such a model of assessment has significant practical implications for teaching and learning. Essentially behaviourist in approach the needs of the learner are seen as secondary to the delivery of a curriculum. Of utmost importance to the teacher, is the need to determine **if** learning has occurred; the emphasis being on the measurement of learning (summative assessment) not the enhancement of learning (formative assessment). Thus assessment sits outside of the learning teaching cycle rather than as an integral part of it. The aforementioned studies have provided some emergent descriptions of teacher practice characterised by detailed planning and the over abundance of checklists as a method of observing and recording assessment information. Furthermore, these studies revealed that the learner was treated as a recipient of assessment information rather than an initiator of assessment. As Torrance

(1993) has commented this model of assessment begs the question of how learning takes place and what role assessment could or should play in the learning process and leads to teachers performing continuous summative assessment rather than formative assessment.

Constructivist approaches to learning, teaching and assessment.

Constructivist theories of how knowledge is acquired and understood have gained considerable currency in recent years. Supported by a large body of empirical evidence which demonstrates that the understandings students acquire in instructional situations are often very different from those the teacher intended, these theories are now widely accepted within many educational communities (Cobb, 1994). Constructivist theories of knowledge assert two main principles. Firstly, knowledge is not received passively by the learner rather it is actively built up through the construction of meaning. Secondly, the function of cognition is adaptive and serves to organise the experiential world of the learner (von Glaserfeld, 1989; Wheatley, 1991). Thus from constructivist perspectives meanings are conceptual structures, constructed by prior experience, which influence each learner's construction and organisation of current experience and guide thinking and acting as s/he seeks to 'make sense' of the world (Begg, 1995).

The acceptance of such principles has far reaching implications for learning and teaching (Begg, *ibid*; Salomon, 1997; von Glaserfeld, 1989). Learning is thus considered to be a process of knowledge construction which is situationally bound and occurs not by simply receiving information but by interpreting it in a meaningful way (Gipps, 1994). Of importance is the need to generate learning with understanding through the use of learning experiences which will challenge and shift student thinking so that their thinking is as close as possible to those of 'experts' (Begg, *ibid*; von Glaserfeld, *ibid*). Language is seen as a tool not only to convey meaning but to evoke meaning through the provision of critical dialogue which helps students to re-examine and modify their original constructions (Wheatley, 1991). Teaching, therefore, is not a direct transfer of knowledge, rather it is an intervention which helps the learner to

make and understand connections between existing schema and new learning. To facilitate this conceptual development the teacher must be able to determine a student's prior knowledge, respond and react to their thinking by providing opportunities and experiences that allow students to test out their own beliefs and to reflect on their own learning in regard to both their own understanding of the content and their personal ways of thinking and learning. In essence the teacher must create and optimise opportunities that will enable her to enter into a meaningful dialogue with students (Begg, 1995; Bell & Gilbert, 1996) so that misunderstandings, 'errors' or unanticipated responses are identified, for it is the identification of such responses which enable the teacher to plan ways in which these misunderstandings can be modified (von Glaserfeld, 1989; Wheatley, 1991).

To achieve this, a more ambitious model of assessment is required, one which aims to integrate assessment into the process of learning and teaching (Gipps, 1994; Pryor & Torrance, 1997; Torrance, 1993; Torrance & Pryor, 1995). Within this model, the focus of assessment is to find out **what** the learner can achieve with support and assistance and to teach within, what Vygotsky termed, the learner's zone of proximal development (Gipps, 1994). Thus, in this model, the formative function of assessment is given priority and is an indivisible part of the learning teaching process as the learner is scaffolded to perform at a higher level. In practice this would mean that teachers would need less detailed planning and more open forms of gathering and recording assessment information, focussing on miscues and aspects of the learner's work which would yield information about current understandings and misunderstandings (Pryor & Torrance, 1997). Furthermore, an emphasis on the learner's understanding would require the learner to take an active role in the learning assessment process.

Summary of theme two: New Zealand curriculum and assessment reforms

In response to wider political and economic crises the past decade has seen the New Zealand education system changed radically and restructured in a number of areas.

From 1990, educational reforms have been concerned with curriculum and assessment and illustrate the shift from a liberal humanist to a technocratic ideology.

Informed by the Achievement Initiative and underpinned by behaviourist learning theory, the New Zealand Curriculum Framework along with a series of supporting statements known as the National Curriculum are now the official policy for learning, teaching and assessment. Critics of the reformed curricula believe that a clearly specified progression in each essential learning area has a limiting approach to teaching and learning. Knowledge is reduced to observable behaviours and student achievement reduced to pre-defined skills and competencies with the assessment of such behaviours and competencies leading to shallow approaches to learning and summative approaches to assessment, the emphasis being on the measurement of learning rather than the enhancement of learning.

This approach to learning, teaching and assessment is at odds with constructivist theories of knowledge and learning which aim to generate learning with understanding through the provision of meaningful learning experiences and critical dialogue that will challenge and shift student thinking. Such theories demand a more ambitious model of assessment, one in which the formative function is given priority with assessment an indivisible part of the learning teaching process.

THEME THREE: THE IMPLEMENTATION OF FORMATIVE AND SUMMATIVE ASSESSMENT REQUIREMENTS

The role of the teacher in formative assessment

Approaches to learning, teaching and assessment can lead to either learning with understanding (deep learning) or learning by memorisation and rote (shallow learning) (Crooks, 1988; Harlen & James, 1997). Constructivist approaches to learning aim to foster deep learning whereas behaviourist approaches tend to encourage rote or shallow learning (Crooks, *ibid*).

For deep learning to occur, the learner through active interaction and participation, must be able to develop a personal understanding of the concepts being taught. This can be achieved by the learner linking and relating new ideas with prior knowledge and experience, confirming or refuting previously held conceptions, this allows for the development and extension of each learner's cognitive map which can then be applied to new learning situations (Entwhistle & Entwhistle 1991, cited in Harlen & James, 1997; Gipps, 1994).

Formative assessment as it is now conceptualised has come to incorporate notions of identifying progress and providing feedback to students through the use of assessment methods which will support and promote deep rather than surface learning (Pryor & Torrance, 1997). This implies a different, more dynamic, interactive and challenging role for teachers (Bell & Cowie, 1997; Black, 1993; Black & Wiliam, 1998; Torrance, 1993) as they are charged with the responsibility for being responsive to student need, intervening where necessary as teaching and learning are occurring. Within this conceptualisation, assessment is not an adjunct to the teaching and learning process but an integral and indivisible part. However for this to occur teachers must be able to assess in a deep way the structure and quality of student learning and understanding. They need to be able to assess the level and complexity of understanding rather than just the recognition or recall of facts (Gipps, 1994). Furthermore, they must be able to promote deep approaches to learning, by linking new learning to previous learning, so that what has been learned will be actively understood and internalised by the learner. To ensure that this can occur, learning experiences need to be relevant to the concepts being taught and matched closely with the learner's skills, ideas and experiences, thus providing an environment which is stimulating and challenging to the learner and her thinking (Harlen and James, 1997). In this way the teacher acts as a mediator between the body of knowledge and skills to be learned and the learner so that: "... *learning becomes a process of appropriation and negotiation of knowledge in a social context.*" (Bell & Cowie, 1997, p.15).

An essential component of formative assessment must therefore be feedback to the

learner (Bell & Cowie, 1997; Black & Wiliam, 1998; Pryor & Torrance, 1997; Sadler, 1989, 1998; Torrance & Pryor, 1995). Of fundamental importance is the quality of the feedback given to the learner. Sadler (ibid) has argued that it is the nature of the interaction between teacher and pupil that determines whether or not learning will be enhanced. In talking of quality of feedback, Sadler stresses the importance of the teacher being able to make this feedback accessible to the learner. He contends that feedback must have a catalytic and coaching value for the learner which will inspire confidence and hope. Quality feedback will enable the learner to identify the gap between current and desired performance and to take some action which will close that gap.

To achieve this, teachers must be able to provide learning experiences and opportunities which will promote this kind of interaction. As Hattie and Jaeger (1998) have stated the feedback process must allow for opportunities to communicate with, and to learners. Therefore observing and talking with children as they are engaging in the learning task as well as providing a forum whereby children can receive feedback and review their own work are necessary features of formative assessment in practice. Teachers also need to have what Shulman (1987) has termed the knowledge bases of teaching. They need a thorough and deep understanding of the subject matter and content to be taught; knowledge of how children learn, both individually and developmentally so they have a clear idea of where children are at and the specific nature of their problems, as well as a knowledge of the progression of ideas within a given topic and general and specific pedagogical content knowledge which will enable them to utilise a range of strategies which will best elicit and act on students' ideas.

As a number of writers have commented, this conception of formative assessment is both ambitious and complex (Dwyer, 1998; Perrenoud, 1998; Pryor & Torrance, 1997; Torrance & Pryor, 1995; Tunstall & Gipps, 1995) and one which teachers accept as part of their role but do not comprehend fully. However, as Shepard (1995) has maintained, the introduction of an innovation will not necessarily improve learning. She argues that to move formative assessment from rhetoric to reality every effort must be made to gain the support, cooperation and commitment of teachers in

its use. Of significance, are findings from other studies which have shown that teachers wanted help to translate assessment principles into practice (Gipps & James, 1996) but generally have been expected to implement formative assessment strategies with little support or additional resources to assist them in the process (Broadfoot et al, 1996; Mavromattis, 1996). For teachers to begin to embed effective formative assessment into their learning programmes there needs to be significant long term professional development opportunities for them (Black, 1993; Dwyer, 1998; Gipps et al 1995; Harlen & James, 1997). For it is only through sustained support that teachers will “...try out new practices, learn new theory and make it their own.” (Gipps 1996, p.43)

The role of the learner in formative assessment

The role of the learner in formative assessment is subject to some debate with some writers believing that assessment can only be formative if it involves the learner (Bell & Cowie, 1997; Sadler, 1989, 1998). Drawing on recent developments in the fields of constructivist learning theory and metacognition these writers believe that the learner has a key role to play in the assessment process. Rather than being a consumer of assessment information the learner is considered to be an active participant, working with the teacher in a cyclic process of eliciting, interpreting and acting on information gained. Implicit within this assumption is the need for the learner to be able to both assess and improve the quality of the work produced through a process of self monitoring and regulation (Gipps, 1994). However as Elshout-Mohr (1994) discovered, students were often unwilling to relinquish their misunderstandings. They needed multiple opportunities through discussion to reflect on their learning and to better utilise the feedback they had received. Sadler (1998) supports this notion of training students to interpret feedback, arguing that it can not be assumed that students will know what to do with the feedback they receive.

In recent literature, self assessment has been defined as a two step process which involves the learner identifying what needs to be learned and then evaluating the extent to which learning has taken place (Hill, 1995). Within the framework of

formative assessment, self assessment is thus an essential development as it is an intrinsic aspect of reflection on one's own learning and a powerful source for the improvement of learning (Black, 1993; Elshout-Mohr, 1994; Parkin & Richards, 1995 cited in Bell & Cowie, 1997). Yet as Sebatane (1998) found, there was resistance on the part of some teachers to the idea of giving students the chance to participate in self assessment. Even teachers who were very serious about assessment provided limited opportunities for students to self assess (Black & Wiliam, 1998) and even if they did, the learner's contribution was tentative and given scant attention (James, 1990). Fontana and Fernandes (1994), in their study, found that the traditional beliefs that parents and students held in respect to the teacher's role in the assessment process, had a negative effect on teachers' willingness to share the responsibility for assessment with their students. Teachers had to undergo intensive in-service training before they felt comfortable and confident to let students assess their own performance.

The problematic nature of combining the formative and summative functions of assessment

In recent times, much has been written about the formative and summative functions of assessment (Bell & Cowie, 1997; Black, 1993; Crooks, 1988; Gipps, 1994, 1995; Harlen & James, 1997; Pryor & Torrance, 1997; Torrance & Pryor, 1995) with much debate occurring within the literature about their relative roles and merits (Broadfoot, 1988; Gipps, 1990; Torrance, 1993). Theoretically, each has a different role to play (Harlen & James, 1997) and each should therefore have quite different properties and qualities from the other (Black, 1986; Gipps, 1994). As Sadler (1989) has stated, many of the principles appropriate for summative assessment are not necessarily transferable to formative assessment. He argues that formative assessment requires a distinctive conceptualisation and technology of its own if it is to contribute directly to helping children learn.

Of concern to a number of researchers, has been the lack of clarity between formative and summative distinctions within assessment literature (Black & Wiliam, 1998).

This lack of clarity has also been evident in official curriculum and assessment documents (TGAT, 1988; NZCF, 1993) developed to support the recent educational reforms, which confuse and blur the difference in these functions and their relationship to each other (Harlen & James, 1997). The essential difference between the formative and summative functions has not been specified clearly. Within official documents great importance and emphasis has been placed on timing: formative during instruction and summative usually at some end point, thus implying that timing is the key difference between the two. Significantly, the real difference which differentiates the two purpose and effect, is given scant attention and is not articulated clearly. Additionally, the two competing functions have been presented as unproblematic with policy makers assuming that formative and summative assessment is well understood by teachers (Harlen & James, 1997; Harlen & Malcolm, 1996; Mavrommatis, 1996; Torrance, 1993; Willis, 1992). As a consequence there is now a fundamental confusion in teachers' minds about these two kinds of assessment (Harlen and James, *ibid*; Mavrommatis, *ibid*) with many teachers not able to distinguish between the two different functions of assessment (Harlen & Malcolm, 1996).

High and low stakes assessment

Associated with the phenomenon of assessment role tension, is the debate about high and low stakes assessment (Sebatane, 1998). It has been well documented that the assessment of student achievement can have both short and long term consequences for learners, teachers and schools in general (Crooks, 1988; Izard, 1991). These consequences may be both intended and unintended and influence what and how children learn and may well encourage either surface or deep approaches to learning and teaching (Crooks, *ibid*; Harlen & James, 1997). As Little and Wolf (1996) noted, teachers, pupils and parents perceive particular assessment practices to be either high or low stakes in nature dependent on the long term consequences that such practice has for them.

Assessment information gathered for use formatively within the context of the

ongoing classroom programme, will be considered low stakes by teachers and pupils if it is kept within the classroom and they are the main recipients and beneficiaries of such information. Summative assessment however, is considered by many teachers and pupils to have more far reaching and long lasting consequences. Gipps et al (1995) have defined high stakes assessment as that which has a significant impact on either students' or teachers' lives. There is considerable evidence which shows that the high stakes nature of assessment can impact seriously on a variety of aspects of teacher and student behaviour. Within the context of national and local policy requirements, the demand for summative assessment can exert a powerful negative influence on teachers' practices (Black & Wiliam, 1998; Sebatane, 1998), dominate classroom work and so distort teaching, that conditions for good formative assessment do not exist (Black, 1993).

In the United Kingdom when it became evident to schools and teachers that results were being used to compare schools, a number of negative outcomes occurred. Teachers coached children for tests, administered assessments repeatedly, encouraged non attendance and used the lack of standardised procedures to their advantage (Lofty, 1993; Torrance, 1993). Airisian (1988) has provided extensive evidence of the adverse effect publishing results has had on school performance in the United States. He contends that the high stakes nature of assessment increases pressure on schools to perform which leads to the perversion of local practices.

The implementation of formative and summative assessment requirements

A number of overseas studies have shown that the implementation of new assessment initiatives has been problematic for teachers as they move from rhetoric to reality and attempt to put policy into practice (Bachor & Anderson, 1994; Broadfoot et al, 1996; Daugherty, 1996; Mavrommatis, 1996). Broadfoot et al (1996) have argued that during any implementation change there is a gap between rhetoric and reality which teachers must attempt to resolve, often with little support and limited resources. These authors contend that teachers do this through the adoption of coping strategies, some

of which may be at odds with their preferred pedagogies and their personal beliefs in regard to the roles and responsibilities of the teacher and learner in the assessment process. Other studies have shown that the changes made to assessment practice have, at times, been counter productive and in conflict with the stated aims of the policy initiatives which have triggered them (McCallum et al, 1995; Willis, 1992). Within the New Zealand context an emerging body of literature has revealed that while there has been general support for the NZCF from primary school teachers, the implementation of assessment requirements has been far more problematic (Aikin, 1994; Baker, 1995b; Faire, 1994; Renwick & Gray, 1995) and is the area in which teachers feel they need further development (Renwick & Gray, *ibid*).

Harlen and James (1997), in their study of teachers in the United Kingdom, found that the unclear distinction between formative and summative assessment evident in policy documents has had a significant effect on teachers' practice. As teachers have struggled to complete assessments for two distinct purposes, the purposes have become confused. As a consequence of this conflation of summative and formative purposes, little genuine formative assessment was evident. Significantly, if it was occurring, teachers were unaware of it. Often teachers believed they were assessing formatively but were in reality completing on going or continuous summative assessment which was used primarily for reporting purposes. Studies by Bell and Cowie (1997); Black (1986); Black (1993); Harlen and Qualter (1991) and Nitko (1995) have reported very similar findings.

Baker (1995) in working with New Zealand teachers, found that they did not view assessment as integral to teaching and learning. Rather, they saw it as an additional task which had little relationship with what occurred in the classroom. Subsequently, this had created in them a dislike and cynicism towards assessment, which worked to prevent the development of the essential interdependence between learning and assessment. For these teachers, there was a feeling of being overloaded with assessment requirements. Irving (1995) has argued that this sense of overload leads teachers to grasp for survival strategies which will in turn negate and undermine confidence in their ability to assess their pupils.

Teachers' knowledge of and practice in the area of formative assessment

Dominated by the tradition of high stakes summative assessment practice most historical studies of assessment have contained little about formative assessment (Black, 1993). Concerns about the lack of data related to formative assessment combined with doubts about the claims made for formative assessment by policy makers and its feasibility and practicality for classroom practice, have led to formative assessment becoming the focus of a number of studies both overseas and in New Zealand. These studies have attempted to ascertain teachers' understandings of formative assessment and have provided emerging descriptions of what formative assessment may look like in practice (Bell & Cowie, 1997; Black, 1993; Crooks, 1988; Gipps et al, 1995; McCallum et al, 1993; Pryor & Torrance, 1997; Torrance, 1993; Torrance & Pryor, 1995). Longitudinal research projects undertaken by McCallum et al (ibid) Gipps et al (ibid) and Torrance and Pryor (ibid) indicate that while teachers have accepted the basic argument about the positive educational role assessment has to play in the promotion of student learning, their understanding of their role and that of the learner in formative assessment is inadequately understood and explicated. Furthermore, these researchers found that generally teachers had a limited theoretical understanding of how assessment could and should be integrated into the learning teaching process.

Crooks (1988) seminal work on assessment and its effect on classroom learning revealed that formative assessment was generally weak in practice, with much classroom assessment encouraging superficial and rote learning. More recent research has confirmed these findings with some researchers contending that the extent and nature of formative assessment is impoverished (Daws & Singh, 1996) and in serious need of development (Russell, Qualter & McGuigan, 1996). Bachor and Anderson (1994) attributed this lack of understanding to the fact that many teachers do not possess the interpretive frameworks that are necessary to coordinate all the assessment information needed to enhance learning. Subsequent studies have shown that feedback to the learner (an essential component in formative assessment) is either

typically low (Black & Wiliam, 1998) or has little or no relationship to the learning which is taking place (Pryor & Torrance, 1997; Torrance & Pryor, 1995). Additionally, the research undertaken by Torrance and Pryor (ibid) revealed that teachers had limited knowledge of theories of learning and their relationship to theories and methods of assessment. As Sadler (1998) has noted even after several decades of research into formative assessment, there still remains much which is unresolved and problematic and much which warrants further investigation.

Summary of theme three: The implementation of formative and summative assessment requirements

Educational assessment functions in two distinct ways: one which is essentially formative in nature, the other essentially summative. The formative function of assessment is concerned with promoting and enhancing learning whereas the summative function is more concerned with the measurement and reporting of achievement. Within both the assessment literature and official policy documents there has been a lack of clarity about these two functions. This has resulted in a fundamental confusion in teachers' minds with many teachers unable to distinguish between the two.

Formative assessment as it is now conceptualised has come to incorporate notions of identifying progress and providing feedback to students through the use of assessment methods which will support and promote deep approaches to learning. This conception implies a more dynamic, challenging and interactive role for both teachers and students. However a review of the most current literature revealed that formative assessment is not well understood by teachers.

The lack of clarity between the formative and summative functions of assessment within official policy documents combined with teachers' limited theoretical understanding of the role formative assessment plays in the enhancement of learning has meant that formative assessment is frequently weak in practice. This situation is exacerbated by the amount of summative assessment teachers are required to

complete.

The next chapter outlines the research methodology employed in this thesis.

CHAPTER THREE

METHODOLOGY AND RESEARCH PROCEDURES

This chapter outlines the research process utilised in this thesis and provides readers with an overall picture of the way in which the research was conducted. The chapter begins by presenting a rationale for selecting the interpretive framework, in particular case study as an approach. It then moves to an examination of case study, its strengths and limitations and subsequently describes how this particular case study was set up. A detailed description of the data collection methods used, their construction and the ways in which the data were analysed are included in this chapter. Ethical issues, as they related to particular stages of the research project, are discussed.

Introduction

Cohen and Manion (1985) place research alongside experience and reasoning as a principal way in which people attempt to understand their environments, yet research is far from a unified and monolithic enterprise (Candy, 1989). Within the research community there has been continued dialogue related to what is considered to be worth knowing, how research is conducted and what should be counted as evidence in supporting knowledge claims. Competing views of social science research represent the different ways of investigating and analysing social reality. Implicit and explicit assumptions underpinning the ontologies, epistemologies and models of human nature have had direct implications for the methodological concerns of the researcher which in turn demand different research methods. The choice of problem, the formulation of questions to be answered, the kinds of data sought and the way the data is reported will all be influenced or determined by the viewpoint held.

Social science research has been dominated by two main traditions, positivism and interpretivism, commonly presented as a simple dichotomy. More recently a dissatisfaction with this dualism has led to some researchers seeking a synthesis in

critical theory, which while incorporating the strengths and eliminating the weaknesses of interpretivism, transcends them to provide a tricotomy of sciences. Each of these paradigms represents clusters of assumptions and broad orientations related to conceptions of social reality, individual and social behaviour which in turn determine the methods to be used and the questions to be addressed within the research endeavour. Issues such as generalisability, validity, reliability, objectivity and subjectivity are viewed and addressed in different ways.

However, research paradigms are not discrete in nature and do not in themselves exist, rather "*they are theoretical artifacts or constructs: an invention of the theorists who have studied social science research.*" (Candy 1989, p.7). Each paradigm has features in common with the others but at the same time differ in other important aspects. Of importance is the realisation that no one paradigm will ever be able to solve all the problems it defines (Kuhn 1970, cited in Candy, 1989). The challenge for the researcher is thus to select a paradigm, based on its goodness for fit or appropriateness to the subject of inquiry, mindful that any paradigm will have areas of weakness which could well be addressed by another approach. Thus the key question which will guide any methodological selection must be "*Which problems is it more significant to have solved?*" (Candy 1989, p.10)

This research sought to investigate the ways in which teachers were implementing current assessment policy requirements. Within the New Zealand context teachers have been faced with implementing curriculum and assessment policies that, at a national level, they have had little hand in developing, yet the work of teachers lies at the heart of the implementation of any assessment system (Willis, 1994). Indeed the successful implementation of any policy initiative is dependent on the willingness and commitment of teachers to carry it out (Aikin, 1994). Therefore, it seemed vital that I was able to understand what was happening to teachers in schools as they endeavoured to interpret, and put into practice, the new assessment policy requirements. I wanted to document their experiences, share their viewpoints, perceptions and practical realities as they coped with the demands of school based assessment.

Methodology has been conceptualised as the theory of knowledge and the interpretive framework that guides a particular research project. Thus the aim of methodology is to help the researcher understand, in the broadest possible terms, not only the products of inquiry but the process itself (Kaplan,1973). Therefore if I wanted to provide an extensive and systematic representation of the lived realities of teachers as they endeavoured to put assessment policy into practice, an interpretive framework seemed to be the most appropriate to operate within.

Interpretive approaches

The interpretive paradigm operates within an epistemological framework, based upon inductive thinking which aims to produce accounts that describe phenomena occurring in a small study. The main focus is on the intentional interactions within a complex scene where participants attribute meaning. Traditionally, interpretive accounts have sought not to reinterpret the actions and experiences of the participants but rather to give a deeper, more extensive and systematic representation of events from the perspectives of the individuals involved (Massey, 1980). While interpretive approaches cover a range of different positions and perspectives there are a number of common assumptions that underpin the approaches and methodologies that are associated with interpretive research. Candy (1989, p.4) has provided a useful list of the assumptions commonly held by interpretive theorists:

1. the belief that any event or action is explicable in terms of multiple interacting factors, events or processes and that causes and effects are interdependent;

2. an acceptance of the extreme difficulty in attaining complete objectivity, especially in terms of observing humans who construe or make sense of events based on their individual systems of meaning;

3. the view that the aim of inquiry is to develop an understanding of individual cases rather than universal laws/ generalisations;

4. the assumption that the world is made up of tangible and intangible multifaceted realities and that these are best studied as a unified whole rather than being fragmented into dependent and independent variables,ie context makes a difference;

5. the recognition that inquiry is always value laden and that such values

inevitably influence the framing, bounding and focusing of research problems.

Research within the interpretive paradigm has the potential to document the lived experiences of people, to provide an authentic account of people's practical realities by providing a rich and thick description. However, it is also acknowledged that a major weakness of research within this paradigm is its failure to realise how the self understandings of individuals may be shaped by illusory beliefs which sustain irrational and contradictory forms of social life. Issues of power, control and unequal power relationships are not identified. A related weakness is the failure to recognise that many of the aims and objectives that teachers pursue are not so much a result of conscious choice but rather as a result of the influence of structural forces over which they have little control (Carr & Kemmis, 1983).

Case Study

The interpretive paradigm has given rise to certain specific approaches to research (Cohen & Manion, 1994). Methods such as case study, participant observation and fieldwork are commonly associated with the interpretive paradigm (Candy, 1989). although it is recognised that these approaches are not necessarily tied to only this paradigm (Jenkins 1986, cited in Candy, *ibid*).

This research project, drawing from the interpretive paradigm employed a case study approach. Case study can be described as a complex and holistic research activity which involves a myriad of variables which may be difficult to isolate due the complexity of the situation (Massey, 1980). Walker (1989) provided a useful definition when he wrote that case study is the examination of an instance in action: the study of particular incidents and events and the selective collection of information on biography, personality, intentions and values which enables the researcher to capture and portray the elements of a situation that provide meaning. Case study in these instances is not viewed as a standard methodological package rather it is seen as an eclectic approach to research, using a range of techniques.

Traditionally, data collection methods have relied heavily on human instruments with the study being reported in an informal perhaps narrative style possibly using verbatim quotation, illustration and sometimes even allusion and metaphor (Massey, *ibid*). Comparisons made are implicit rather than explicit, the emphasis being on the reader to interpret. Case study offers a surrogate experience inviting the reader to underwrite the account, by appealing to her tacit knowledge of human situations (Adelman, Jenkins & Kemmis, 1976). While themes and hypotheses may be of importance they remain subordinate to the understanding of the case.

Case studies can be set up in one of two ways (Adelman et al, 1976) In the first instance the case is selected as an instance drawn from a class while in the second the case is given as a unique 'bounded system.' Three kinds of generalisations can be drawn from case study research. Generalisations may be made from an instance to a class, or from case bound features of the instance to a multiplicity of classes or about the case (Adelman et al *ibid*). Important to note is the retrospective nature of generalisations. In general case study does not deal in predictive generalisations rather generalisations are made as the study continues with techniques employed to confirm or disconfirm. The case study set up was an example of an instance (the schools and the teachers) drawn from a class (assessment). A multi site case study approach, involving several replications of a single case study, was employed. Information was gathered through questionnaires, interviews, and document analysis.

Contemporary research should be non exploitative and beneficial to all the stakeholders involved (Lang, 1996). Thus while the outcome of any research endeavour should contribute to the pool of educational knowledge, it should also be accessible and relevant to both the researcher and the researched (Burgess, 1985). As I began this research project, I believed that I would gain valuable insights into teachers' circumstances and personal views about assessment that would add to a pool of knowledge related to how teachers cope with the implementation of an education policy initiative. However I also felt that a case study approach could assist the individuals who participated in the project. Case studies are a step to action, they begin in a world of action and contribute to that world. Insights gained may be directly interpreted and

put to use (Cohen & Manion, 1994). In talking to the teachers to gain their consent prior to the research project beginning, many acknowledged the 'worthiness' of the project. Assessment was viewed as problematic by many teachers and they were pleased that someone was attempting to document their endeavours and concerns. A commitment was made to the teachers in each of the schools to feedback results in an on going manner. Teachers felt that the data gained from their particular school would be helpful to them as a staff in terms of planning for whole school and individual professional development. In this way the research became more of a dialectic exchange between those involved (Altrichter, 1993).

Research activity culminates in a final report, yet in some instances participants never see the report. This denies them the opportunity to read about their experiences and does not afford them the opportunity to compare their experiences with the experiences of others. In other instances the reports written are exclusive to particular audiences, often requiring the reader to have specialised knowledge to interpret what is being said. Case study should present research in a more publicly accessible form than other kinds of research reports, with language and format less esoteric and less dependent on specialised interpretation (Cohen & Manion, 1994). It was hoped that in writing the final report in this way that teachers would want to read what is contained in the report.

Triangulation

Triangulation can be conceptualised as a strategy for increasing the validity of research findings (Cohen & Manion, 1994). Regardless of which philosophical, epistemological or methodological perspective a researcher is working from s/he must provide the best evidence from which meaningful propositions about the social world can be constructed (Mathison, 1988). As an approach, case study has often been criticised as unscientific and subjective, lacking in techniques that will produce valid and reliable data. However the use of triangulation techniques such as multiple data collection methods, data sources and researchers can enhance the validity of the research findings.

Throughout this project a number of triangulation techniques were employed. These

included data, methodological and investigator triangulation (Denzin, 1978). The importance of including multiple data sources was recognised and incorporated into the research design. As Denzin (ibid) has argued, to adequately understand the social phenomenon under investigation it must be examined under a variety of conditions. Therefore, in this study, it was important to include teachers who had experienced an external review by the Education Review Office as well as those who had not. Additionally every effort was made to include teachers who taught at a variety of class levels, held a variety of positions within the school and who worked in both smaller and larger schools. During the data collection phase of the project a multimethod approach was utilised. The use of questionnaires and interviews ensured the potential for cross checking and verifying data. Furthermore the ongoing collection and analysis of data gave direction to the data gathering process and suggested what to check and confirm. Finally, while it was not feasible to involve another researcher in the collection of data, it was possible to use someone during the analysis phase of the questionnaire data. For each of the qualitative questions content categories were established and participants responses were coded accordingly. To check the reliability of this coding a colleague coded responses independently and comparisons were made.

The sample

The sample was taken from primary schools in the Auckland Metropolitan Area as listed in the Auckland College of Education directory of schools. Education Review Office records were then used to identify schools that had undergone an external review in 1996 and schools which were expecting a review in 1997. Using this information schools were placed in two categories, those which had recently undergone an ERO review and those which had not (and were not expecting one in 1997). The schools were then divided into two further categories: schools with more than twenty teachers and schools with less than ten teachers. Once these categories had been determined I then selected a school that I had had a professional relationship with through my role as a visiting lecturer. Initial contact was made through the principal of each school. A brief explanation about the nature and purpose of the project was given and permission was sought to speak to the teachers, to determine whether or not they would be willing to

participate in the research. At this stage of the project several principals, whose schools had recently undergone an ERO review, refused permission stating that the review had caused staff added pressure. In their opinion staff needed some 'breathing space.' In the other category there were no refusals the first school approached gave permission for me to talk to the staff. The final sample consisted of four schools, two from each category.

Once permission was gained from the principal, arrangements were made to speak to the staff as a group. In each of the four schools, I attended a staff meeting and explained the nature and purpose of the project. Staff were invited to participate in the research and were given assurances in regard to confidentiality and anonymity. Staff were also given the opportunity to ask questions. However they were not required to make the decision immediately. An agreement was made whereby the principal would contact me within twenty four hours, to let me know whether or not staff would be willing to be involved. All of the schools were willing to participate.

The four schools selected were not regarded as representative of Auckland primary schools, rather they were viewed as purposive examples (Lincoln & Guba, 1985). That is, they were selected as critical cases which had the potential to generate as many categories and properties of categories as possible (Hammersley & Atkinson, 1983) thus both maximising and minimising the difference between cases (Glaser & Strauss, 1967). In the present study all of the schools selected were primary schools that I had already developed a professional relationship with, thus minimising the difference between cases. In order to maximise the difference between the cases, the schools selected represented variations in school size, physical location, decile rating and in their experience of external review as conducted by ERO.

The schools

School A: A small school located in a Central Auckland suburb. Categorised as decile one this school had recently undergone an Effectiveness Review.

School B: A large West Auckland school, with a decile five ranking. This

school had recently completed an Assurance Audit.

School C: A large decile 10 school situated on the North Shore of Auckland. This school had not experienced any type of ERO review in recent times.

School D: A small school, categorised as decile three, situated in the Eastern suburbs. This school had not experienced any type of ERO review in recent times.

The questionnaire

The questionnaire used was constructed specifically for this project (Appendix A). However in its construction a number of sources were used to assist in the development of the questions to be asked. These sources included:

1. recent relevant studies already undertaken;
2. consultation with several colleagues who had a particular interest and expertise in the area of assessment;
3. interviews with teachers.

Several New Zealand studies have examined the effect of recent curriculum and assessment reforms on teachers (Wylie, 1992, 1994) and these were used as initial sources of possible questions. A considerable amount of time was also spent with two colleagues who work and research in the assessment area. As a result of these two separate activities, broad areas of focus were identified and key questions were developed.

Walker (1989) contended that all too often research has been used in an autocratic way, with the researcher's problems and concerns being of paramount importance. He has argued that to improve the fit between research and practice the participants themselves need to be involved in the identification of what is to be researched. Aware then, that there may have been a discrepancy between what we as lecturers and researchers in a College of Education, viewed as important to investigate and what practising teachers viewed as important, I decided to gain feedback from several practising teachers. Subsequently, two teachers were interviewed to determine what they saw as issues or

concerns to be addressed. Rather than developing an interview schedule which could have influenced the participants' thoughts, a non directive interview was used (Cohen & Manion, 1994). Two interviews were conducted, one with a deputy principal in a primary school, and one with a basic scale teacher who had recently left the teaching profession after fifteen years teaching service. The choice of participants was deliberate as I was interested to determine whether teachers holding different positions within a school had differing or similar experiences and viewpoints about assessment. I was also interested as to why the second participant had left teaching. Each interview took approximately forty five minutes and during this time the participants were able to talk about their experiences which contributed to my knowledge of why they thought they needed to assess as they did, their concerns and attitudes towards assessment.

Using these multiple sources of information, questionnaire categories were compiled which included: biographical data; school information; assessment requirements in schools, their possible advantages, disadvantages and implications; collecting, recording and reporting assessment information and factors which shape and influence teachers' practice.

A questionnaire must be clear, unambiguous and uniformly workable, thus inviting response and minimising potential error (Davidson, 1970 cited in Cohen & Manion, 1994). An ideal questionnaire should engage the participants' interest, encourage their cooperation and hopefully elicit answers as close as possible to the truth. The questionnaire was formulated using different types of responses; both structured and open ended. Taking into consideration the time factor involved in completing a questionnaire, a number of structured response questions were asked. In many of these questions there were also opportunities for participants to elaborate or comment if they so desired.

Completing a questionnaire can be viewed as a learning process in which participants become more at home with the task as they proceed (Cohen & Manion, 1994). To ensure that this happened the initial questions asked were relatively simple and straightforward, relating to what the participants knew about the assessment

requirements and asking them to describe what was happening in their own schools. The middle part of the questionnaire tackled the more difficult questions, asking participants to look outward and make comments related to the wider implications of the new assessment requirements. Finally, to keep participant's interest and encourage them to complete the questionnaire, questions were asked that related directly to their own experiences, this time in the area of in-service training.

Trialling the questionnaire

The pre-testing of any questionnaire is crucial to success (Cohen & Manion, 1994). The initial questionnaire was trialled with two groups; final year College of Education students who were currently enrolled in an assessment paper and ten practising teachers. The practising teachers held a variety of positions (deputy and assistant principals, senior teachers and permanent and relieving basic scale teachers) in a number of different schools. Both groups were asked to complete the questionnaire, comment on its design, clarity of wording and user friendliness. They were asked to make suggestions regarding additions and alterations to both the structure and the content of the questionnaire.

As a result of the trial several alterations were made to the questionnaire. In asking questions about the New Zealand assessment requirements and the possible implications of implementing these requirements, many of the trial participants felt that they did not have the information necessary to answer the questions asked. To address these concerns, explanations were developed that outlined assessment policy requirements, and were inserted at the beginning of some questions to provide the necessary background information. The official policy documents that should inform teachers' assessment practice the NZCF and the Ministry of Education document *Assessment: Policy to Practice (1994)* were used as sources of this explanatory information. Several questions were reworded to reduce ambiguity. Others were changed from an open ended to a structured response, with a space for comment. This change was made to reduce the amount of writing that was required of the participants, while at the same time allowing space for an elaborated response for those who felt it

was necessary.

School information.

Using a structured response, participants were asked to identify their school, the current position they held in the school and the class level they were currently teaching. Questions related to current position and class level were asked to determine whether or not the position held within the school or the particular class level that a teacher taught have any influence over how assessment is perceived.

Assessment requirements in schools.

A number of studies have investigated factors which affect the successful implementation of educational policy (Blackmore, 1988; Gipps, Brown, McCallum & McAlister, 1995; Sullivan, 1994; Willis, 1992, 1994). These findings have shown that teachers hold vastly different views as to why assessment reforms have taken place. Some teachers see assessment as a legal requirement which calls teachers to account while other teachers have welcomed new developments believing that assessment will improve teaching and learning (Gipps, Brown, McCallum & McAlister, 1995). How teachers view the reforms will affect whether or not they will endorse or resist their implementation (Sullivan, 1994, 1997). Furthermore it has been well documented that the effective implementation of assessment requirements relies on more than becoming a competent practitioner, skilled in assessment methodology. It is also imperative that teachers understand the theoretical and ideological assumptions underpinning assessment if they are to make the links effectively between teaching, learning and assessment (Blackmore, 1988; Gipps, 1994; Willis, 1994).

Using the above mentioned research (Gipps et al, 1995), participants were asked to complete structured and open ended questions that asked them to identify which of the new assessment requirements they were familiar with; why they thought these requirements had been introduced and whether or not it was important for classroom teachers to know about assessment requirements at a national level (in which they

themselves may never be directly involved). They were also asked to identify why they thought changes to assessment practice had occurred; and to outline some of the possible advantages, disadvantages and implications for children, teachers, schools and parents of the requirements in regard to school based assessment.

Collecting, recording and reporting assessment information.

The assessment process involves collecting data and then recording and reporting the data gathered. Teachers are required to assess knowledge, skills and attitudes, the learning processes that children engage in as well as final products. Each of the seven essential learning areas and eight essential skills of the New Zealand Curriculum Framework must be assessed and reported against achievement objectives. There is some evidence that some parts of the assessment process are more problematic than others (Baker, 1995b; Gipps, Brown, McCallum & McAlister, 1995) and that teachers find some curriculum areas more difficult to assess than others (Gipps, Brown, McCallum & McAlister, *ibid*). To ensure the successful implementation of assessment policy requirements, teachers need to understand important theoretical notions underpinning assessment practice (Blackmore, 1988; Torrance, 1993); appreciate the strengths and weaknesses of different assessment methods (Willis, 1992); and be aware that different recording and reporting procedures may be needed for different purposes (Baker, 1995). Findings have indicated that while many schools had elaborate record keeping systems teachers found it difficult to describe precisely what they used to determine levels of attainment and how they reached this decision (Baker, 1995; Gipps, Brown, McCallum & McAlister, 1995). Using these research findings, participants were asked structured and open questions in regard to their levels of confidence, the types of assessment methods used in their schools, the usefulness of such methods and finally, how the information gained from their assessments was used.

Factors which shape and influence teachers' practice.

Within the New Zealand context a body of literature has shown that generally, teachers

have given support to the New Zealand Curriculum Framework (Aikin, 1994; Renwick & Gray, 1995). However, teachers have felt less positive about the assessment reforms, and their implementation has been far more problematic (Aikin, *ibid*; Faire, 1994). This has been the area in which teachers felt they needed further professional development (Renwick & Gray, 1995). Moreover it is well documented that there are important contextual factors which affect teacher response to change. These factors relate to the way change is introduced and implemented (Hargreaves & Fullan, 1992) and the type and amount of support teachers receive (Fullan, 1991). Also of importance is the development of a collaborative culture (Hargreaves, 1994) and the identification of a central focus for school development (Castle, 1997).

In the present study, participants were asked structured and open questions in regard to how change had been introduced and implemented in their school, who had primarily initiated those changes, and the type of support which had been most beneficial to them.

The procedure

Forty three teachers, working in four different primary schools, completed the questionnaire phase of the data collection. Subsequently twelve teachers, three from each of the schools, were interviewed. The research design allowed for an interactive process of data gathering from which analysis was developed. The process was interactive in that the data collection and analysis occurred simultaneously, with the analysis giving direction to the data collection by suggesting what to check, when to seek confirmation and how to extend the data collection itself (Owens, 1995). Initially data was collected through questionnaires and as these were analysed interview questions were developed. Categories for analysing the data were not identified prior to the research being undertaken, rather they were formulated during the data collection phase of the research. The use of multiple data gathering techniques ensured the potential for cross checking and verifying data.

Completing the questionnaire

The questionnaires were completed over a four month period. Questionnaires were distributed to all the teachers (excluding the principal) in each of the four schools. Once a school had agreed to participate in the research, a time was negotiated in regard to the completion of the questionnaire. A sufficient number of questionnaires was delivered by person to each of the schools and an agreement was reached that the completed questionnaires would be collected two weeks hence. To protect anonymity and confidentiality, each questionnaire along with a consent form (Appendix B), participant information sheet (Appendix C) and self addressed envelope were packaged together. Staff returned completed questionnaires and consent forms, in the envelopes provided to the school secretary, who then passed them on to me. Staff who did not wish to be involved in the project returned the uncompleted questionnaires in the same manner. In total, seventy eight questionnaires were distributed with forty three returned.

The interviews

The research interview has been defined as "*a two person conversation initiated by the interviewer for the specific purpose of obtaining research - relevant information, and focused by him on content specified by research objectives of systematic description, prediction or explanation.*" (Cannell & Kahn 1968, cited in Cohen & Manion 1994, p.281). In this way the interview is conceptualised as a transaction whereby one party is seeking information whilst the other is supplying information. Cohen and Manion (1994) have argued that as a research technique the interview may be used in three ways:

1. as the principal means by which information is gathered, enabling the researcher to access a participant's knowledge, values, attitudes and beliefs;
2. to test hypotheses or as an explanatory device useful in the identification of variables and relationships;
3. in conjunction with other research techniques to probe more deeply, affording the researcher the opportunity to confirm or disconfirm findings to date.

Initially data was collected through the questionnaire. However it was not until the questionnaires had been analysed fully that the interview questions were developed. In this way the primary purpose of the interview was to supplement the data already gathered, to probe more deeply and to seek clarification as to why the questionnaire participants may have responded as they did.

Interviews take a number of forms ranging from structured to unstructured (Burgess, 1985; Cohen & Manion, 1994) thus requiring the interviewer to play either a directive or subordinate role in the interview process (Powney & Watts, 1987). A structured interview enables the researcher to organise content and procedures in advance and essentially places the locus of control with the researcher (Powney & Watts, *ibid*). In this study a structured interview schedule containing eleven open ended questions was developed (Appendix D). An open ended question format was considered to be the most suitable as the prime purpose of the interview was to probe and clarify. As Cohen and Manion (1994) state open ended questions allow the researcher to probe, to consider aspects of the research in greater depth, to clarify misunderstandings and to test the limits of a participants' knowledge. In essence open ended questions allow the researcher to make a 'truer' assessment of what each participant really believes and may also reveal unforeseen answers.

Cognizant of the need to ensure that there was congruence and consistency between the research aims and the specific questions asked of participants, a cross checking exercise was then completed. Using the three major research questions underpinning this study, each interview question was categorised in relation to each of these major questions. In some instances the questions related to several of the research questions, in others only one. The completion of this exercise was beneficial in that it enabled me to feel confident that the research aims were reflected in the questions being asked, and that no one aspect of the research project was being either over investigated or omitted.

Once the interview schedule was completed, it was piloted with several practising teachers who were not involved in the study. The interviews were undertaken in a context that was as authentic as possible, and were taped which provided me with the

opportunity to put to the test the logistical aspects of the interview. The teachers interviewed were asked to comment on two aspects of the interview process: firstly the overall structure of the interview, the clarity and ordering of the questions and secondly they were asked to provide me with feedback about my interview skills, the appropriateness of my responses to them and my ability to establish a rapport and put them at ease. As a result of this piloting exercise, several minor modifications were made. Several of the questions were reworded and more time was allocated at the beginning of the interview for the purpose of establishing rapport.

The outcome of any interview is dependent not only on the interviewer but also on the interviewee. The importance of selecting the most appropriate people to interview is well documented in the research literature (Burgess, 1985; Cohen & Manion, 1994; Powney & Watts, 1987). According to Powney and Watts (*ibid*) the two main criteria for selecting participants should be their willingness to inform and their sensitivity to the area being investigated. In their opinion the 'best' participants will be those, who not only want to be involved, but who are, as a result of their experiences, perceptive and reflective about the area under investigation. However, care must also be taken to ensure that the final list of participants gives appropriate representation to the range of views relevant to the research.

From the original pool of forty three teachers, twelve were selected to become interview participants, three from each school. Selection criteria sought to both minimise and maximise differences between interviewees. To minimise the difference all interviewees were selected on the basis of the depth of their responses to the questionnaire. To maximise differences, position held, class level taught, experience and viewpoint were used as selection criteria. As shown in Table 1 interview participants held a range of positions and taught across all levels of the school.

Table 1

Position held and class level taught by interview respondents

Interviewee	Position held				Class level taught		
	AP/DP	ST	BS	BT	Y1/2	Y3/4	Y5/6
1		x				x	
2				x	x		
3	x						x
4			x		x		
5		x				x	
6				x		x	
7		x			x		
8			x				x
9	x				x		
10	x				x		
11			x				x
12				x	x		

Conducting the interviews

To some extent an interview situation is likely to be potentially threatening for those being interviewed. Therefore it is crucial that the interviewer establishes a rapport and thus gains the confidence of the interviewee. Furthermore, participants need to feel assured that ethical principles such as confidentiality and anonymity will be preserved.

In the present study initial contact with possible interviewees was made by telephone. During the course of the conversation interviewees were invited to participate. They were given a brief explanation as to the nature and length of the interview, the reason for it and the basis for their selection. Assurances in regard to confidentiality and anonymity were also given. Finally participants were asked if they would be willing to have their interview taped. All twelve of the participants who were contacted agreed to participate.

Once participants had agreed to be interviewed, a time and place convenient to them was arranged. In all cases the participants wanted to be interviewed on their school site.

Some interviews were completed at lunchtime, others during teachers' release time. In all instances the interviews took place in a quiet place away from noise and interruptions. The participants were aware that even though the interview would take only forty five minutes, an hour had been allocated to complete it. In this way extra time was built into the interview process. This time was spent making the participants feel comfortable and building rapport. Again, they were given a brief explanation as to the nature, length and purpose of the interview, and the basis of their selection. It was also explained to participants why the interview was being taped and how it would be transcribed. Prior to the interview beginning, it was emphasised that there were no right or wrong answers to the questions. Rather, it was stressed that it was the participants' experiences, viewpoints and opinions that were of importance to the research.

Data analysis

Data analysis can be described as a detailed examination of the database that ensues from the research endeavour. As an activity it is creative and constructive, requiring the researcher not only to interpret what has been said, but also to reduce the data gathered into some manageable form that will provide an authentic account to the intended audience (Powney & Watts, 1987). Of importance is the necessity to match the data with appropriate and sensitive models for their analysis, acknowledging that no single representation can capture all the relevant aspects of the phenomenon (Coxon, 1979). Therefore as several data collection methods had been utilised in this research project, it was necessary to employ several different analysis techniques.

The questionnaire.

The questionnaires were identified by number, from one to forty three and grouped school by school. This enabled individual responses to be identified more easily, also school similarities and differences. The data gained from the questionnaires were analysed using both quantitative and qualitative techniques. The structured questions were analysed using quantitative techniques. When the data approximated an interval scale inferential tests (analyses of variance) were run. An alpha level of 0.05, two tailed

was employed. When the data was ordinal inferential tests were not undertaken. All analyses were completed using the SPSS statistical package.

The open ended questions were analysed using qualitative techniques. In completing this analysis I was conscious of the need to impose a structure on the accumulated data in a way which was neither too cumbersome nor so lacking in specificity that it did not reflect the data collected (Watts 1983, cited in Powney & Watts 1987). To ensure the analysis was a valid interpretation of the data gathered, a number of techniques were employed. In the first instance participants' responses were collated verbatimly under each of the questions. These responses were identified by number. All responses were transcribed from the individual questionnaires on to the computer, which then enabled me to bring together discrete units of meaning and get some feeling for the whole (Cohen & Manion, 1994). Aware that the analysis of qualitative data is a process of interpretation and selection and that frequently within qualitative research "*it is still not absolutely clear how issues or ideas emerge in order to end up in the finished written product.*" (Bryman & Burgess 1994, p. 224) I employed several coding techniques which helped me to conceptualise the raw data. As Agar (1979) has noted, the key to extracting categories from raw data is through the identification of frequently mentioned activities or common topics of conversation. Thus as I read and re-read each individual's response, clustered together under each question, I highlighted key words and phrases that appeared frequently or seemed significant in regard to the research literature. As a result of this activity content categories were established for each of the open ended questions. Returning to the raw data individual responses were categorised according to these content categories (see Appendix E) In this way the content categories emerged from the data itself.

The Interviews.

A qualitative approach to the analysis of data, referred to as constant comparison analysis (Glaser & Strauss, 1967), was used to make sense of this data. The analysis of the interview data involved a number of steps and became an iterative process as I listened to, read, examined and reflected upon the data, transcript by transcript. The

first step in this process was the transcription of each interview (Appendix F). As time was precious, a skilled typist was employed. Again all transcripts were identified by number, in this instance from one to twelve. In addition, the interviewees' questionnaire number was also included. This procedure enabled the information gained from the two sources to be cross checked and ensured that any verbatim use of transcript extracts reflected, as accurately as possible, the respondent's viewpoint. The transcripts were dated and double spaced to allow room for notes to be written. After reading the transcripts several times, participants' responses to each of the interview questions were paraphrased and summarised. At the same time, to gain a sense of the non verbal messages that may have been conveyed, I listened to the taped interviews. These activities provided the context for the emergence of specific units of meaning and again conveyed a sense of the whole (Cohen & Manion, 1994).

The identification of emergent themes is a critical step in qualitative analysis. Bogden and Biklen (1982) define a theme as a concept or theory which emerges from the data. To identify the emergent themes embedded within the interview data it was necessary to tease out what was being said through the establishment of analytic categories. The establishment of such categories is a central element of the analysis process (Hammersley & Atkinson, 1983) and in this study descriptive and conceptual categories were created to make sense of the data. Mason (1994) has defined descriptive categories as lists of substantive topics which can be used to index transcripts whereas conceptual categories are those grounded in theoretical perspectives which aim to tease out aspects of the data which are relevant to the research questions.

To establish descriptive categories transcripts were analysed and indexed question by question. Conceptual categories were then formulated by linking the descriptive categories to relevant theory as identified within the research literature (see Appendix G for a specific example of this process) This analysis led to the identification of five major themes: the professional development of teachers, competing conceptions of accountability, reflections on practice, the purposes of assessment and methods of assessment. Once these had been established it was necessary to return to the raw data. Coloured highlighters were used to highlight relevant extracts evident in each of the

transcripts. This was an important step because at this stage transcripts could be considered as a whole rather than as answers to specific questions and substantial amounts of data that may not have appeared under a specific question, but had been mentioned in another question, could be incorporated under relevant themes. Subsequently, relevant chunks of transcript, coded by number, were transferred verbatim on to the computer under each of the themes. This allowed me to cluster together units of relevant meaning (Cohen & Manion, *ibid*). In the development of each of the themes it was necessary to return constantly to these quotes and at times to the transcripts to ensure that the contextual nature of the transplanted chunks was not lost (Bryman & Burgess, 1994). The continual returning to the data ensured that themes could be modified, developed and extended. In this way there was an assurance that what was being said was substantive in nature as the participants themselves told their story, making the cogent points.

Summary of the research process

Drawing from the interpretive paradigm, this thesis employed a multi site case study approach involving several replications of a single case study. Data was gathered from forty three teachers who completed the questionnaires. A sub sample of twelve teachers were interviewed. The research design allowed for an interactive process of data gathering from which analyses were developed. Initially data was collected through the questionnaires and as these were analysed interview questions were developed. The primary purpose of the interview was to supplement the data already gathered, to probe more deeply and to seek clarification as necessary.

In an attempt to match the data with appropriate and sensitive models for their analysis, several different analysis techniques were applied. Data gained from the questionnaires were analysed using both qualitative and quantitative techniques. Constant comparison analysis (Glaser & Strauss, 1967) was used to analyse the interview data.

Ethical considerations related to informed consent, confidentiality and anonymity were taken into account and implemented during various stages of the research process.

The results from the questionnaire phase of the data collection are reported in the next chapter, chapter four, under the headings used in the questionnaire: school information; assessment requirements in schools; collecting, recording and reporting assessment information; implications of assessment requirements and finally, in-service training.

CHAPTER FOUR

RESULTS

In this chapter the results from the questionnaire phase of the data collection are reported. The presentation of the results follows the headings and sequence used in the questionnaire: school information, assessment requirements in schools, collecting, recording and reporting assessment information, implications of assessment requirements and finally in-service training.

The section on school information provides readers with a brief profile of the participants themselves: their educational qualifications, the class levels taught and current positions held within the school. The second section identifies participants' familiarity with the specific assessment contexts outlined in the New Zealand Curriculum Framework and reports on teachers' perceptions of why these contexts exist. The third section of this chapter: collecting, recording and reporting assessment information, reports findings in regard to teachers' levels of confidence, the uses made of assessment data and changes made to assessment practice. The chapter continues by outlining teachers' perceptions of current assessment requirements and the perceived advantages and disadvantages for teachers, schools, children and their parents. Finally, the participants' in-service opportunities and future professional development needs are reported.

School Information

Characteristics of the teachers

Questionnaires were distributed to all teachers (excluding the principal) in each of the 4 schools. Principals were excluded from the study as a number of the questions asked related directly to classroom practice. As none of the principals in the four schools had teaching commitments it seemed inappropriate to include them in the study. Seventy

eight questionnaires were distributed with forty three returned. Higher rates of return were gained in School A (100%) and School D (80%) with School C (56%) and School B (48%) much lower. Overall there was a 55% return of the questionnaires. Forty two of the questionnaires were completed by female teachers and one questionnaire was completed by a male teacher.

Teachers were asked to indicate the highest educational qualification they had gained. The pattern of teachers' responses in each of the 4 schools was similar (see Table 2). Approximately half of the teachers had either a Trained Teachers' Certificate (27.9%) or a Diploma of Teaching (18.6%) as their highest qualification, while 11.6% had completed a Higher Diploma of Teaching and 4.7 % had gained an Advanced Diploma of Teaching. Over a third had gained an undergraduate degree (34.9%) but only 2.3% had completed a postgraduate degree. School A and School B had relatively high proportions of degreed staff (over 40% of staff in each school). An examination of the characteristics of each of the schools found one was in a medium decile funding area while the other was a decile one school. Again one of the schools was a large school while the other was a small school. Thus there seems to be no obvious relationship between the qualifications held by staff and school characteristics.

Teachers held a variety of positions within the school, ranging from senior management through to beginning teachers (see Table 3). Over two thirds of the teachers taught in basic scale positions, that is either as a Scale A or beginning teacher, while the other third held a more senior position (deputy or assistant principal or senior teacher). Each level of responsibility was represented in Schools A and D. In Schools B and C responses were not received from some senior management levels.

Table 2

Percentage of Respondents with Particular Qualifications Across Schools.

	Sch A	Sch B	Sch C	Sch D	Average across all schools
Trained Teachers Certificate	20.0	18.2	35.7	37.5	27.9
Diploma of Teaching	30.0	18.2	14.3	12.5	18.6
Higher Diploma of Teaching	10.0	9.1	7.1	25.0	11.6
Advanced Diploma of Teaching	0.0	9.1	7.1	0.0	4.7
Bachelors Degree	40.0	45.5	28.6	25.0	34.9
Masters Degree	0.0	0.0	7.1	0.0	2.3

Teachers taught across the range of class levels from Year 1 through to Year 6 (see Table 4). Nearly half taught in the junior area of the school (Year 1 and 2) while just over a quarter taught at Year 3 and 4. Less than 20% of the teachers taught at the senior school level (Year 5 and 6). A small percentage (9.3%) were teaching in either a part time position, or in a non traditional whanau or vertical group setting, for example Year 2 and 3. The pattern of responses was similar between Schools A and C with teachers responding from all class levels. School D also followed this pattern but had no responses in the 'other' category. School B was different from the other schools in that nearly three quarters of the responses received came from teachers in the Year 1 and 2 area of the school.

Table 3

Percentage of Respondents Holding Particular Teaching Positions Across Schools.

	Sch A	Sch B	Sch C	Sch D	Average across all schs
Deputy Principal	10.0	9.1	0.0	12.5	7.0
Assistant Principal	10.0	0.0	0.0	12.5	4.7
Senior Teacher	10.0	27.3	14.3	12.5	16.3
Scale A	50.0	45.5	71.4	50.0	55.8
Beginning Teacher	20.0	18.2	14.3	12.5	16.3

Table 4

Percentage of Respondents Teaching at Particular Class Levels Across Schools.

	Sch A	Sch B	Sch C	Sch D	Average across all schs
Year 1 & 2	40.0	72.7	28.6	50.0	46.5
Year 3 & 4	30.0	9.1	35.7	25.0	25.6
Year 5 & 6	20.0	9.1	21.4	25.0	18.6
Other	10.0	9.1	14.3	0.0	9.3

Assessment requirements in schools

The New Zealand Curriculum Framework (1993) outlines the official policy for teaching, learning and assessment in New Zealand schools. Assessment policy at local and national level is outlined, with 5 contexts for assessment identified. The document states clearly that assessment is carried out for a number of purposes. Research findings have shown that successful implementation of any policy initiative is related to how teachers view such reforms (Gipps, Brown, McCallum & McAlister, 1995; Sullivan, 1994, 1997) and their understanding of the ideological assumptions underpinning them (Blackmore, 1988; Willis, 1994). Therefore it was deemed important to identify participants' familiarity with specific assessment contexts also their perceptions as to why current assessment requirements had been introduced.

Assessment requirements at a national level.

The first question in this section of the questionnaire asked teachers if they thought it was 'important for teachers to know the assessment requirements at a national level' and to give reasons for their choice. Ninety three percent of the participants agreed that it was important. A content analysis of responses identified five content categories:

- will assist teachers to deliver the curriculum more appropriately;
- will assist teachers to cater for the individual needs of children;
- will provide more equitable opportunities for children both in the present and in the future;
- will address the need to develop a more consistent, standardised approach to assessment nationally;
- will enable national standards to be established and monitored.

The teachers frequently provided more than one reason with many giving two or three reasons. The need to develop a more consistent, standardised approach to assessment at a national level was the most common reason given (21 teachers). Individual teachers commented that if consistency was achieved, both staff and children would be

advantaged as children moved from class to class and school to school. Linked to this was the need to establish and monitor standards. Teachers across all the schools felt that this was important, (16 responses) stating that standards of performance should be drawn from achievements nationally not just at the local level. This, they thought, would provide teachers and schools with baseline data against which student performance could be compared as well as determining whether or not standards were rising or falling over time.

Several teachers (6) commented that assessment was a means of selection so therefore it should be fair and consistent. Increased standardisation of the information collected and communicated to others would provide more equitable opportunities for children. Two teachers, one from School A and one from School C remarked that knowing about the assessment requirements would assist teachers to deliver the curriculum more appropriately. Two other teachers, again in Schools A and C, linked knowing about assessment requirements to their ability to cater for the individual needs of children.

Reported familiarity with assessment requirements outlined in the New Zealand Curriculum Framework.

Teachers were asked to identify the assessment contexts outlined in the New Zealand Framework with which they were familiar. The five contexts were school based assessment, national monitoring, key transition points, records of achievement and assessment for qualifications. All of the participants were familiar with school based assessment and over two thirds of the participants indicated they were familiar with records of achievement (see Table 5). Just over half of the participants were aware of the national monitoring project with slightly more than a third familiar with key transition points. A very small number of teachers reported being familiar with assessment for qualifications. A series of five one way analyses of variance (the five assessment contexts by the four schools) found no significant differences (see Table 15, Appendix H) between the schools in the reported familiarity teachers had with the five assessment contexts outlined in the New Zealand Curriculum Framework.

Table 5

Percentage of Respondents' Reported Familiarity with Particular NZCF Assessment Contexts Across Schools.

	Sch A	Sch B	Sch C	Sch D	Average across all schs
School based assessment	100.0	100.0	100.0	100.0	100.0
National monitoring	60.0	45.0	43.0	63.0	51.0
Key transition points	40.0	27.0	57.0	25.0	40.0
Records of achievement	50.0	64.0	71.0	88.0	67.0
Assessment for qualifications	00.0	18.0	2.0	25.0	12.0

Why do we need these contexts

Participants were asked 'why do you think these assessment requirements have been introduced?' A content analysis of their responses identified eight content categories:

- to provide a better learning focus for children;
- to increase teacher understanding of assessment;
- to provide a better match between assessment and curriculum requirements;
- to ensure that there are a variety of ways used to assess children's progress;
- to ensure there is greater consistency between schools;
- to increase school accountability;
- to establish and improve educational standards;
- to assist in the reporting process.

The teachers frequently provided more than one reason, with many giving two or three reasons. The most common reason given as to why new assessment requirements had been introduced related to accountability. Fifteen teachers gave this as a reason. Specific responses coded under this category included reasons such as to compare schools nationally and internationally and to judge the quality and effectiveness of the programmes provided by schools. In this way, teachers and schools would be held more accountable. Linked with this accountability function, was a perception that the assessment would establish and improve educational standards (11 teachers).

Teachers reported that assessment had been introduced to enable them to monitor progress against achievement objectives in the new curriculum (10 teachers) and to provide consistency in curriculum delivery within and across schools (14 teachers). Individual teachers commented that clear guidelines were needed nationwide, so that teachers had similar expectations of their pupils, common descriptions of achievement levels and that when achievement objectives were set, they were assessed in some standardised manner.

Only five teachers said that the requirements had been introduced to assist schools and teachers in the reporting process. A small number of responses (6) related to providing a better learning focus for children, to increasing teacher understanding of assessment (2) and to ensuring that a variety of assessment methods are used to assess children's progress (3).

Collecting, recording and reporting assessment information

As outlined in the method chapter of this study, studies by Baker (1995) and Gipps et al, (1995) revealed that the practice of assessment is problematic for teachers in a variety of ways. To determine whether or not teachers in this study experienced similar problems they were asked to indicate levels of confidence in specific aspects of the assessment process (collecting, recording and reporting assessment information), in assessing children's learning in curriculum areas and in the use of specific assessment methods. Teachers were also required to specify the uses made of assessment

information. Finally they were asked to describe their perceptions of how and why changes to collecting, recording and reporting assessment data had occurred.

Confidence in aspects of assessment

Teachers were asked to rate their level of confidence in each of the following activities: collecting data, recording data, reporting data to parents and reporting data to others. A rating of 5 was equivalent to 'very confident', whereas a rating of 1 was equivalent to 'not confident'.

In all four aspects of assessment activity, teachers indicated moderate to high levels of confidence (see Table 6). The area of assessment that teachers were the most confident in was collecting assessment information ($M = 3.7$) while both recording information and reporting to parents was rated the same ($M = 3.6$). Confidence in reporting assessment information to others received the lowest rating ($M = 3.4$). A series of four one way analyses of variance (each of the four assessment activities by the four schools) indicated that there were no significant differences between schools in the confidence teachers had in collecting [$F(3,39) = 1.29, p = .29$], recording [$F(3,39) = 1.51, p = .23$] and reporting assessment information to parents [$F(3,39) = .65, p = .59$]. However there were significant differences [$F(3,39) = 4.49, p = .008$] between the four schools in the confidence teachers had in reporting assessment information to others. Consequential contrasts (LSD, two tailed, $\alpha = .05$) found that School B was significantly less confident than the other three schools.

Table 6

Mean Ratings of Respondents' Levels of Confidence in Various Aspects of Assessment across Schools.

	Sch A	Sch B	Sch C	Sch D	Average across all schs
Methods of collecting data	3.40	3.81	3.64	4.25	3.74
Methods of recording data	3.30	3.45	3.64	4.12	3.60
Methods of reporting data to parents	3.40	3.54	3.57	4.00	3.60
Methods of reporting data to others	3.60	2.72*	3.64	4.00	3.46

* $p < .05$

Confidence to assess children's learning in specific curriculum areas.

Teachers were asked to rate their level of confidence in assessing children's learning in ten different curriculum areas: art, health, mathematics, music, physical education, reading, science, social studies, technology and written language. A rating of 5 was equivalent to 'very confident', whereas a rating of 1 was equivalent to 'not confident'.

Teachers reported that they were very confident in assessing children's learning in areas such as reading, written language and mathematics (see Table 7). They were moderately confident in such areas as science, health, and social studies, less confident in art and music, and least confident in technology. A series of 10 one way analyses of variance (the 10 curriculum areas by the four schools) found no significant differences between schools in reported confidence at assessing children's learning except in the area of technology (see Table 16, Appendix H). Subsequent comparisons (LSD, two

tailed, $\alpha = .05$) between pairs of schools found teachers in Schools A and B to be significantly less confident than teachers in School C. School D did not differ significantly from any other school.

A series of one way ANOVAS was run comparing the levels of confidence reported by experienced (more than 2 years) and beginning (less than 2 years) teachers. For these analyses the schools were combined (Table 7 provides the average confidence levels for these combined groups of teachers). The 10 one way analyses of variance (the 10 curriculum areas by teacher experience) showed that there were no significant differences between the experienced teachers and the beginning teachers in reported levels of confidence in any of the 10 stated curriculum areas (see Table 17, Appendix H).

Table 7

Mean Ratings of Respondents' Levels of Confidence in Assessing Children's Learning in Particular Curriculum Areas Across Schools.

	Sch A	Sch B	Sch C	Sch D	Average across all schs
Art	3.1	2.7	2.7	3.0	2.8
Beginning Tch					2.8
Other Tchs					2.8
Health	2.8	3.1	3.3	3.6	3.2
Beginning Tch					2.8
Other Tchs					3.2
Mathematics	3.6	3.7	3.8	4.6	3.8
Beginning Tch					4.0
Other Tchs					3.8
Music	2.7	2.5	2.6	2.1	2.5
Beginning Tch					2.4
Other Tchs					2.5
Physical Educ	3.4	3.9	3.6	3.5	3.6
Beginning Tch					4.0
Other Tchs					3.5
Reading	4.4	4.2	4.3	4.7	4.4
Beginning Tch					4.7
Other Tchs					4.3
Science	3.4	3.6	3.2	4.1	3.5
Beginning Tch					3.5
Other Tchs					3.5
Social Studies	3.2	2.7	3.2	3.7	3.1
Beginning Tch					3.1
Other Tchs					3.1
Technology	1.9*	2.1*	3.0	2.7	2.4
Beginning Tch					2.8
Other Tchs					2.4
Written Lang	3.1	2.7	2.7	3.0	2.8
Beginning Tch					2.8
Other Tchs					2.8

p <.05

Factors contributing to confidence levels in specific curriculum areas

Teachers were asked to rank in order of importance factors that had contributed to their confidence in assessing specific curriculum areas, 1 being the 'most important' and 5 the 'least important'. Five factors were listed: attendance at in service courses, development of assessment exemplars/criteria within the school/syndicate, familiarity with New Zealand curriculum documents, in school support in implementing assessment procedures and familiarity with specific assessment resources.

A similar pattern occurred across all schools with all factors rated as having moderate to moderately high importance (see Table 8). The development of exemplars / criteria within the school was seen by participants as having the greatest effect on their confidence levels ($M = 2.4$). Familiarity with curriculum documents ($M = 2.5$), in school support ($M = 2.5$) and familiarity with specific assessment resources ($M = 2.7$) were also rated as moderately high. Attendance at in-service courses was perceived as having only a moderate effect ($M = 3.0$).

Mean rankings of Schools B and C were very similar but there did seem to be differences between Schools A and D. School A tended to rank 'familiarity with NZ curriculum documents' as their most important source of confidence whereas School D gave this a relatively low ranking. Similarly School A ranked 'familiarity with specific assessment resources' as their most important source of confidence while again School D attributed a lower ranking to this source. However it is important to note that the reader should not confuse differences in ranking with absolute values of importance.

Table 8

Mean Rankings of Factors Contributing to Levels of Confidence in Assessing a Specific Curriculum Area Across Schools.

	Sch A	Sch B	Sch C	Sch D	Average across all schs
Attendance at in service courses	3.2	2.6	3.3	3.1	3.0
Development of assessment exemplars	2.1	2.6	2.8	1.8	2.4
Familiarity with NZ curriculum documents	1.9	2.7	2.6	3.2	2.5
School support in implementation	2.5	3.0	2.6	2.0	2.5
Familiarity with specific assessment resources	1.9	3.0	2.7	3.4	2.7

Data collection methods used in schools

Teachers were asked to identify whether or not the following assessment methods were used in their school: conferencing, portfolios, standardised tests and tasks, checklists, running records, prose inventories, pupil self assessment, peer assessment, rating scales and observation. Observation, conferencing, checklists, running records and standardised tests and tasks were identified as being used in schools by over 90% of the teachers (see Table 9). Three quarters of the sample stated that pupil self assessment was used, while approximately two thirds of the sample stated that peer assessment was utilised. Just over half of the teachers reported that portfolios were being used in

their schools with prose inventories being used to a lesser extent (42%). Less than a third of the sample reported that rating scales were used as a method of collecting assessment data.

A series of 10 one way analyses of variance (the 10 data collection methods by the four schools) was undertaken. A binary scale was used, where a teacher reporting use was scored as 1 and a teacher reporting non use was scored as 0. There were no significant differences between schools in the reported use of the following data collection methods: conferencing, portfolios, standardised tests and tasks, checklists, running records, prose inventories and observation (see Table 18, Appendix H). However the schools did differ significantly in the reported use of other data collection methods. Significant differences were established in the use of pupil self assessment [$F(3, 37) = 5.17, p = .004$] and peer assessment [$F(3, 37) = 6.53, p .001$]. Subsequent contrasts (LSD, two tailed, $\alpha = .05$) revealed that teachers in School B used these two methods less frequently than teachers in Schools C and D. School A did not differ significantly from any other school. Schools also differed significantly [$F(3, 38) = 4.80, p = .006$] in the reported frequency of use of rating scales. Consequential contrasts (LSD, two tailed, $\alpha = .05$) found that teachers in School A used rating scales significantly more frequently than teachers in Schools B and C. School D did not differ significantly from any other school.

Table 9

Reported Use of Specific Data Collection Methods Across Schools.

	Sch A	Sch B	Sch C	Sch D	Average across all schs
Conferencing	80.0	90.0	92.8	100.0	90.4
Portfolios	70.0	40.0	35.7	87.5	54.7
Standardised Tasks	100.0	80.0	100.0	87.5	92.8
Checklists	100.0	90.0	85.7	100.0	92.8
Running Records	100.0	100.0	85.7	92.8	97.6
Prose Inventories	40.0	50.0	21.4	75.0	42.8
Self Assessment	66.6	40.0*	92.8	100.0	75.0
Peer Assessment	66.6	20.0*	92.8	75.0	65.8
Rating Scales	70.0*	10.0	14.2	25.0	28.5
Observation	100.0	100.0	92.8	100.0	97.6

p < .05

Confidence in using specific data collection methods

Teachers rated their level of confidence in the use of specific assessment methods: conferencing, portfolios, standardised tests and tasks, checklists, running records,

prose inventories, self assessment, peer assessment, rating scales and observation techniques. A rating of 5 was equivalent to 'very confident', whereas a rating of 1 was equivalent to 'not confident'.

Teachers indicated they were more confident in the use of some methods than others (see Table 10). They were very confident in the use of observation techniques, running records, checklists and standardised tests and tasks, moderately confident in the use of conferencing, self assessment, peer assessment and portfolios and less confident in using prose inventories and rating scales. A series of 10 one way analyses of variance (the 10 data collection methods by the four schools) found no significant differences between schools in reported confidence in the use of various data collection techniques (see Table 19, Appendix H).

Usefulness to teachers of various methods of data collection

Teachers ranked the 10 specific assessment methods in terms of their usefulness, 1 being the 'most useful' and 10 the 'least useful'. A similar pattern occurred across all schools. Methods of data collection such as observation, running records, conferencing and checklisting were considered to be very useful to teachers while the information gained from standardised tests and tasks and pupil self assessment was viewed as being of moderate use (see Table 11). Of least use were prose inventories, portfolios, peer assessment and rating scales.

A series of correlations were calculated to examine the degree of agreement among the mean rankings schools gave to each of the 10 methods. The correlations between the mean rankings of the schools were very high (ranging from 0.84 to 0.97) with one exception, and this was the correlation of .62 between Schools B and C. An inspection of the mean rankings in Table 10 shows that the mean rankings of School B differ dramatically for prose inventories and markedly for portfolios from those of School C.

Table 10

Mean Rankings of Confidence Levels in Using Data Collection Methods Across Schools.

	Sch A	Sch B	Sch C	Sch D	Average across all schs
Conferencing	3.4	4.1	3.8	4.3	3.9
Portfolios	3.0	3.0	3.1	3.8	3.2
Standardised Tasks	4.3	3.5	4.2	4.7	4.1
Checklists	4.2	3.9	4.1	4.7	4.2
Running Records	4.5	4.0	4.5	4.8	4.4
Prose Inventories	2.3	3.3	2.4	3.8	2.9
Self Assessment	3.0	3.3	3.3	3.5	3.3
Peer Assessment	2.8	2.6	3.5	3.2	3.1
Rating Scales	3.2	2.1	3.4	2.7	2.9
Observation	4.4	4.0	4.3	4.8	4.3

Table 11

Mean Rankings of the Usefulness of Various Data Collection Methods.

	Sch A	Sch B	Sch C	Sch D
Conferencing	2.9	3.5	3.0	3.7
Portfolios	5.9	4.8	6.8	7.1
Standardised Tasks	4.3	5.3	4.1	5.2
Checklists	3.1	3.0	4.3	3.8
Running Records	2.0	2.5	3.4	1.7
Prose Inventories	5.8	4.7	8.6	6.6
Self Assessment	4.7	6.2	5.1	5.6
Peer Assessment	6.0	7.8	6.0	6.8
Rating Scales	6.2	7.1	7.5	7.8
Observation	1.5	2.6	2.2	3.1

Ways in which assessment has helped teachers in their teaching

Teachers were asked ‘in what ways has assessment been of assistance to you in your teaching?’. A content analysis of their responses identified five content categories:

formative feedback to the teacher;
summative feedback to the teacher;
formative feedback to children;
summative feedback to children;
summative feedback to parents.

Teachers frequently provided more than one reason with many providing several reasons. All of the teachers (43) commented that they used the results of assessment in a summative way to measure individual pupil progress and achievement. Specific responses coded under this category included to monitor children's progress against achievement objectives and learning outcomes, and to determine individual gains made over a set time period. Additionally, these teachers reported that they used the results of individual pupil achievement to ascertain the effectiveness of their teaching programmes and to make decisions about the strengths and weaknesses of their own teaching.

To a lesser extent, teachers (29) talked of using assessment for formative purposes. They commented that assessment data was used to plan, to diagnosis individual strengths and weaknesses, to adapt programmes and select suitable resources. Teachers stated that this was an ongoing process which enabled them to adapt their formally planned programmes, regrouping and reteaching as necessary. A limited number of teachers (6) stated that information was used for communication purposes; by reporting individual progress and achievement to parents, identifying difficulties children had encountered and specifying the support needed. Using assessment information to provide feedback to children about their on going progress, or summatively in respect to how well they had been able to achieve objectives or goals set, was mentioned only a limited number of times (4).

Ways in which assessment is used by teachers to help children in their learning

Teachers were asked 'in what ways has assessment helped the children you teach in their learning?' A content analysis of their responses identified five content categories:

children are more involved in the learning process;

children are more responsible for their own learning;
children are grouped more appropriately;
individual needs are identified and catered for;
the programme offered is of a better quality.

Many of the participants identified multiple reasons and therefore responses were applicable to more than one content category. Almost half of the teachers (21) stated that through assessment children became more involved in the learning process as achievable, assessable goals and objectives were made explicit to them. Specific responses coded under this category included reasons such as children were better able to: focus their efforts, identify personal strengths, weaknesses and achievements. Furthermore, teachers commented that assessment could be used to develop children's confidence and could act as an incentive for children to work harder and persevere. The use of assessment data to assist children to become more responsible for their own learning was mentioned less frequently (5 teachers). These teachers talked of assessment becoming less teacher driven and children taking more responsibility for setting their own goals.

Enabling children to be grouped more appropriately was identified as a way of helping children to learn by a small number of teachers (5). However just over half the teachers (22) commented that assessment helped children in their learning as individual needs were identified and catered for through the provision of individualised programmes of instruction. Associated with this was a belief expressed by some teachers (10) that learning was linked to the quality of the programme offered. Quality was expressed by these teachers in terms of the relevancy of content taught, appropriateness of activities selected and pace and style of delivery, as they took opportunities to extend and consolidate children's learning.

Changes to collecting and recording assessment information

Teachers were asked to identify any 'significant change' to collecting and recording assessment within their schools. On the basis of their responses five content categories

were established:

- unsure of what changes had occurred;
- an increase in the number of methods used to collect and record data;
- the collection of school wide data;
- assessment now matches curriculum requirements;
- extra work for teachers.

A number of teachers gave examples of more than one change, with some teachers providing two or three changes. Across all of the schools there was quite a large number of teachers who were unsure of what changes had occurred (18). Specific reasons given by these teachers included: they were beginning teachers, they had only been in their present school for a short period of time or they had only recently taught in New Zealand, either as New Zealand teachers returning from overseas or as non New Zealand trained teachers.

Thirteen teachers across Schools A, B and C reported that school wide data collection systems had been established and in the case of School C these were computerised. A number of teachers (11) stated that a greater variety of assessment procedures were now being used, citing individual profiles, checklists, tracking books, one month observations, portfolios and self and peer assessment methods as examples.

Less than a quarter of the teachers in the sample mentioned that changes made were linked to curriculum requirements. They commented that assessment related more specifically to achievement objectives and learning outcomes with the recording of this information by strand and topic. The extra workload, both in terms of the ongoing collection of information and the recording of it, often for the benefit of other stakeholders, was mentioned by 4 teachers.

Initiators of changes to collecting and recording assessment data

Teachers were asked to rank, in order of influence, the person or group who they

believed had primarily initiated the changes to collecting and recording assessment information within their school, 1 as having the 'greatest influence' and 7 the 'least influence'. Seven groups were listed: principal, assistant / deputy principal, Education Review Office, Board of Trustees, parents, teachers within the school and Ministry of Education.

The mean rankings of teachers in each school revealed that the principal, the deputy and assistant principal and the Ministry of Education had the greatest influence in making changes to collecting and recording assessment information (see Table 12). The Education Review Office and teachers themselves were identified as having a moderate influence, while Boards of Trustees and parents had the least influence.

A series of correlations were calculated to examine the degree of agreement among the mean rankings each school gave to each of the seven variables. The correlations between the mean rankings were all significant ($p < .05$, two tailed) and high (.71 to .93) with one exception, and this was the correlation of .59 between Schools A and C. An inspection of mean rankings in Table 11 shows that the mean rankings of School C for Boards of Trustees, the Education Review Office and parents are markedly different from those of School A.

Table 12

Mean Rankings for Initiators of Change to Collecting and Recording Assessment Information Across Schools.

	Sch A	Sch B	Sch C	Sch D	Average across all schs
Principal	3.0	2.7	2.3	1.2	2.3
Assistant/ Deputy Principal	2.5	2.6	2.0	2.6	2.4
Education Review Office	2.1	3.0	3.8	4.6	3.3
Board of Trustees	5.2	5.2	3.4	6.0	4.9
Parents	6.5	6.5	4.3	6.3	5.9
Teachers	3.3	3.6	3.3	4.0	3.5
Ministry of Education	3.0	2.0	2.8	2.6	2.6

The introduction and implementation of changes to collecting and recording assessment information

Teachers were asked 'how have changes been introduced and implemented?'. A content analysis of their responses identified three content categories:

- hierarchically; decisions made by senior staff;
- as a staff development focus;
- building upon existing practices.

Over three quarters of the teachers who responded to this question (16) stated that changes to collecting and recording information had been introduced through staff

development programmes operating within their school. Specific responses coded under this category included participation in Ministry of Education contracts either by all teachers in a school or by selected representatives, the rewriting and revamping of schemes and policies and at a syndicate level the development of exemplars, the trialling of various data collection methods and the compilation of criteria lists.

Four teachers stated that changes had built on procedures that currently existed within the school. A small number of teachers (5) commented that teachers as a group had been excluded from the decision making process with proposed changes decided at the senior management level (principal, deputy and assistant principal) with little or no consultation with staff. These teachers stated that change had been imposed on them.

Why changes have occurred

Teachers were asked 'why do you think changes had occurred?' On the basis of these responses six content categories were established:

- to provide a better match between curriculum and assessment requirements;
- to meet the requirements of the Education Review Office;
- to meet Ministry of Education requirements;
- to monitor progress throughout the school in a more coherent and uniform manner;
- the need for teachers to be seen as accepting of change;
- to make teachers and schools more accountable.

Approximately a third of the teachers who answered this question (9) stated that changes had occurred as a response to the need to monitor individual pupil progress. Individual teachers commented on the need for standardised procedures nationwide and the importance of developing school wide tracking systems. The necessity for assessment systems to reflect curriculum requirements (achievement objectives, levels and strands) was cited by approximately a quarter of the teachers. One teacher said that teachers are constantly mindful that unless they are seen as accepting of change then in future they will be excluded from the decision making process.

A number of teachers talked about the influence of the Education Review Office (ERO) and the Ministry of Education on schools. Seven teachers stated that in response to an impending ERO visit and in an attempt to appease the review team change had occurred in their schools. They commented that ERO were advocates of certain assessment procedures and could assert pressure on schools to adopt these procedures. Some teachers (7) commented that the Ministry of Education could also assert pressure on schools to make changes, not through review but rather through the issuing of directives and texts to support policy documents or through Ministry of Education contracts. Finally some teachers (4) felt that changes had occurred because it was a means by which schools and teachers could be held to account for their performance. This, they remarked, was part of a world wide trend, politically and economically driven.

Changes to reporting assessment information

Teachers were asked to identify any 'significant change' to reporting assessment information. A content analysis of their responses identified six content categories:

- unsure what changes had occurred;
- summative ways of reporting to parents had been revised;
- more regular reporting to Board of Trustees;
- more copious record keeping;
- collation and reporting of school wide data.

In each of the schools there was quite a large number of teachers who were unsure of what changes had occurred (13). As reported previously the reasons for this were threefold: there were a number of beginning teachers in the sample, some teachers had only been in their present school for a short period of time or a number of the teachers had only recently taught in New Zealand, either as New Zealand teachers returning from overseas or as non New Zealand trained teachers.

Many teachers (30) commented on changes to the ways in which summative data was

reported to parents. There were both similarities and differences among schools in the ways in which data is reported. The use of written reports and parent interviews to convey information to parents was common across all schools. School A provided a written report twice a year, an interview mid year and initiated parent conferences at other times during the year, if needed. Little information was received from School B apart from the fact that parent interviews and written reports were used as a means of communication. School C had made changes to their report format, omitting effort and achievement ratings, and had increased the number of parent interviews to two each year. Forms had been sent home to parents prior to interviews, encouraging them to identify points for discussion. In addition to a written report and 2 parent interviews, School D sent home folders of children's work containing work samples along with the goals that children were working towards. These samples were used as discussion points at the parent interview.

A small number of teachers (4) identified change in relation to the collation of school wide data, stating that information was sent to others within the school for the purpose of reporting to ERO (School A) and to the community (Schools B, C, D). Three teachers in schools B and C felt that this has led to more copious record keeping. A number of responses (8) were received from teachers in Schools B, C and D explaining that there was more frequent reporting to the Board of Trustees. Board members were provided with aggregated data of pupil achievement, information related to current curriculum activities, developments and programmes and school wide achievements.

Initiators of changes to reporting assessment data

Teachers were required to rank in order of influence the individual or group who they believed had primarily initiated the changes to reporting assessment information, 1 having the 'greatest influence' and 7 the 'least influence'. Seven groups were listed: principal, assistant / deputy principal, Education Review Office, Board of Trustees, parents, teachers within the school and Ministry of Education.

Teachers' mean rankings revealed that the principal or the deputy / assistant principal

had the greatest influence in making changes to reporting assessment information (see Table 13). The Education Review Office, Ministry of Education and teachers themselves were identified as having a moderate influence, while Boards of Trustees and parents had the least influence.

A series of correlations were calculated to examine the degree of agreement among the mean rankings schools ascribed to each of the seven groups. Some of the correlations between the mean rankings were significant ($p < .05$, two tailed) and high (ranging from .73 to .95) while others were not significant and lower (ranging from .58 to .65). The lowest non significant correlation was between School B and School C. An inspection of the mean rankings showed a substantial difference in the ranking they gave to parents (School B = 6.5, School C = 4.2).

Table 13

Mean Rankings of Initiators of Change to Reporting Assessment Information Across Schools.

	Sch A	Sch B	Sch C	Sch D	Average across all schs
Principal	3.0	2.7	1.2	1.8	2.1
Assistant/ Deputy Principal	2.2	3.5	2.0	2.6	2.5
Education Review Office	3.4	3.2	3.0	4.0	3.4
Board of Trustees	6.0	4.5	3.2	4.8	4.6
Parents	5.2	6.5	4.2	5.6	5.3
Teachers	3.0	4.2	2.7	3.6	3.3
Ministry of Education	3.6	2.5	3.6	4.0	3.4

The introduction and implementation of changes to reporting assessment information

Teachers were required to identify 'how changes have been introduced and implemented.' On the basis of their responses three content categories were constructed:

- through senior management;
- through staff development;
- in a gradual and ongoing way.

Many teachers identified a number of ways in which changes had been introduced and implemented. Over half of the teachers who answered this question (11) stated that assessment had been the focus of staff development programmes. Specific comments coded under this category included the time allocated to whole school and syndicate meetings, the debating of important assessment issues and the opportunities to trial various assessment methods for ease of use and manageability. Seven teachers in Schools C and D emphasised the developmental approach that their school took, explaining that changes were gradual and ongoing, that they were in fact still trialling and streamlining certain procedures. These teachers said an ongoing process of review was important.

Over a third of the teachers (6) indicated that they felt that changes had been decided primarily by the senior management team (principal, deputy and assistant principal). Decisions made were then presented to staff with limited opportunities for discussion. Consultation was seen as minimal by these teachers.

Why changes have occurred

Teachers were asked 'why changes have occurred?' A content analysis of their responses identified four content categories:

- to meet the requirements of the New Zealand Curriculum Framework;

- to meet the demands of the Education Review Office;
- to meet the demands of the Ministry of Education;
- to increase teacher accountability.

Approximately half of the teachers (10) stated there was a necessity for reporting systems to reflect curriculum requirements (levels, strands, objectives). A small number of responses (2) focussed on the the need to meet Education Review Office demands while others (3) identified Ministry of Education demands as reasons for change. Finally several respondents (2) felt that changes had occurred because it was a means by which schools and teachers could be held accountable for their performance. These teachers stated that both the government and society wanted to identify specific weaknesses in teaching programmes, for example mathematics, and possibly new reporting systems could identify such weaknesses.

School use of assessment information

Teachers ranked in order of importance, the uses made of assessment information within their school. The nine uses listed were: to help students take responsibility for their own learning, to cater for the individual needs of children, to report to parents, to report to the Ministry of Education, to report to the Education Review Office, to build up a profile of individual achievement, to assist in future programme planning, to make changes to current teaching and to report to the Board of Trustees. A ranking of 1 was equivalent to the 'most important' while a ranking of 9 was the 'least important'.

A similar pattern occurred across all schools. Catering for the individual needs of children was deemed as being the most important use made of assessment information (see Table 14). Utilising this information to build up a profile of individual achievement and to plan programmes of work were also ranked as very important by teachers. Making changes to current teaching, reporting to parents and helping students to take responsibility for their own learning was considered to be of moderate importance. Of least importance were the uses made of assessment information to report to the Education Review Office, Boards of Trustees and the Ministry of Education.

A series of correlations were calculated to examine the degree of agreement among the mean rankings schools gave to each of the nine uses. The correlations between the mean rankings of the schools were all significant ($p < .05$, two tailed) and high (ranging from .74 to .93). Thus it can be assumed that the schools gave similar rankings to the uses.

Table 14

Mean Rankings of the Uses Made of Assessment Information Across Schools

	Sch A	Sch B	Sch C	Sch D	Average across all schs
Student responsibility for own learning	3.7	6.1	4.4	3.6	4.4
Cater for individual needs	2.1	2.5	1.6	1.5	1.9
Report to parents	4.1	4.2	4.1	5.0	4.3
Report to Ministry of Education	6.8	7.2	7.4	7.6	7.2
Report to Education Review Office	5.5	6.7	6.9	6.2	6.3
Profile of Individual Achievement	3.7	3.5	2.5	3.8	3.3
Future Programme Planning	3.1	2.4	3.8	3.1	3.1
Changes to current teaching	2.7	5.4	4.4	4.0	4.1
Report to BOT	6.6	5.9	6.5	6.0	6.2

Implications of assessment requirements

The New Zealand Curriculum Framework (1993) states that the primary purpose of school based assessment is to improve teaching and learning. Through the use of a range of procedures and strategies teachers are expected to diagnose learning strengths and weaknesses, measure student progress against defined achievement objectives and review the effectiveness of teaching programmes offered. Information gained can be used to build profiles of student achievement and provides the basis for feedback to students and parents. The Education Review Office through regular reviews determines and reports how successful schools have been in assessing student achievement in comparison to levelled achievement objectives. New Zealand research has shown that the implementation of new curriculum and assessment requirements has been problematic for teachers (Renwick & Gray, 1995) and has lead to teachers becoming less confident in their professional ability (Irving, 1995). This section is thus concerned with identifying the advantages and disadvantages of such a system. In addition participants were asked to identify the possible effects, intended and unintended, that the new assessment requirements might have on children, teachers, schools and parents.

Advantages of the new assessment requirements

Teachers were asked to identify the 'advantages of the new assessment requirements.' On the basis of their responses, four content categories were established:

- assessment is more closely linked to the teaching learning process;
- assessment has taken on a broader focus;
- schools and teachers have clearer guidelines within which to operate;
- greater accountability.

The teachers frequently provided more than one advantage, with many identifying two or three advantages. Over half of the responses received for this question (22) revealed that teachers felt that assessment was now more integral to teaching and learning.

Individual teachers stated they were more cognizant of their own strengths and weaknesses, their teaching was more focussed on individual needs and programmes offered were more relevant to learners. They regarded that this had been achieved through a greater awareness of what to teach (achievement objectives), and improved planning. Associated with this was the belief expressed by many teachers (19), that schools had clearer guidelines in relation to content, delivery and assessment. Teachers commented that they were more familiar with and confident in using the national curriculum statements.

Fourteen teachers believed that assessment had taken on a broader focus; processes that children engaged in were now being assessed, along with skills and attitudes. They commented that the move away from only assessing factual knowledge or a final product was advantageous for children as was the departure from using only pencil and paper assessment methods. Using assessment methods which involved teachers working closely alongside children was seen positively by these teachers.

The possibility of using assessment information for comparative purposes, within and across schools was viewed positively by a limited number of teachers (7). This could, they explained, make teachers more accountable for what and how they teach.

Disadvantages of the new assessment requirements

Teachers were asked to identify the 'disadvantages of the new assessment requirements.' A content analysis of the responses identified six content categories:

- increased stress and workload for teachers;
- fragmentation of learning for children;
- assessment is now driving the curriculum;
- relevancy and appropriateness of assessments undertaken;
- uses made of assessment other than classroom use;
- lack of support for teachers.

Teachers often identified more than one disadvantage with some identifying several disadvantages. Increased stress and a greater workload for teachers was identified as a disadvantage by over three quarters of the teachers who responded to this question (28). Teachers commented on feelings of pressure, uncertainty and overwork, which they believed had led to increased levels of stress. They wrote of the time consuming nature of assessment especially in relation to the paperwork involved, the recording and filing of information, which was often completed in their own time late at night or on the weekend. A certain amount of uncertainty surrounded the expectations of ERO, with teachers stating that they felt comfortable with matching assessment with curriculum requirements but were unsure of what the ERO team would be looking for during a review visit.

Related to the increased workload was a belief expressed by many teachers (16) that assessment is driving the curriculum. Assessment it was reported, was considered to be more important than teaching; the focus of day to day activities in the classroom with less time available for teaching, planning or preparation. Again teachers explained this was done often to satisfy the requirements of the ERO team.

Some teachers (6) felt that generally there had been a lack of assistance for teachers in the implementation of the current curriculum and assessment reforms. This was not expressed as a criticism of their school but as a request for continuing support and training at a wider level. The introduction of new curriculum statements over a short period of time was seen as problematic by teachers, as was the lack of advice from agencies such as ERO as to their expectations. The employment of overseas trained teachers provided added pressure for schools as they attempt to familiarise these teachers with curriculum content and support them in meeting curriculum and assessment requirements.

Doubt was expressed by fifteen teachers in relation to the relevancy and appropriateness of the assessments undertaken. Some assessment activity was considered to be meaningless and unnecessary with too much emphasis placed on assessing surface level learning. Five teachers thought that assessment had brought

about fragmentation of learning for children. Replication of assessment information was also seen as a difficulty with a small number of teachers (5) stating that some assessment was often completed for the benefit of others using ERO as the example.

Implications of new assessment requirements

Teachers were asked to specify the possible implications of the new assessment requirements for children, teachers, schools and parents. Teachers responses indicated both positive and negative implications.

For children

On the basis of teachers' responses five content categories were constructed:

- individual needs are catered for;
- achievement levels will increase;
- children have greater involvement in the assessment process;
- less time for quality teaching;
- children are assessed more frequently.

Teachers identified a number of positive implications for children, the prime one being individual needs are catered for (16 teachers). This, teachers claimed, was achieved through the identification of children's strengths and weaknesses, and the provision of a more individualised needs based programme which enabled children to be regrouped and retaught where necessary. Some teachers (7) stated that the provision of more appropriate programmes of work would lead to higher levels of achievement.

Thirteen teachers commented that children have a greater involvement in the assessment process. Individual teachers stated that through improved teacher-pupil communication children are more aware of expectations and are more cognizant of their areas of strength and weakness. The specification of long and short term goals provided children with opportunities to take responsibility for and control of their learning.

Teachers identified several negative implications for children. These related to the consequences of over assessment. Approximately a quarter of the teachers felt that assessment had taken time away from teaching or it had affected teaching. Some teachers talked of the lack of creativity and flexibility now evident in their teaching (8). Others commented that schools had gone overboard, with children being continually assessed which could have possible negative effects on children's motivational levels (9).

For teachers

On the basis of teachers' responses five content categories were constructed:

- gain accurate information;
- increased workload for teachers;
- less time spent teaching;
- personal implications;
- the undervaluing of teacher judgements.

Positive implications were noted by half of the teachers (19) when they stated that the new requirements had provided them with more accurate information. The use of various methods and techniques enabled them to gain an accurate picture of pupil achievement, planning and teaching was focussed on set objectives, and instruction individualised. Teachers said they were able to judge more objectively the effectiveness of their teaching and the quality of the programme.

A number of negative implications for teachers were identified. Over three quarters of the teachers who responded to this question wrote of the increased workload and paperwork that has ensued (24). Again the time consuming nature of assessment was cited as a problem, both in terms of working with individual children and the amount of work required to record information. Teachers commented on the unrealistic expectations placed on them as they were required to assess individual progress in each essential learning area. The problem was compounded by large class sizes. Six teachers reported that they now spent less time teaching children and had less time for planning

and preparation purposes.

Some teachers stated that there was increased pressure on them to 'achieve' which had led to high degrees of stress and anxiety (8). The loss of enjoyment of teaching and job dissatisfaction because of assessment demands were given as reasons as to why teachers were leaving the profession. Associated with this was a belief expressed by several teachers (4) that their professional judgment was under attack. They commented that teacher judgment could only be legitimised through the collection of hard data, with little room for teacher intuition.

For schools

A content analysis of teachers' responses identified four content categories:

- the development of more effective assessment procedures;
- an increased workload;
- increased accountability;
- the need for continued staff development.

From a positive perspective approximately half of the teachers stated that their school was developing more effective and appropriate policies and procedures (21). Schemes had been updated and policies and procedures rewritten in line with current curriculum and assessment requirements. Teachers stated they were clearer about what and how to assess as school and syndicate teams had worked together collaboratively identifying specific achievement objectives, trialing, using and reviewing a wider range of tools and techniques for the collection, recording and reporting of assessment information.

However as a result of all this work, many teachers (14) commented on the increased workload. Teachers remarked on the tight time frames within which to implement a multiplicity of new curriculum documents. The time needed to become familiar with a number of new curriculum documents, to revamp and rewrite policies and schemes and to monitor the implementation of these policies and procedures were illustrative of the increased workload for teachers. Four teachers commented on the need for schools to

provide on going staff development if the requirements were to be implemented successfully.

The belief that schools were being called to account for their performance was expressed by about a quarter of the teachers (9). Teachers talked of the external auditing of schools by the Review Office as yet another pressure to cope with and stated that the way in which the Education Review Office reviewed and reported school performance required and forced schools to conform. Teachers commented that schools were judged on the reports they received which in turn could have a positive or negative outcome, as these reports were often used by other stakeholders (parents, community, society) for comparative purposes.

For parents

On the basis of teachers' responses five content categories were constructed:

- gain more specific information about their child's progress and development;
- more involved in their child's education;
- more assured about the quality of programmes offered;
- use information to make educational choices;
- little understanding.

Over three quarters of teachers claimed that parents, through regular reporting procedures, now gained more specific information about their child; his/her learning, achievements, strengths and weaknesses. They stated that teachers provided specific feedback to parents explaining what each child was able to do. Five teachers commented that parents were now more involved in their child's learning and the assessment process itself. These teachers talked of providing parents with ways in which they could help their child or asking them to contribute to the collection of information about their child's achievements. However a few teachers (5) raised questions about levels of parental understanding, stating that often parents were unsure of, or unfamiliar with, the educational terminology or jargon used and had little comprehension of the information provided to them in regard to their child's learning

and progress.

Over a quarter of the teachers stated that regular, explicit reporting procedures has resulted in parents feeling more confident that their children's needs are being met, receiving an assurance that children are learning through the provision of quality programmes. Two teachers commented that parents, on the basis of student results, were not only making decisions about their children's progress but also making choices between schools.

In-service training

It is well documented that the way in which change is introduced and implemented has a significant effect on teachers' practice (Castle, 1997; Hargreaves & Fullan, 1992) Of particular importance is the type and amount of support receive (Fullan, 1991). While generally teachers have felt positive towards the implementation of the New Zealand Curriculum Framework the implementation of assessment requirements have been far more problematic and is an area in which teachers feel they need further professional development (Faire, 1994; Renwick & Gray, 1995) This section reports on findings in regard to in-service and staff development opportunities, future training needs and overall adequacy of the training teachers had received.

Benefits Associated with Types of In-Service Training

Teachers were asked to identify the in-service training that had been of the most benefit. On the basis of responses received three categories were established:

- Ministry of Education contracts;
- staff development within own school;
- university/college of education courses.

Well over a third of the teachers identified Ministry of Education contracts, specifically Mathematics, English and Science, as being of great benefit to them. Teachers stated

that through participation in these contracts they had had the opportunity to examine and consider the curriculum documents in depth, break down the achievement objectives into learning outcomes and develop assessment exemplars which could be used within the daily classroom programme. Specifically, teachers mentioned the ongoing advice and support that advisers and contract facilitators had provided. They considered this to be invaluable, as was the opportunity to trial and adapt suggestions within their own school situation.

Eighteen teachers commented on the benefits of continuing staff development within their own environment. These teachers were appreciative of the opportunities provided at the school and syndicate level which enabled them to adapt and manage requirements in relation to class and school needs. Support and assistance 'on site', along with a consultative and collaborative approach to staff development, left teachers with a feeling that their individual needs and concerns were being met. A lesser number of teachers (5) considered university and college of education courses, both at the pre-service and in-service level as beneficial. They stated that these courses provided theoretical understandings which supported the practical application of assessment processes and procedures. In addition they were appreciative that questions had been raised about the need to collect large amounts of data and the way in which information collected was to be used. These teachers remarked that participation in these courses enabled them to reflect critically and to identify possible contradictions in policy.

Further training in assessment

The second question in this section of the questionnaire asked teachers to identify what further training they would like in the area of assessment. On the basis of responses received four categories were constructed:

- classroom based assessment practices;
- assessment requirements at a local and national level;
- ongoing opportunities;
- none.

Two thirds of the teachers who responded to this question wanted training that would assist them to assess children's progress more effectively and efficiently across each of the seven essential learning areas. They were seeking practical help which would allow them to incorporate assessment more readily into daily classroom programmes at the same time making it more useful (for them) and less time consuming. Assistance in the use of particular assessment methods, for example self and peer assessment, was identified as a need.

Eight teachers commented that there was a need to address assessment requirements at a level beyond the school. These teachers contended that they would benefit from opportunities to work with teachers from other schools, where experiences could be shared in terms of scheme and policy development and implementation, and ways in which the requirements of ERO could be satisfied. There was a recognition from some teachers (5) that the change process would be, through necessity, ongoing as new curriculum documents were introduced and they requested continuing opportunities for training. Other teachers (5) stated they required no further training in the area of assessment commenting that it was not their favourite topic, they had had enough.

Adequacy of in-service training

Teachers were asked to rate the adequacy of their in-service training. A rating of 5 was equivalent to 'excellent' whereas a rating of 1 was equivalent to 'inadequate'. 35% of the participants felt that their training had been less than adequate, 30% rated it as adequate with a further 35% rating their in service training as either good or excellent.

Summary

Using both content and statistical analysis, information gathered from the forty three teachers who participated in the questionnaire phase of the data collection was reported. Responses revealed that teachers' knowledge of the five assessment contexts as outlined in the New Zealand Curriculum Framework was sporadic although all teachers were familiar with policy in relation to school based assessment. Teachers identified

both formative and summative reasons for the introduction of the new assessment requirements. They also provided examples of formative and summative uses made of the assessment information they collected.

While generally, teachers felt supported to implement curriculum and assessment change within their school environment, they were ambivalent in regard to some of the changes made to their assessment practice. Both positive and negative implications for teaching and learning were identified. Assessment was considered to play a key role in the enhancement of learning but at the same time many teachers felt that it was also being used to control teachers and teaching.

There were reported differences in teachers' confidence levels both in regard to their ability to assess specific areas of the curriculum and the use of specific assessment methods. Teachers also indicated that the data gathered from some methods of assessment as compared to others, was of greater formative use.

The following chapter, based on data from both the questionnaire and interview phases of the data collection, and presented as five themes, provides an in depth discussion of a number of the findings outlined in this chapter.

CHAPTER FIVE

EMERGENT THEMES

Three major research questions underpinned this thesis. Based on information gained from both the questionnaire and interview phases of data collection this chapter reports on findings in relation to the three questions. Presented in the form of five emergent themes, teachers' understandings of the purposes of assessment, the uses made of assessment information and factors which influence and shape teachers' practice are all discussed in some detail. Throughout the discussion current literature and recent research studies are used to contextualise this study.

The five themes, which were created by descriptive and conceptual analysis, form the basis of the discussion and include: (1) the professional development of teachers, (2) competing conceptions of accountability, (3) reflections on practice, (4) the purposes of assessment and (5) methods of assessment.

Theme one, the professional development of teachers, portrays the ways in which schools and teachers have approached curriculum and assessment change through the development of reflective practice and the establishment of a collaborative culture.

Theme two, competing conceptions of accountability, considers the ways in which accountability has been conceptualised by key players within the study. Teachers' personal conceptions of accountability are critiqued and compared to those of the Education Review Office. Teachers' perceptions of the effect of the review office on their practice are documented.

Following on from the effect of the Education Review Office on teachers' practice the next theme entitled reflections on practice, examines the ongoing changes that schools and teachers have made to their assessment practice and the reasons for making such changes.

Theme four, the purposes of assessment, begins with an analysis of current assessment policy and the influence it has had on teachers' assessment practice. In the second part of this theme a detailed analysis of teachers' articulated practice is presented. Formative and summative approaches to assessment are contrasted.

The final theme, methods of assessment, considers the ways in which teachers have been able to utilise particular assessment methods in the enhancement of learning.

A summary is provided at the conclusion of each of the themes.

THEME ONE: THE PROFESSIONAL DEVELOPMENT OF TEACHERS

Over the past five years teachers have been charged with the responsibility of implementing, almost simultaneously, various curriculum and assessment initiatives. However, the successful implementation of any policy in education depends largely upon the willingness and commitment of teachers to carry these out (Aikin, 1994). Within the New Zealand context an emerging body of literature shows that while there has been general support for the NZCF from primary school teachers, the implementation of assessment requirements has been far more problematic (Aikin, *ibid*; Baker, 1995; Faire, 1994; Renwick & Gray, 1995) and is the area in which teachers feel they need further development (Renwick & Gray, *ibid*).

For each of the schools in this study assessment had become a critical issue as teachers sought to both improve their practice and meet the demands of a range of stakeholders. As Carr and Kemmis (1983) have argued the aims and objectives that teachers pursue are influenced by structural forces over which they have little control. A number of teachers, as they attempted to explain why assessment had become such an important activity, referred to these structural forces:

“ worldwide trends, political, Ministry of Education, political reasons.”
(Q# 36);

*“ the changes in the education system, social expectations ...
accountability expectations of parents and society, the need for higher*

achievement.” (Q# 6);

“ government and policy requirements.” (Q# 29).

However, it was the Education Review Office (ERO) that was considered to be the agency which enforced these increased demands and requirements. Writers such as Clark (1998), O’Neill (1998) and Robertson et al (1997) have argued that ERO in its monopoly position as the ultimate arbiter of acceptable practice, have been a driving force in bringing about changes in school and teacher practice, particularly in the area of assessment. Many of the teachers in this study supported this view:

“ ERO forced changes upon us” (Q# 2);

“ because ERO expected them.” (Q#20);

“ it is required, ERO look for these.” (Q# 32);

“ ... because of the pressure of ERO, I understand more individual assessment is done to meet the requirements of ERO.” (Q# 39);

“ I feel assessment is being driven by ERO.” (Q# 41).

Significantly, the meeting of these perceived demands had moved assessment from a low stakes to a high stakes activity for schools and teachers. As noted in the literature particular assessment practices can be perceived to be either low or high stakes in nature dependent on the long term consequences such practice has on teachers and schools (Gipps et al, 1995; Little & Wolf, 1996; Sebatane, 1998). Implicit within many teachers comments were the effects that ERO could have on schools. A number of teachers however, were quite explicit in their comments and voiced concerns related to the ways in which the findings of ERO could be used:

“ to be able to show how well schools are doing in relation to others.” (Q# 16);

“ ... schools that are failing behind can be picked up.” (Q# 13);

“ if they [ERO] see that you don’t have any records or you’re not assessing then they can say whether or not you’re [the school] are effective.” (Int # 2);

and the possible effects these findings could have on a school’s ability to compete in the educational marketplace:

“ can be used for good marketing ... choice of school [by parents].” (Q# 36);

“ [parents] will move houses to be in better school’s district.” (Q# 34).

Several New Zealand studies have documented the impact of ERO’s external inspection practices on teachers’ personal and professional lives (Renwick & Gray, 1995; Robertson et al, 1997; Yeoman, 1995). Indeed Robertson’s work has provided some evidence that ERO’s approach to school review has encouraged schools to direct their energy towards meeting compliance regulations rather than working toward genuine educational improvement. Many teachers in this study commented upon the demands placed upon them as they endeavoured to meet contractual requirements, make their work visible and ‘prove’ their professional judgements. Certainly their comments showed an awareness of the efficacy of some practices but at the same time illustrate the professional dilemmas that schools and teachers face as they attempt to compete in the educational marketplace:

“ that certain assessments will be done to satisfy ERO rather than for the good of the children, that certain statistics which can give a false impression of children’s ability will be used to judge a school’s effectiveness.” (Q# 9);

‘ to a certain extent to prove to ERO we are doing it [assessment].’ (Int # 4);

“ we have to show on paper definite progress ... much of what I do I feel I am doing for bureaucracy and I don’t need to do it ... but there are forms and sheets to be filled in for other people.” (Int # 5);

“ a lot of it I record because it is required ... a lot of it is superficial because we have got ERO coming out and we have to do this, this and this.” (Int # 8);

“ you need to have the data to say well this where the children are at ... they are operating at this level and here is the data to prove it ... its well documented and there’s data to support it and you’ve got concrete evidence.” (Int # 10).

Although critical of the influence of ERO on their practice on a more positive note, many teachers believed that certain changes to their assessment practice had been worthwhile. Professionally, teachers had invested a lot of time and energy in implementing the national curriculum statements and from their perceptions there was a

mismatch between their teaching and assessment practice which needed to be rectified:

“ there has been a need to meet the curriculum demands of assessment.” (Q# 40);

“ needed to develop school wide assessment documents which are in line with the new curriculums.” (Q# 13);

“ to keep pace with educational developments.” (Q#24);

“ the assessment needed to relate to the curriculum it seemed silly to have one without the other.” (Q# 42).

A further analysis of teachers' responses indicated that their professional reasons for making changes to their practices related to moral and ethical issues. Advocates of professional and ethical approaches to learning and teaching have argued that teachers must have a moral base from which they can consider the implications of their professional practice (Battersy 1988, cited in Turnbull 1997; Calderhead & Gates, 1993; Valli, 1992). Many teachers within this study made both implicit and explicit reference to these moral dimensions of teaching when they talked of why their assessment practice needed to change. The related issues of fairness to children and consistency of teachers' practice seemed to be important to many teachers. They believed that a closer match between curriculum delivery and assessment activity would result in the establishment of school wide systems of monitoring and tracking individual progress which would provide them with more accurate information. Teachers inferred that this would enhance learning for children:

“ to be able to monitor progress from year one to year six for each child, schools nationwide doing the same ... more consistency.” (Q# 27);

“ to provide fair assessment which can be easily passed from year to year school to school.” (Q# 28);

“ consistency across schools to make transitions from school to school more fluid.” (Q# 30).

Hargreaves and Fullan (1992), in talking about the professional development of teachers, emphasised the need to consider not only the acquisition of skills and knowledge, but also personal and contextual factors. They have argued that any attempt to change teachers' practice will be affected by the context within which

development occurs, for the context will enhance or inhibit the development of the individual. It is well documented in the literature on change, that certain conditions must be present if successful implementation of policy initiatives are to take place. The degree of change undertaken by teachers is strongly related to the amount of interaction they have with each other and with those able to provide assistance. Regular and frequent communication along with shared support and help were found to be strong indicators of implementation success (Fullan, 1991). Furthermore, the development of a collaborative culture where teachers work as a team is one of the ideal conditions that led to teachers dealing with the challenge of change in a positive professional way (Hargreaves, 1994). If these conditions are met there will be a greater probability that teachers will come to own the changes that are occurring (Ramsay, Harold, Hill, Lang & Yates, 1997).

Of interest to this study, was the way in which teachers and schools had managed the change process in relation to assessment. In what ways were teachers involved in the process? What support systems and structures were put in place for teachers? What strategies had proved helpful to teachers? Had teachers worked together in a collegial and collaborative manner? These questions were the focus of this particular part of the study and information gained from both the questionnaire and interview phases of the data collection provided some answers to these questions.

In attempt to address some of the critical issues related to the implementation of assessment policy all of the schools had targeted assessment as a focus for staff development programmes. Responses elicited from participants from both the questionnaires and interviews revealed that changes to the collecting, recording and reporting of assessment information had been introduced and implemented through staff development programmes operating within each school:

“ staff development within our school, speakers, advisory people where assessment has been part of the whole school planning process.” (Q# 7);

“ through staff and team meetings, gradually over a period of time ... enabled us to have more relevant assessment ... more relevant to the curriculum.” ((Q#31);

“ by staff, with staff, for staff.” (Q# 41);

“ we’ve worked as a staff.” (Int # 11).

An analysis of the interview data suggested that staff development had moved through a series of stages although each of the schools had neither necessarily gone through each stage, nor in exactly the same way. In addition, it appeared that several of the stages may through necessity, happen simultaneously and furthermore teachers may move backwards and forwards from one stage to another.

The importance of allowing teachers to talk about their practice within a meaningful and relevant context represents a critical point at which theory and practice intersect and where teachers’ as practitioners generate personal insights and contribute to the development of shared understandings of what constitutes good practice (Brown & Angus, 1997; Schon, 1983). Evidence was gained from teachers in two of the schools that this discussion was how they had addressed the issue of assessment initially in their schools or in the case of the third, how they intended to address this. From teachers’ comments, it could be seen that in this initial stage of the development process, discussion focussed not on the technicalities of implementation but on more fundamental questions related to the purposes of assessment and the consequences of such assessment for children:

“ ... people need to take a step back and be reflective about assessment as a whole rather than just assessment in particular areas and to think very clearly about what it they are wanting to achieve, what they are trying to find out about the learning for this child ... it’s more looking at the philosophy of what assessment is all about ... the school needs to go back right to the beginning, which we are starting to do here as well and have a look at the needs of the children and our community.” (Int # 3);

“ ... we have had staff meetings where we have talked about assessment and the need to assess children and what we are doing with it [assessment].” (Int # 5);

“ we worked right from the beginning on our beliefs and how we could implement them ... so we’ve worked through the whole thing so everybody is on board with that because it is the ownership thing, we’ve all done it together.” (Int # 10).

Much has been written in the literature of the importance of schools identifying a central

focus for their development and from there committing time and energy to that (Castle, 1997; Gipps et al, 1995). In 1994 Livingstone wrote that the area that had generated the most stress for teachers was the almost concurrent implementation of a number of new curricula within a very short time frame. Schools in this study, aware of the difficulties that teachers have been faced with, have concentrated on teachers becoming more familiar with the new documents, committing time and energy to their expansion thus enabling teachers to translate the curricula into workable documents for themselves. This appeared to be the second step in the process. However, not surprisingly since there have been five new documents to date, there was some evidence that not all the documents had received the same amount of attention. Mathematics and English had received the most attention:

“ most schools focus on the current curriculum documents and have in-service within the school to help the clarity come about.” (Int # 3);

“ this school has actually fine tuned what the achievement objectives are ... since I’ve been here I’m more attuned to what is required.” (Int # 4);

“ we made an emphasis ... in our school so we could start at the top from the curriculum and take from it what we were wanting to do in our school.” (Int # 9).

During this stage of the process there was evidence that schools had looked beyond their immediate environment and sought support, training and advice from outside of their school as they took considerable advantage of the professional development opportunities offered by the Ministry of Education through participation in teacher development contracts. Participation in these contracts was either through whole school participation or through the participation of selected staff who were then charged with the responsibility of feeding back to their colleagues within the school the knowledge, skills and information they had gained :

“ when Maths, English and Science were introduced the staff was small and in Maths the whole staff took part in the contract at the same time so we were able to set up systems together so we are on the same wave lengths.” (Int # 9);

“... I’ve been on contracts and part of each contract has been the assessment side for that particular curriculum area and that has given me the detail of it.” (Int # 3).

Many of the teachers interviewed considered that their participation in these contracts had contributed to their professional development. In addition, many commented favourably on the way in which contract facilitators had recognised the particular needs of their school:

“ as a whole school we’ve done curriculum development ... in English and Maths ... they’ve been very, very good.” (Int # 10).

However several teachers, while they had found participation in the contracts beneficial in terms of their increased curriculum knowledge and confidence, voiced some concerns related to the assessment advice they had been given. Two issues were of concern to them: firstly, the sense that assessment had not been given enough attention and secondly when assessment had been mentioned, there seemed to be little linkage between assessment and learning. Comments from one of these teachers illustrate their concerns:

“ ... even on the contracts I’ve been concerned with the amount of assessment they are actually asking of us ... the contracts didn’t tend to look at assessment very strongly ... it was more looking at activities ... I felt that they [facilitators] didn’t tend to link it strongly [assessment] with what they were teaching us.” (Int # 3).

Substantial evidence gained from the two phases of the data collection indicated that in depth investigations of the new curriculum documents had led schools to re-examine their current policies and schemes. Many teachers talked of the collaborative way in which they had worked in rewriting and revamping policies and schemes. The writing of school policies which then led to the development of school schemes as workable documents appeared to be the next step in the process:

“ ... worked as a staff on the scheme and the policy which then gave me a big picture of how the whole thing was put together.” (Int # 11);

“ we’re reworking the schemes now ... we’re just rewriting all the schemes now to be more in line with the curriculum documents.” (Int # 1).

Hall, Webber, Varley, Young and Dorman (1997) in their study of British teachers, found that the process of devising a whole school policy had impacted positively on both teacher confidence in relation to assessment in general, and to teacher awareness

of assessment. Many teachers in the present study commented on the helpfulness of engaging in the sort of activities related to 'getting to know' the curriculum documents, policy writing and scheme development. These teachers believed that it had helped them become more confident and had made their job more manageable:

" ... I think that professional development ... in that way has been really good and then with the other curriculum areas coming in you can relate it because all the curriculum documents are written in the same style, you know more and more and more how things fit in and how you can manage it [planning and assessment] more easily." (Int # 7);

" ... we haven't done many subjects we've only done English and Maths and I think we have looked at the curriculum document, we have constructed a school policy and then gone into a scheme where we have taken achievement objectives from the curriculum and written those in terms of learning outcomes that would be measurable for each topic ... it makes a good working document for me as a classroom teacher." (Int # 11);

" ... we've just completed our maths policy and that was a whole school syndicate sort of thing and that was great, it really worked out really well ... you can see the focus points and teaching points ... right down from new entrants all the way up to our year six ... that's really good ... that helps with assessment it really does." (Int # 12).

The final step in the development process was in regard to implementation. Describing this phase of the process, teachers provided evidence of the ways in which they worked together planning units of work, developing assessment exemplars and trialling various assessment techniques. Renwick and Gray (1995) discovered that the school syndicate was an effective structure whereby teachers could work together and support each other as they attempted to implement curriculum and assessment requirements. Considerable evidence gained from many teachers in this study, revealed that teachers really appreciated the support that a syndicate structure had provided:

" ... we plan together as a syndicate which is really good, it takes a bit of pressure off you as a teacher." (Int # 12);

" ... with the syndicate that I have got they're really supportive and we do a lot of planning together and with assessment they leave a lot of leeway, but you get ideas from each other and they share how they assess." (Int # 6).

A further analysis of teachers' comments showed that syndicate and team structures provided them with opportunities to learn, grow and develop as a result of being

involved in a hands on way in personally relevant experiences. The ongoing opportunities to discuss and debate their experiences allowed teachers to learn together, and provided some rich dialogue for them to reflect upon. Comments made by a number of the teachers were indicative of the value they placed in being able to talk about their experiences in a meaningful and relevant way which then served as a way of improving practice. As one teacher stated:

“ ... another thing as a classroom teacher, one of the most valuable things for me being able to implement the assessment procedures, is being able to talk about my experiences with other teachers and also knowing it [assessment] is an ongoing thing, it is not something that is set in concrete, we can come back and review it and work on making things better and more useful to us as teachers and children in the end.” (Int # 10).

Additionally, there was tangible evidence that many teachers felt supported themselves and were willing to support others, which is indicative of the development of a collaborative culture (Hargreaves, 1994):

“ ... generally speaking it is really supportive here in that we discuss things and most of the staff realise we've got a pretty good thing going.” (Int # 5);

“ well the best way for me to help people ... to take on board something new is for them to understand the reasoning, all the supporting evidence, as to why it is important and how it would help ... start there, might be time in syndicate meetings where we get to spend time talking about that and actually going through workshops and actually putting ourselves into the situation.”(Int # 10).

Summary of theme one: The professional development of teachers

The successful implementation of any policy initiative is dependent on the commitment and willingness of the teachers involved. Professional development therefore, should be concerned with not only the acquisition of skills and knowledge but also with the personal and contextual factors which may either inhibit or enhance this process. In all of the schools in this study, assessment had been both a critical issue for teachers and the focus of school wide professional activity. The planning for and implementation of staff development programmes had seen staff involved in a series of professional activities. An analysis of these activities has provided an emerging description of how teachers have worked together collectively and collaboratively to effect and manage

change related to their assessment practice.

The involvement of teachers at both a school wide and a syndicate level has resulted in a progressive cycle of action and reflection that considers the effects of those actions. There was considerable evidence that teachers in the context of their assessment practice were scrutinising their own contributions and competencies, moving some way towards a more realistic epistemology of that practice. In many instances change was being effected and supported through the concept of the reflective practitioner and extended by the development of a collaborative culture. In this way for a number of teachers, professional development in regard to assessment, was becoming an iterative activity.

THEME 2: COMPETING CONCEPTIONS OF ACCOUNTABILITY

It has been well documented in the literature that many countries are expecting more from their teachers than ever before, while at the same time there are repeated calls for teachers to become more accountable (Codd, 1998; OECD, 1990; Snook, 1994; Thrupp, 1997). In New Zealand, where New Right ideology has informed educational policy development and implementation, the accountability of teachers has been pursued through the rigorous assessment of students (Snook, 1994). Teachers' responses gained from the questionnaires revealed that, in discussion about assessment of their students, they have begun to use one of the most prevalent discourses associated with New Right ideology, that is the discourse of accountability:

" ... accountability, expectations of parents and society...the need for higher achievement." (Q # 6);

" greater accountability." (Q # 11);

" teachers more accountable." (Q # 15);

" more accountability." (Q # 18);.

" political reasons. ... to become more accountable." (Q # 36);

" increases accountability." (Q # 41).

It would appear that accountability as a notion is acknowledged by teachers in the study, their perception being that the recent assessment reforms have made them more accountable.

Accountability for the quality of learning and teaching in New Zealand classrooms is a responsibility shared by the state; through the Education Review Office, the profession as a whole through agencies such as the Teacher Registration Board, elected Boards of Trustees, principals, and teachers themselves. It is in the sharing of these responsibilities that accountability becomes a problematic and contentious issue as various stakeholders have disparate, often competing and conflicting notions of what form and function an accountability framework should take. Accountability in a restricted sense will emphasise the more readily quantifiable, easily specifiable and clearly behavioural aspects of education (Rae, 1993). However, in a broader more inclusive sense, accountability will embrace aspects of education that elude precise quantification and specification (Elliot, 1992). These two competing and contradictory views of accountability are often referred to as dichotomies; the marketisation versus the professional imperative (Codd, McAlpine & Poskitt, 1991, 1995), the internal versus external accountability frameworks (Ingvarson & Chadbourne, 1994), or the technocratic-reductionist versus the professional contextual (Codd, 1993). The very essence of these competing and contradictory views of how schools may be held to account and how this may impact on teaching, learning and assessment are encapsulated in a comment made by one of the teachers interviewed who currently holds a senior management position in a school:

“ I think one of the major benefits in school based assessment is that, if done properly it can focus on a child and their learning, then it benefits the child in that you’re meeting needs and therefore quality learning takes place ... you can get budgets meeting the needs of children because of the buying of appropriate resources. As far as the major problem ... I’ve seen schools become too heavy on checklisting, they’re collecting lots of samples of work that have limited validity and reliability, that it [assessment] has caused a lot of stress on teachers and that the assessments [sic] hasn’t necessarily changed what is happening in classrooms and therefore not giving quality teaching ... sometimes I’ve heard teachers who have actually assessed at home so they’re actually doing it for the wrong reasons, they’re doing it because they are told they have to and therefore the changes that are happening in the classroom is actually minimal.” (Int # 3).

A number of writers (Ball, 1993; Codd, 1988, 1992, 1993) have argued that language is a form of social practice that produces real social effects. In this way language becomes discourse, shaping what can be said and thought by the various stakeholders involved, "*We do not speak a discourse it speaks us*" (Ball 1993, p.14). In these terms, positions are constructed and the only possibilities of response may be through the language, concepts and vocabulary which the discourse makes available. As Codd (1993) has argued, there are certain discursive practices associated with each of the two competing accountability discourses. The value ascribed to particular practices is dependent on what stance is seen as the most important, technocratic-reductionist or professional-contextual. When teachers involved in this study talked of becoming accountable, or of increasing their accountability what did they mean? Was accountability viewed as a professional responsibility in the broadest sense or was it seen as the meeting of certain requirements, imposed on teachers by other stakeholders? Who benefitted from teachers becoming more accountable and what effect on teaching and learning did the meeting of requirements have? In essence, what discursive practices did teachers value when they talked of increased accountability? These were the salient questions to be addressed in this section of the study.

During the interview phase of this research project, it was evident that all the teachers considered teaching to be a serious, challenging and demanding endeavour. Each teacher was willing to take responsibility for her own performance. Teaching was viewed as a moral activity within which teachers should act with integrity. Accountability was seen not as some end point but as a process, one in which the teacher played a central and personalised role. Implicitly stated, was the assumption that teachers were able to self monitor and regulate their behaviour. As Codd (1993) has argued these aforementioned discursive practices sit the accountability discourse within the realm of professional commitment:

" ... gives you the professional understanding that you are not there to be mediocre, that you are there to do the best for the kids." (Int # 7);

" I think who I am accountable to has changed ... I like to think I am accountable to myself ... if I do something I like to do it properly." (Int # 8);

“ if I am a failing as a classroom teacher then I am letting everyone else down.” (Int # 2).

What was happening for children seemed to be of vital importance to all of the teachers interviewed. Statements made by many teachers indicated that they were willing to be responsible for what Snook (1994) has termed the most problematic aspect of teaching, that is the fostering of learning. They were willing to take responsibility for what was occurring in their classrooms and the opportunities they were providing for children. Writers such as Darling-Hammond (1994) have argued that a professional approach to teaching emphasises the centrality of the child in the learning teaching process. In the opinion of many of the teachers interviewed, the needs of children were of paramount importance and the extent to which those needs were met underpinned their notion of accountability. Several teachers felt that the onus was on them if the children in their classes were failing to learn and these teachers personalised this failure. Others believed that they should not be held responsible for actual student achievement as minimal student gains in learning may be the result of wider social and economic problems. These teachers were willing to take responsibility for the ethos of their classrooms (Snook, 1994) and the provision of appropriate learning experiences. These aforementioned views can again be likened to what Codd (1993) calls the professional contextual view, where the main pedagogical aim of teachers is to develop the human capacities of the children they teach, rather than solely to produce the attainment of specific learning outcomes:

“ to me the big question is what changes are happening for children, what is happening in the classroom ... we are accountable to children and to show there is learning happening.” (Int # 3);

“ I worry the most about the children ... yes I think that I had let people down mostly if the kids in my class weren't learning.” (Int #1);

“ I think that some people think that accountability is making sure the child necessarily achieves what they're supposed to ... I think that as long as you are trying to teach the child that's as far as accountability goes however I don't think that is what Lockwood Smith had in mind ... but it's all the garbage they [the children] bring to school things that governments don't take into consideration.” (Int # 4).

Sullivan (1997) has contended that teachers have ambivalent feelings about some of the current educational reforms, resisting some and rejecting others. Certainly the

current assessment reforms were viewed by the interviewees in an equivocal way. Some teachers acknowledged that assessment if used appropriately was the means by which individual needs could be identified and catered for. Many teachers talked explicitly of the close relationship between assessment and planning, which they felt had a positive impact on the quality of the programmes provided for children:

“ you know you’ve got to realise it’s [assessment] helping you ... and therefore you can plan to meet children’s needs, whereas if you didn’t have assessment you wouldn’t know where to start.” (Int # 6);

“ I think the planning now makes a lot more sense I really know why I am teaching something. If anybody walked into the room at any time and said why are you teaching what you’re teaching right now, I could take them to my planning and say I’m teaching this because I’m doing something which is going to help me teach a child this objective.” (Int # 11).

However several teachers raised the important issue that the simple act of collecting and recording assessment information would make little difference to children and programmes unless that information is acted upon. In their minds, accountability did not equate with detailed records, rather they viewed themselves as more accountable if they were utilising the information gained:

“ I think often we do collate information but we do nothing with it which then goes back to the point, why are we collecting the data. If it is so we can present it to ERO I think then it is very dubious. If you are using it to look at how we could change our programmes or change our philosophy or bring in resources, then I think yes you’re using the information in a very valid way.” (Int # 3);

“ ... its like everything else if you assess them [the children] and don’t follow through with what the assessment is telling it doesn’t make a scrap of difference. You have to use that assessment knowledge and if you don’t you’re in the cart. I think that is the crux of the whole thing using that assessment.” (Int # 4).

The preceding comments made by teachers illustrate a professional model of accountability whereby assessment is the major responsibility of the teacher (Codd, Mc Alpine & Poskitt, 1995) and the needs of the learner rather than the needs of the market are pre-eminent. The utilisation of assessment information for instructional and evaluative purposes within an ongoing classroom programme was seen by teachers to be of vital importance.

However data gained from the questionnaire responses revealed that the Education Review Office (ERO) impacted both on teachers work and their notions of accountability. There was a degree of uncertainty surrounding the expectations of ERO with some teachers believing that assessment was driving the curriculum, which often resulted in an overabundance of paperwork. ERO was perceived, by a reasonable number of teachers, as an agency that exerted considerable power over schools and teachers:

“ initially the prompt to make changes [to collecting and recording procedures] came from an impending ERO visit. “ (Q # 4);

“ please help us make assessment more manageable, in the classroom, in our planning and preparation time, and make it useful when we are meeting our children’s needs ... and far less cumbersome for passing on the information to others such as ERO ... we are drowning in paperwork ... ticks and crosses.”(Q # 28);

“ schools are forced to conform as ERO gives reports to the media ... I feel assessment is being driven by ERO ... more assessment is done to meet the requirements of ERO.” (Q # 40);

“ I would like a course [in service] that shows how to assess easily with least disruption and ERO will give ten out of ten for.” (Q # 41).

A number of writers (Codd, 1993; Codd, McAlpine & Poskitt, 1995; Rae, 1993; Robertson et al, 1997; Snook, 1994; Thrupp, 1997) have voiced concerns relating to the narrow way in which accountability has been expressed by the Education Review Office. The quest for effectiveness (the meeting of appropriate goals) and efficiency (the meeting of those goals in the most appropriate manner) has resulted in Assurance Audits and Effectiveness Reviews that emphasise contractual compliance and technical competence. As Thrupp (1997) stated, compliance is determined by the existence rather than the implementation of adequate policies and competence is often determined through the provision of data rather than the actual performance of teachers. Many interviewees were concerned about these types of accountability procedures which were not necessarily driven by classroom practice but rather driven by the school’s desire to appease the Review Office:

“ I believe a lot of assessment has taken place which to the observer may look like there is assessment happening when in fact the validity of it is very shallow ... I think it is for senior teachers, principals.” (Int # 3);

" I think to a certain extent to prove to ERO we are doing it [assessment]. My last school definitely all the paperwork was geared to ERO, it was never geared to what you wanted to use." (Int # 4);

" much of what I do I feel I'm doing for bureaucracy ... there are forms and sheets that are filled in for other people ... I wonder whether they are looked at ... I don't think they are but I'm told to do them. I resent this I really resent this." (Int # 5);

" I think a lot of it [assessment] is superficial because we have got ERO coming out and so we have to do this and this and that." (Int # 8).

Central to a model of accountability that promotes external review is the implicit belief that teachers cannot be trusted. The message conveyed to them is that there is low trust in both their commitment and their teaching ability and their performance will need to be monitored more closely (Robertson et al, 1997; Sullivan, 1997) Within such a model, the teacher has the responsibility to prove through the evidence of hard data, their professional judgements. An over emphasis on the provision of hard data can often undermine professional confidence and lead teachers to perform assessment activities purely for the sake of providing quantitative information rather than as an instructional tool to help them determine children's needs (Irving 1995). Several teachers during the interviews provided anecdotal evidence not so much about themselves but about their colleagues whom they felt lacked the confidence to trust their own professional abilities:

" I know teachers in my team ... who say to me its [assessment] useless and I say to them don't do it but they still have the feeling oh someone's going to look at it and it's going to be needed to be done." (Int # 2);

" I see a lot of information coming from other schools where they are at the overboard stage ... they have been checked out by ERO ... and this is why they have done it." (Int # 9).

While ERO will continue to be an agency that has considerable influence and effect on schools and teachers, there was evidence gained from a number of the teachers interviewed that they were beginning to examine critically their assessment practices and to reject some of those practices and procedures that were particularly technicist in their application. A feeling was expressed by some teachers that they were confident in what they were doing with children and why they were doing it. There was an impression gained that schools were streamlining their assessment procedures,

developing methods of collecting and recording assessment information useful to them and at times rejecting methods perceived by them to be favoured by ERO teams:

“ they [schools] are going through the stage where they are proving they have done it [assessment] ... now we are seeing how we can lighten the load and make systems more streamlined and beneficial for us and the children.” (Int # 9);

“ I think people are getting used to the fact that they don’t have to run around with a pencil and paper all the time ... for a while there we went through a stage where you just couldn’t use your intuition.”(Int # 7).

Summary of theme two: Competing conceptions of accountability

Codd (1993, p.17) wrote that educators in New Zealand must “*win back the high ground of educational discourse ... and technocratic reductionism in educational evaluation must be resisted vigorously.*” This he believed could only be achieved “*if teachers are at the front line of that resistance.*” Although it is inappropriate to make generalisations across other schools and teachers, it is heartening to note that many of the teachers interviewed were attempting to take up this challenge through adopting the discursive practices associated with a professional commitment to accountability.

Teachers were willing to accept that the state has a role in the assessment and monitoring of pupil learning and school performance, acknowledging that there was a need for schools and teachers to be held accountable. Yet how accountability is legitimised was of concern to the interviewees. All of the teachers interviewed believed that first and foremost they were accountable to the children they teach. They also felt accountable to parents, senior teachers and the school management team. Most teachers, while cognizant of the influence and effect that ERO has over schools and teachers, did not feel personally accountable to this agency. Moreover teachers believed that The Education Review Office’s technocratic reductionist view of calling schools and teachers to account through contractual compliance and technical competence (through the provision of internal policies and the meeting of pre-specified attainment targets) had little effect on actual classroom practice. Teachers believed that accountability meant more than engaging in assessment practices and procedures that would appease ERO. They raised questions about the need to collect the amount of

data and the way in which information collected was to be used.

Personally, many teachers felt that the new assessment requirements had increased their accountability. This had been achieved through using the results of assessment to identify individual needs and through the provision of appropriate programmes of work. However for some teachers there was still confusion between their personal autonomy and professional responsibility. There was some evidence that schools and teachers were rejecting a narrow reductionist approach to assessment preferring to utilise methods which would support and enhance children's learning.

THEME THREE: REFLECTIONS ON PRACTICE

The year 1990 heralded a phase of educational reform which, driven by the National Government's Achievement Initiative, was concerned with curriculum and assessment. As a result the New Zealand Curriculum Framework (1993) and a series of supporting documents, collectively termed national curriculum statements, have been developed and are currently being implemented in schools throughout New Zealand. Since this time there has been an abundance of literature, produced by both critics of the reforms and the Ministry of Education, which has highlighted the tensions and problems that teachers have faced as they have attempted to translate a policy initiative into practice. (Baker, 1995; Irving, 1995; New Zealand Education Gazette, 1995; Renwick & Gray, 1995). In turn this has affected teacher confidence and morale with much being written about teachers' feelings of lack of control, the weakening of professional confidence and the inability to cope (Baker, 1995; Irving, 1995; Jesson, 1995; Sullivan, 1994, 1997). However it could be argued that these reactions are hardly unexpected as the implementation of any major change takes time, is often anxiety provoking and requires extensive effort (Fullan, 1991). The feelings expressed by the teachers interviewed were of importance to this study: Did they express feelings similar to those already documented in the literature related to the effects of the current reforms on teachers? Was there a sense of teachers 'hanging on' or was there a sense of growth? Were the teachers feeling empowered? Were teachers accepting of the changes to assessment which had occurred or were they beginning to challenge some of their own practices?

These questions will be discussed under this theme.

As reflected in the British experience (Gipps, 1994; Gipps, McCallum Brown & McAlister, 1995) New Zealand schools and teachers in the main were largely unprepared for the impact of a national curriculum and the development of an assessment system that supports such an initiative. Several teachers in the study, all of whom had breaks in their teaching service, discussed the difficulties which faced them when they returned to teaching. Comments made emphasised the complexity of the task required of them, their personal feelings of inadequacy and the incredibly daunting and overwhelming nature of the teaching and assessment task. These comments also serve as a reminder of how teachers felt when they were charged initially with the task of implementing curriculum and assessment policy:

“ I think breaking down achievement objectives ... some of them are quite broad ... breaking them down into something that can be measured ... establishing benchmarks to measure them ... it was scary just thinking about it.” (Int # 10);

“ ... this great big thick book on English [curriculum document] a great big thick book on Maths, I was floundering with that as a new teacher.” (Int # 11).

In addition to the size and complexity of the task facing individual teachers, schools through the state educational restructuring process, were in a sense, detached from each other (Codd, McAlpine & Poskitt, 1995). The decentralisation of administration and the introduction of independent self managing schools meant that schools were operating as independent bodies. Individual schools it seemed, were expected to set up their own systems, working as isolated units with limited contact with peers and colleagues in other schools. This effectively reduced their access for comparisons which may have enabled them to reference their own work in relation to a range of approaches (Brown & Angus, 1997). Many of the teachers interviewed, especially those in more senior positions, felt that this individualised approach to policy implementation, as well as a lack of specific directives from state agencies such as the Ministry of Education, had caused them extra work:

“ ... a lot of changes occurred in just trying out new ways and things and sometimes that resulted in a lot of extra work ... while we've been trying to

figure out how to do this [assess] we've done a lot more than we needed to." (Int # 1);

" ... we seem to have gone overboard, you know teachers were told if you don't do it [assess] we will do it for you, so it has gone overboard ... and we weren't sure why." (Int # 7),

" I think of all hours doing that [setting up systems] ... if several schools in the area had banded together and developed and adopted the same system I'm sure that would have helped." (Int # 9).

Furthermore, the lack of direction and schools' reduced access to comparisons had resulted in assessment systems that schools and teachers were unhappy with. Teachers who held senior or middle management positions were especially concerned:

" I think sometimes we put these things on ourselves, that it wasn't necessarily a directive from the Ministry ... we needed to be on paper, that was the unwritten thing, therefore ... we needed to checklist ... but I think we've come through that or are coming through that." (Int # 3);

" ... it [assessment] has gone overboard and [teachers] have tried to assess everything and we found ourselves especially at the beginning assessing every little thing ... and it got to the stage where we were assessing more than we were teaching ... and it is probably just this last term we have started to come to terms with it." (Int # 7);

" ... that was detrimental to teachers because a lot of them had got to a point where you mention assessment now ... and you've got a feeling that maybe the emphasis is moving away from teaching ... it tends to have gone that way in feeling the water and trying to get an idea of how to do it. (Int # 1).

From the preceding comments it can be deduced that in the initial stages of the reform process, schools and teachers were taking a reactive rather than a proactive stance to the implementation of assessment policy. However in further discussion with the teachers interviewed there was evidence that as time has gone on, schools through the efforts of key personnel, were becoming more proactive. It is well documented in the literature, both in New Zealand and overseas, that the degree of change undertaken by teachers is directly correlated with their ability to interact and communicate with each other, the provision of mutual support and help and reflection on their own practice (Brown & Angus, 1997; Bell & Gilbert, 1996; Fullan, 1991; Goodson, 1997; Hargreaves, 1994; Hargreaves & Fullan, 1992). All of the teachers interviewed provided examples of ways in which they had worked together either as a whole school or syndicate (as is

discussed in an earlier theme).

Many teachers in the study perceived that the support given to them, both as individuals and as members of teams, had augmented their curriculum knowledge and increased their levels of confidence thus providing a feeling of success. This was true for more experienced teachers:

“ I’ve been on the English initiative so I’ve had the new curriculum opened up to me in lots of ways I wouldn’t have if I had just sort of picked up the document.” (Int # 10);

“ ... you think yes I can do that [planning], I have done that, it went quite well, now I can try something else ... you know more and more and more how things fit in and how you can manage more easily.” (Int # 7);

“ I think it’s actually easy once you start really using the documents properly and realising it’s a pattern, it’s quite easy to use.” (Int # 4);

and for those teachers beginning their careers:

“ ... constantly using the curriculum documents so learning what is there and how to use it ... it’s been like a process rather than a big book of rules.” (Int # 6);

“ I’m more familiar with actual curriculum documents ... and where I am going ... whereas for me last year there was a big question mark ... I was fortunate to have support ... to actually know what you are reading, what you are talking about and what needs to be happening.” (Int # 12).

Feeling satisfied with the ways in which they have implemented curriculum requirements, teachers now seem to be paying closer attention to assessment policy and practice. The assessment process can be divided into discrete aspects, that is collecting and analysing assessment information, utilising the information for teaching and learning purposes, recording that information and finally reporting it to parents and other stakeholders. In an attempt to discover what counts as good assessment practice, many teachers in the study were endeavouring to identify what is not working well, reflect on the problems that face them and offer some alternative solutions. When teachers talked about the various aspects of the assessment process a number expressed dissatisfaction with the current systems of assessment operating within their schools. These dissatisfactions covered all stated aspects of the assessment process.

Gipps (1994) has stressed the relationship between assessment and the way subject matter is presented. She argues that this relationship affects what and how pupils learn. In New Zealand since the introduction of the New Zealand Curriculum Framework and the associated curriculum documents, initial attempts to assess children's performance against achievement objectives have resulted in schools attempting to define knowledge as a logically sequenced package (Elley, 1993). This has led to schools breaking down achievement objectives into learning outcomes, the assessment of which is often through long lists of criteria with accompanying indicators of levels of mastery. A number of the teachers interviewed were critical of this model of assessment which atomises knowledge. They voiced concerns about the relevancy of the data collected, the over emphasis on the easily observable; the skills and factual knowledge that children may be able to demonstrate and the possible effects this has on teaching and learning:

" ... getting hooked into assessing every little objective ... for example you might be [assessing] something like listens to a range of music ... it's assessed ... at the end who uses it ... who cares ... who is going to need it?" (Int # 1);

" ... when it [assessment] was first in we were assessing far too much ... we were assessing everyday ... you had to know if children knew everything ... and they probably knew a lot of stuff before we assessed it." (Int # 7);

" I think the overburdening of checklists is probably least valuable because I think it can focus on the wrong thing. Often from what I've seen in my role ... some of the skills and knowledge that has been checked off is surface level learning ... can child name 4 shapes ... types of clouds ... that's surface stuff ... it doesn't show the processes the child went through to get to that or something of the learning process." (Int # 3).

Other teachers in the study were concerned about the reliability or dependability of the data they themselves collected. According to Gipps (1994) the underlying reliability questions underpinning criterion referenced assessment relate to whether an assessment would produce the same or a similar result if given on several occasions or if made by two different assessors. Furthermore, within a standards based assessment approach based on pre-specified learning outcomes and associated criteria, the key question must always be how often does the child need to display that behaviour or characteristic before it is determined that it has been mastered. These teachers displayed an

awareness of these important notions underpinning reliability. Additionally they appeared to be aware of the shortcomings of checklisting as an assessment method:

“ maths for example we do a 6 week block ... and they [the children] will improve heaps from the pre to the post test and it's easy to tick them off, but I'm sure that in a lot of cases if I did the test next term I'd get different results ... as an overall assessment later on those children who I ticked might not have retained it ... it is a form of assessment but is it right?” (Int # 8);

“ I hate tick sheets why do you go around and see the child and tick them because at that particular moment they are doing something on that particular [assessment] sheet ... I think it is like lotto and I don't consider them [the assessments] very accurate ... I would much rather be doing something else rather than tick sheets.” (Int # 5);

“ As long as you treat them [checklists] properly ... when I do my PE [Physical Education] or Health I do checklists ... its good to know they [the children] are capable but you can't say that's it for everyone.” (Int # 6).

Within criterion referenced assessment a critical issue is the consistency of standards, that is ensuring that when qualitative judgements are made assessors interpret criteria and performance in the same way (Gipps, 1994; Peddie, 1992). An associated major technical problem is the crucial importance of context in performance with a number of researchers demonstrating that contextual factors critically affect pupil performance (Gipps, 1994; Elley, 1993, 1995). All of the teachers raised questions related to the reliability of the information received from their colleagues. Some teachers questioned the dependability of the assessment information received from colleagues in other schools while others acknowledged that context probably was the reason for inconsistent pupil performance. While the advocates of current assessment reforms may argue that schools will achieve greater consistency of standards, the situation in New Zealand, in which schools have been encouraged to work as autonomous, independent units will work to the detriment of this. Several teachers highlighted the detrimental effect this can have on children and their learning:

“ a child will come to you and from their records they have covered that but when you go back and look at that you think no way and you think is it me or is it the previous teacher or has the child suddenly gone backwards or is it the context it was taught in?” (Int # 8);

“ I think there should be more cooperation, more direction from the Ministry ... perhaps if several schools had banded together ... perhaps that would have helped children go between schools because I think that is

where it really falls down, is [sic] when the children shift.” (Int # 9);

“...sometimes you wonder whether how another school perceives a particular task or curriculum area is in fact the same as what you are doing, it’s hard to see that those comments aren’t necessarily what you would agree with.” (Int # 10).

In addition to voicing concerns about the relevancy, appropriateness and dependability of current data gathering and recording methods, many teachers were also skeptical about the usefulness of the assessment information gathered. Again teachers provided many illustrative examples of the ways in which assessment information was collected but never utilised. These examples related to both assessments they had undertaken themselves and the uses made of assessment information provided by other teachers. Utilising assessment information had become problematic for teachers partly due to the sheer amount of information they were gathering and receiving and partly due to the detailed nature of that information. There appeared to be an overabundance of information gathered related to topics covered. In an attempt to show a child’s progression over time, work samples were filed and kept for long periods of time. Finally in the quest to avoid ambiguity, criteria had often been specified in great detail resulting in over specified checklists and complex mastery codes:

“ there were all these records, their maths, literacy and things I haven’t even looked at ... there’s all these piles of triangles and that’s all it looks like and lines if the triangles haven’t been filled in ... you don’t have time to go through all of them ... you cant take it in on every single child ... it wasn’t valuable ... they have [assessment] for every single topic ... where they [the children] are at ... you don’t have time for that.” (Int # 2);

“ ... there’s this great file of work that they might have done two years ago ... it’s irrelevant ... I want to know what they are doing right now ... we’re bogged down.” (Int # 5).

Schon (1983), as he expatiated on teachers’ work, wrote that their knowing is often embedded in action without their being able to describe the underlying rules and procedures. From the aforementioned comments gained from the teachers it was evident that, although unable to use the theoretical language associated with good assessment practice, teachers were thinking at a level deeper than mere implementation, identifying many aspects of practice that had become problematic for them. As Schon (ibid) has argued, teachers in thinking about what they are doing while they are doing it

enables them to reflect and turn thought back on action. It was obvious during the interview process, that a number of teachers were engaged actively in reflective activity as a process to question existing practices. These teachers, who frequently but not always, held senior positions in their schools raised issues related to how assessment could be best used to discover the learning which had occurred. They were concerned with what should be assessed and the most appropriate methods to be used:

“ ... it depends on how you define effective assessment programmes. It doesn't mean assessing every little thing. I mean finding out what is important to be assessed and assessing that and having your ongoing programme reflects [sic] ... that's what's important.” (Int # 1);

“ ... it's more finding out what's the best way, what's the most suitable ways for assessing my children's needs and where do I take it [learning] from there what am I looking for to assess ... am I looking for something specific or general?” (Int # 12);

“ I think people need to take a step back and be reflective about assessment as a whole ... to think very clearly about what it is they're wanting to achieve, what they are trying to find out ... the learning for that child.” (Int # 3).

Bell and Gilbert (1996) make the important distinction between reflection used in the broadest sense, that is teachers thinking about their own practice and ideas and reflection used as critical inquiry. The preceding comments are illustrative of teachers' reflecting on their own practice. However several of these same teachers were obviously using reflection as critical inquiry when they raised what Broadfoot (1979, p.19) believed is, “ *the most profound question about educational assessment*” that is why assess? These teachers, one a deputy principal and the other a beginning teacher, were considering the reasons for assessment at both micro and macro levels:

“ I've done a lot of personal reflection in it [assessment] ... and I've wanted to step back and see it on a bigger picture ... as to what we are assessing and why ... to me the big question is what changes are happening for children, what is happening in the classroom?” (Int # 3);

“ I should be asking myself why am I doing all this assessment ... who is going to benefit ... myself, is it going to benefit the children or the school in general, or the parents out there who are concerned about their children coming to school learning ... first of all it should benefit the children and the teacher ... it seems to be benefiting ... all these big people in education [ERO] ... it just seems unrealistic because they are not seeing what is happening in schools.” (Int #12).

Snook (1993, p.9) in his keynote address to a national assessment conference, challenged teachers to consider their current assessment practice in relation to the learning opportunities provided for children, and to recognise the close connection between process and product in education. *"To assess is to take a stand on the nature of learning. To facilitate learning is to take a stand on assessment"*. Data gained from many of the teachers indicated that changes are beginning to occur to actual practice as schools and teachers step back and review assessment systems that were initially put into place to support the national curriculum. Teachers, in questioning the relevancy, appropriateness and usefulness of assessment information gained, are beginning to consider a range of assessment strategies that they perceive will be beneficial to teaching and learning:

" we need to cut down on what we do and do it well ... we've done more than we've needed to ... we've got to stop that as a school and try and work around it." (Int # 1);

" we worked right from the beginning on our beliefs and how we are going to implement them ... what ways we are going to assess ... we came back and reviewed it ... work on making things better and more useful to us as teachers and for children in the end." (Int # 10);

" in this school there has been free and frank discussion and that's one of the things I like ... everybody says I hate doing this and someone says do it this way it might be better ... there is tremendous backup." (Int # 5);

" well we went through the system where we went overboard ... we have cut back ... we [have] lightened the load and made the systems more streamlined." (Int # 9);

" I've definitely moved away from doing a lot of checklisting ... it doesn't show the process ... and I think it's also saying that that's the only way you can assess children when in fact I actually think the best assessment is what's happening while the child is learning." (Int # 3).

Summary of theme three: Reflections on practice

Teachers have been charged with the responsibility of implementing a curriculum policy initiative that is essentially reductionist and technocratic in nature, in which attainment is measured against pre-specified achievement objectives and learning outcomes. Teachers in this study had worked together to make sense of a multitude of curriculum documents which now constitute the national curriculum. This had given

them a certain degree of satisfaction although it should be acknowledged that a huge amount of time and effort had been expended by teachers to reach this point. The impression gained from most teachers was that rather than feeling overwhelmed and unable to cope with the curriculum requirements their increased curriculum knowledge had given them greater confidence. However preliminary attempts to set up assessment systems to support the national curriculum were viewed quite negatively by most teachers.

Anecdotal evidence provided by many teachers revealed that initial attempts to develop assessment systems had resulted in an overdependence on technocratic reductionist methods of collecting, recording and reporting assessment information. A large number of teachers expressed their dissatisfaction in terms of the amount, relevancy, dependability and general usefulness of the assessment information collected. There was the feeling expressed by some of the teachers that current assessment practices were impacting negatively on learning, encouraging the fragmentation of knowledge and the development of surface level learning by children, at the same time failing to assess deep learning. There was some evidence that teachers are looking beyond the manageability of assessment and through reflection, personal insights and the development of shared understandings, are redefining what constitutes good assessment practice.

THEME FOUR: THE PURPOSES OF ASSESSMENT.

The New Zealand Curriculum Framework (1993), along with a series of supporting statements, known as the National Curriculum, is the overarching policy for learning, teaching and assessment in New Zealand schools. Assessment intention outlined in the New Zealand Curriculum Framework (NZCF) states that assessment is to be carried out for a number of purposes and identifies a number of contexts within which this will occur: school based, key transition points, records of achievement, national monitoring and assessment for qualifications.

With regard to school based assessment, a number of clearly defined purposes are

outlined which are frequently referred to in the assessment literature as formative and summative purposes (Bell & Cowie, 1997; Gipps, 1994; Harlen, Gipps, Broadfoot & Nuttall, 1992; Hill, 1997; Torrance, 1993). Formative assessment can be defined as assessment which is essentially an on-going component of good teaching, used to enhance the learning teaching process through the provision of feedback to the learner and teacher responsiveness to student need; whereas summative assessment is more concerned with the reporting of student achievement usually in relation to pre-specified achievement outcomes. The distinction that is often made between these two types of assessment is when they occur: formative during instruction and summative usually at some end point, for example at the end of a unit of work. However Gipps (1994) argues that timing is not the key difference between formative and summative assessment. Rather it is the purpose and effect of such assessment practice that differentiates the two, assessments made during instruction may not necessarily be used for formative purposes.

The formative purposes of school based assessment are clearly given precedence within the NZCF (1993, p.24) as it is stated that the *“primary purpose of school based assessment is to improve students’ learning and the quality of learning programmes.”* Furthermore the close relationship between learning and assessment is stressed to practitioners through the statement *“assessment is integral to the learning teaching programme.”* At the same time however schools and teachers are expected to use assessment information summatively as they are required to: measure student progress against pre-specified achievement objectives; review the effectiveness of the teaching programmes offered; develop clear profiles of individual students’ achievement, their learning and development and provide feedback to parents.

National Curriculum statements provide expanded detail for teachers on the required knowledge, understandings, skills and attitudes that need to be taught and assessed in each of the essential learning areas (Aikin, 1994). Additionally, general commentaries in regard to assessment can be found in each of the documents. To date, five curriculum statements have been released in final form (Mathematics, 1992; Science, 1993; English, 1994; Technology, 1995; Social Science, 1997). All reiterate that the

primary purpose of assessment is to improve and enhance learning and teaching through the identification of learning strengths and weaknesses and the provision of individualised programmes of instruction:

“ includes diagnostic assessment procedures which enables teachers to discover difficulties that individual students may be having ... Diagnostic assessments enable teachers to plan further learning activities specifically designed to meet the learning needs of individual children.” (Mathematics in the New Zealand Curriculum 1992, p.15);

“ the curriculum in science should recognise, respect and respond to the educational needs, experiences, achievements, and perspectives of all students: both female and male; of all races and ethnic groups; and of differing abilities and disabilities.” (Science in the New Zealand Curriculum 1993, p.11);

“ ongoing, continuous assessment which provides immediate feedback, enhancing the learning as it proceeds ... teacher assessment, in which progress and strengths are recognised, difficulties diagnosed, and strategies to overcome them planned ... also assists teachers to monitor their teaching and modify programmes accordingly.” (English in the New Zealand Curriculum 1994, p.21).

At the same time each of the curriculum documents outlines the summative purposes of assessment as they emphasise the need to measure student progress against pre-defined achievement objectives and to develop profiles of individual pupil achievement showing progress made over time:

“ assessment should ... focus on the ways that students are meeting achievement objectives so that a full picture of their progress can be built up.” (Technology in the New Zealand Curriculum 1995, p.24);

“ in any programme of learning it is important that assessment information is systematically accumulated to allow judgements to be made about each student's attainment of the full range of knowledge, skills, and attitudes described by the relevant achievement objectives.” (Science in the New Zealand Curriculum 1993, p.19);

“ when evaluating students' progress, teachers should ... determine which level for a particular strand is the 'best fit' for each student in terms of consistent performance. Through this process, teachers will build a profile of each student's language development.” (English in the New Zealand Curriculum 1994, p.21);

“ assessment should also be undertaken to provide students and their parents with an indication of a student's progress... teachers should report what students have been working on, what they have achieved, and how well they have achieved it.” (Mathematics in the New Zealand Curriculum 1992, p.15).

Of concern is the fact that similar to overseas experience, it would appear that within the various curriculum statements the essential difference between formative and summative assessment has been confused and blurred (Harlen & James, 1997). While assessment is considered to be an integral part of the learning teaching process the emphasis has been placed on the timing of such activity rather than the purpose and outcome of such activity which is the key distinction between formative and summative assessment. Implicit in a number of the statements is the belief that assessment which is undertaken as part of the daily routine of classroom activity will be formative in nature:

“ these procedures [assessment], however, should not be seen in isolation from the much broader teaching and learning context provided for each example.” (English in the New Zealand Curriculum 1994, p.21);

“ assessment tasks and procedures should be consistent with the general aims of science education and be compatible with regular classroom activity. In this way assessment will be an integral part of the learning programme.” (Science in the New Zealand Curriculum 1993, p.18).

“ assessment should, as far as possible, be integral to the normal teaching and learning programme ... and avoid the artificial intrusion on learning and teaching time which is associated with separate assessment sessions.” (Mathematics in the New Zealand Curriculum 1992, p.15).

From careful examination of the NZCF and the associated National Curriculum statements it can be seen that both the formative and summative purposes of assessment have been identified. In addition to the key distinction between being blurred these purposes are presented as being complementary rather than contradictory in nature. This ignores a body of literature which states that assessment for two or more purposes causes problems and tensions in the kinds of results and reporting they demand, the use to which results are put and conditions under which assessment is administered (Broadfoot, 1988; Crooks, 1988; Gipps, Dockerall, Harlen & Nuttall, 1992, Sadler, 1989). Furthermore the formative approaches to assessment are presented as being straightforward, again disregarding research findings that have found the practice of formative assessment to be problematic and not well understood by teachers (Harlen & James, 1997; Torrance, 1993; Torrance & Pryor, 1995).

Data gathered from the questionnaires revealed that teachers were aware of the various purposes of school based assessment as they identified both the formative and summative aspects of their assessment practice:

"... check levels, rearrange groups ... monitor how far and in what ways each child have [sic] developed over a period of time and where there is a need for more concentrated teacher input." (Q # 1);

" setting objectives pertinent to individual or groups, evaluate the effectiveness of my teaching programme ... helps to individualise progress rather than moving on with the group." (Q # 2);

" it [assessment] forms the basis for evaluation of programmes which in turn leads to planning new programmes ... measures achievement of set objectives ... helps pinpoint strengths and weaknesses, to reteach where necessary and extend children where appropriate." (Q#13);

" for reporting progress, for determining individual needs." (Q # 27).

Throughout the questionnaire, teachers consistently referred to the formative aspects of assessment. They attributed great importance to assessment and its potential to enhance teaching and learning through the identification of individual learning needs:

" helps in pinpointing strengths and weaknesses of personal teaching, helps to see where to move or input into individual needs next; be aware of children's needs and strengths for extension ... strengths and weaknesses diagnosed therefore programmes suited for learning needs." (Q # 3);

" being able to plan future programmes centred around individual needs gathered from assessment ... being able to teach to their specific needs and improve the quality of my programme, better more individualised needs based programmes." (Q # 4);

" they [children] are getting taught to their individual needs, shows me where to target children's learning needs and target the best possible resources." (Q # 29).

Additionally the importance of using assessment data to inform future planning was made explicit by the majority of teachers. Many teachers talked of using assessment information for longer term planning purposes:

" it means I know my kids and what they are capable of. Assessment also helps with further teaching and planning." (Q # 42);

" ... we are probably more aware of children's needs when planning future

work." (Q # 37);

" I use the findings [from assessment] to plan the programme." (Q # 10);

" helped me know what the children need to learn next, what I need to plan for my programme." (Q # 7);

while a minority of teachers talked of using it on a more short term basis:

" able to help me with grouping, able to give me information for ongoing lessons." (Q # 17);

" grouping, where to go, what to repeat." (Q # 41);

" has allowed me to see what direction their learning is going... has assisted me to decide what steps to take next." (Q # 25).

From the aforementioned comments, it can be seen that the teachers in the study had accepted the basic argument put forward by policy makers that formative assessment has a positive educational role to play in the learning teaching process. However, a number of prominent writers in the field of formative assessment (Gipps, 1994; Sadler, 1989; Torrance, 1993; Torrance & Pryor, 1995) have voiced concerns related to the claims made for formative assessment. They argue that the process of accomplishing formative assessment is likely to be a good deal more complicated and a far more complex activity than is often acknowledged.

McCallum, Gipps, McAlister and Brown (1995) have argued that the approaches teachers adopt in relation to their assessment practice are in line with their views on teaching and learning. They posit that the link between assessment and learning, while crucial, has never been widely addressed in practice. Of central importance to this study, was the relationship between learning, teaching and assessment in teachers' articulated practice. Was their practice underpinned and influenced by behaviourist assumptions about learning and assessment? Or was it underpinned by constructivist assumptions? What use was made of the assessment information gathered? Did teachers essentially use assessment information for formative purposes, that is by being responsive to individual needs as learning was occurring or were the uses primarily summative, providing accounts to interested stakeholders of what had been learned? Were the approaches used the same in all curriculum areas? Was information

used in similar ways across these curriculum areas? These questions were of considerable importance to the study and it was primarily through the interview phase of the data collection that teachers' responses to these questions were elicited.

The type of assessment which is informed essentially by behaviourist assumptions is characterised by a model of learning where objectives are pre-determined and programmes of instruction are designed so that learners have opportunities to attain the set objectives. Within this model what counts as achieving the objective is defined specifically (Sadler, 1989). This view of learning is evident in all the National Curriculum documents in which a structure of objectives in eight clearly defined levels is outlined for each strand of a subject (Elley, 1993). Comments made by many of the teachers interviewed revealed that they had taken aboard the National Curriculum and were using the documents as the basis for planning their programmes:

"... before I start I have the achievement objectives, I know what I want to achieve, I teach towards those and at the end of it [unit] I can just assess to see whether they've [the children] achieved those objectives." (Int # 2);

" we tend to plan cooperatively each unit and we have the curriculum document in our hands when we are planning the units ... we're using those achievement objectives and those skills straight from the documents." (Int # 4);

" ...we do all our planning from, when we plan for science, health, technology, social studies we take our documents with us to the planning sessions and we work from them and we also have our overviews that are set out for those things and we make sure we are addressing what we have planned." (Int # 7).

While teacher responses from the questionnaires had indicated that they used the information gained from assessment diagnostically in regard to their long and short term planning this was not evident during the interviews. In fact in many curriculum areas (the exceptions being reading, written language and mathematics) teachers tended to engage in a didactic model of learning in which the teacher broadly defined the children's needs, usually through the identification of a level of achievement. Teachers then tended to start children at the same point and then in an attempt to provide more individualised instruction, diverged from the original plan:

" it's a bit like starting a unit on seeds for example and saying okay we are

going to learn about seeds and you're teaching stuff that they already know so you ask what do they know ... we always do the plan first but I always do that as part of the session." (Int # 4);

"we do a lot of planning together [as a syndicate] ... with our planning and then we do different learning experiences." (Int # 6);

"I have an overview in the plan ... and be quite clear about the strands and objectives I am hitting ... at the same time children have individual goals based on where they are at because you are assuming that the goal you're hitting, the objective you're trying to hit is accessible to all children when in fact there might be some areas that each child needs to actually learn as part of achieving their objective." (Int # 3).

Torrance and Pryor (1995) have argued that teachers whose assessment practice is influenced by a behaviourist approach to teaching and learning will be more concerned with the accomplishment of particular achievement objectives than fostering the development of student understanding of a particular task. At the centre of these teachers' concerns is the delivery of the curriculum which typically sees planning for assessment occurring simultaneously with unit planning. Again a number of the teachers interviewed talked about using this model especially when planning unit studies, for example science, social studies, health, technology:

"... it has to come back to the planning and when you plan and you set up your original plan ... you decide together at the time on an assessment task which could be part of the whole thing." (Int # 1);

"we plan the assessment task as we plan the unit." (Int # 4);

"everything we plan we have an assessment activity for the end of it." (Int # 2).

Within this model the assessment used will focus on determining if the child has learned what has been taught. In this way assessment follows teaching in order to check that the process is going according to plan (McCallum et al, 1995). For many of the teachers interviewed, assessment was collected to provide evidence that learning had occurred, to show student progress over time, always in relation to the achievement objectives and learning outcomes set:

"we've taken achievement outcomes from the curriculum and written those in terms of outcomes that would be measurable for each topic ... why you assess children is to see what they have learned, to measure where they are up to ... where I can set them off from and then when I have taught something at the end of the unit I would be wanting a measure of what I

feel the child has been able to achieve.” (Int # 11);

“ it is good to see where the progress has been made.” (Int # 8);

“ it’s progression, it’s seeing where they actually started and how they’ve progressed in that certain time, maybe a time frame of three to four weeks and seeing the progress from there.” (Int # 12);

“ I am now very aware that I must have or like to have two sets of marks which are assessment and I can say to somebody this is where they [children] started and by the time we finish this unit this is what they can do.” (Int # 5).

However, both less and more experienced teachers were concerned that the assessment they gathered had limited value in regard to enhancing learning for children:

“ I don’t refer to any of the topics that we did at the beginning of the year, I assess them [the children] put them [the results] in my tracking book and that is that.” (Int # 2);

“ with science ... what we [children] know prior to and then at the end, so these assessments do give you an indication that what you actually put in place for children has improved their learning. There’s no connection between picking up that topic again and taking it further, there isn’t unless you do the same topic in one year which we rarely would do.” (Int # 10).

Teachers provided a number of explanations as to why they were unable to utilise the assessment information gathered. Several teachers commented on the necessity to ensure that the curriculum is covered adequately which, in reality meant that they moved on sometimes at the expense of individual children. Not surprisingly, given the range of curriculum areas a primary teacher is expected to have content knowledge of, a few teachers alluded to the depth of their subject knowledge and their confidence to implement some areas of the curriculum. They felt that this lack of knowledge in some areas had impinged upon their ability to utilise the information gained from children:

“ well if it was the end of the unit ... I’d probably just move on ... because what we have to cover we’re always pushing time ... there is so much to teach ... with maths I’ve got a couple of children who admittedly slow ... and it [the unit] is beyond them and I think I must move on, I cannot spend anymore time with it ... what am I doing trying to teach something which is beyond them.” (Int # 5);

“ I think more the sciences and the areas which sometimes aren’t focussed on enough ... sometimes I might lack confidence there because I am new and I’m trying to find out what I am looking for and you’re so busy trying to keep reading and maths and those sorts of areas that sometimes you don’t push enough in the other subject areas ... if you are not confident in

an area you sort of hold back a bit and take what they have done.” (Int # 6);

“ well sometimes I wonder particularly with science, you know where one of your specific learning outcomes a child should be able to name do, dot dot, I mean we do it to find out if they know but you often think well okay you know ... but where do you go from here?” (Int # 9).

Data gained from the questionnaires revealed that the curriculum areas that teachers were most confident in were reading, written language and mathematics. Although not explicitly discussed, it was evident when interviewing many of the teachers that their confidence in these areas could be attributed to the depth of their content knowledge. This confidence in one’s own content knowledge is illustrated by the response of a junior school teacher:

“ I feel more confident assessing reading, I have done reading recovery and reading recovery really sets people up well ... I feel as if the children I teach for reading are working at their correct level all the time because even if I am not doing a running record during our daily reading I know whether they are coping, whether I should go over more things with them or whether they need to move on.” (Int # 7) .

It was evident that, in talking about the assessment of these curriculum areas, many teachers were attempting to use a constructivist approach. The majority of writers in the field of formative assessment would agree that this type of assessment is far more ambitious and challenging to the teacher, as she responds to the individual needs of children as learning occurs (Gipps, 1994; McCallum et al, 1995; Torrance, 1993; Torrance & Pryor, 1995). A comment made by one teacher in the study encapsulates the challenging nature of this type of assessment:

“ I do a lot of discussion work but then it is hard to assess because things are thrown at you and you can’t sort of write them down.” (Int # 6).

Within this model children are expected to learn in idiosyncratic ways and assessment is used, not only to identify if learning has been achieved but also to determine what children may achieve given the appropriate opportunities and experiences. Assessment is very much an on going, dynamic process where the information gained goes beyond providing feedback and most importantly informs future action. Assessment is seen not as the sole responsibility of the teacher, rather the interactions between the teacher and

the child are seen as part of the assessment process itself. This interpretation of formative assessment moves assessment into an integral position within the learning teaching process (Bell & Cowie, 1997; Torrance, 1993). Another teacher in the study encapsulated this notion of assessment as she described her practice:

“ to me it’s part of the programme that involves the child and because it involves the child it is not an add on ... it’s part of the day’s programme ... you are watching, observing, working alongside children, you’re empowering them [the children] to discover what their goal is and negotiate with them what it is and talk to them about it ... it’s just part of good teaching.” (Int # 3).

Furthermore, many of the teachers interviewed talked in a general way of how they attempted to respond to their children’s needs:

“ you can see where the child is at and how you can help them, where their downfall is and you can say right this is what they can’t do and I will have to work towards that.... then work on giving them activities and teaching points that is going to help them.” (Int # 2);

“ with their topic in maths then I take off the ones that have got it and extend them ... and then the other ones are extended or the slower ones helped.” (Int # 4);

“ I like to think that our approach to any kind of learning whether it is reading or writing is really an integration of where you’ve [the child] come from and what you’re learning and what you need to know and why ... you’re actually able to hone in exactly with what the child can do ... the assessment I said is a very valuable tool that actually makes sure you make the right choices about the child’s next step.” (Int # 10).

The teaching of reading provided the most specific examples of how many teachers across all class levels taught were able to elicit and interpret assessment information, incorporating that information into their future curriculum planning. At times the information gained was acted upon during the teaching episode itself, while at others it was incorporated into the next teaching episode :

“ you do your running records and you might see that no one is cueing semantically or something so you can hone in on those skills ... you’ve drawn that information from your assessment and you can spend time on working on those skills.” (Int # 1);

“ I’ll just keep that child down in reading, asking questions when you came to this word what would you do, ask them to actually look at it , what they could do, reinforce it in that way.” (Int # 10);

" we sit at a table and we read together and I look and I think this is a bit easy for you, I will have a look at you by yourself so I do a running record and on their alphabet check ... I will just whip through that and see if they have learned some more and then I will put them onto a level [reading] which is more suitable for them and I will fit them in either to a group that they can work with or I will take them on their own for a while." (Int # 7).

However, as several teachers stated, this type of assessment was not formally recorded; rather it was used intuitively:

" ... a lot of it I record it sort of in my head." (Int # 6);

" I don't write down anything but it goes into my next day's planning." (Int # 7).

McCallum et al (1995) in talking about teachers whose approach to assessment was underpinned by constructivist principles, stated that as these teachers expected children to learn in idiosyncratic ways, they were therefore more willing to try children on higher levels not yet taught. In this way, these teachers were using assessment information diagnostically. Comments made by several of the teachers interviewed illustrated how this might occur in mathematics and in written language:

" in maths I might say I want to see some repeating patterns and a girl will come up to me with six colours repeated, she knows the objective really well, so I will give her a different activity that she can do ... I might put her straight on symmetrical patterns." (Int # 7);

" ... with the writing, I think that's a very fine example with sitting down, conferencing with the child, discussing this is what I can do from the child's perspective and you as a facilitator saying well yes I agree with you, you are doing that, what is now the next step so the situation is almost negotiated ... that to me is a real example of assessing, then straight away using that knowledge ... well this is now the next step we need to focus on and having it in the back of their books so it's accessible to the child so they are actually empowered to actually use that knowledge." (Int # 3).

Several of the teachers interviewed were also very aware of the benefits that accrued to them as they involved children in the assessment process. These teachers articulated the benefits of using a constructivist approach and demonstrated their awareness of the need to identify both the learner's conceptual understandings and her errors (Begg, 1995; von Glaserfeld, 1989; Wheatley, 1991). The provision of opportunities which enabled teachers to observe and work alongside children, listening to them talking out

loud, investigating their own errors was seen as critical. In essence these teachers believed that this constructivist approach to assessment provided them with an increased understanding of the learning processes children engaged in:

“ before I didn't question the children enough and that way I just assumed they didn't know ... instead of questioning the children and allowing them to justify why they did what they did and also for them to understand oh no I meant this ... so before I wasn't giving them [the children] a fair go.” (Int #6).

Summary of theme four: Purposes of assessment

The New Zealand Curriculum Framework and associated National Curriculum statements are illustrative of a broadly criterion referenced model of assessment where the intention is to determine whether or not a child has achieved the knowledge skills and understandings as defined by pre-determined achievement objectives. At the same time, contained within these documents, is the notion that assessment should be an integral part of the learning-teaching process and should thus be about the improvement of learning. In this way teachers are charged with the responsibility to use assessment formatively and summatively; to promote learning through teacher responsiveness to learning needs as well to measure what has been learned. However a closer analysis of current curriculum statements revealed the key distinction between formative and summative assessment is not articulated clearly within these documents.

On the basis of the evidence collected from both the questionnaire and interview phases of the present study, it was evident that teachers had taken aboard the rhetoric of policy documents as they attributed great importance to assessment and its potential to enhance teaching and learning. However a more detailed analysis of teachers articulated practice revealed that much of the assessment practice they engaged in was summative rather than formative in nature.

In many curriculum areas teachers adopted a behaviourist approach which essentially enabled them to take ongoing 'snapshots' of where children were currently at rather than where they may be going to next. While teachers intended the information

gathered to enhance teaching and learning, in essence it could be better described as repeated or continuous summative assessment. Assessment practices used in curriculum areas such as reading, written language and to a lesser extent mathematics provided illustrative examples of a constructivist approach to assessment. In these curriculum areas teachers were more able to respond and react to the assessment information they gained as learning was occurring. In part this appeared to relate to teacher confidence and the depth of their content knowledge in specific curriculum areas.

THEME FIVE: METHODS OF ASSESSMENT

Teachers in New Zealand have traditionally used a wide range of assessment methods to establish what children can and cannot do (Crooks, 1988; Bourke, Poskitt & McAlpine, 1996). In regard to school based assessment the NZCF endorses the use of a variety of formal and informal procedures which include diagnostic surveys, running records, checkpoints, tests, observations, anecdotal records and self assessment by students. Additionally, National Curriculum statements support the use of multiple techniques as they provide both broad suggestions and specific examples that can guide teachers' practice within the context of the daily classroom programme:

"... assessment should involve multiple techniques including written, oral and demonstration format." (Mathematics in the New Zealand Curriculum 1992, p.15);

" the teacher observes and records students' ability to recall the text and the main features of the character, and to identify language features." (English in the New Zealand Curriculum, 1994, p.45);

"... when the students place given animals and plants in appropriate groups, using a pictorial identification key ..." (Science in the New Zealand Curriculum 1993, p.61).

Furthermore most of these statements encourage the involvement of the child in the assessment process either through self assessment or by working collaboratively with the teacher:

"... students and the teacher assess the clarity and the effectiveness of the views expressed in the role play." (English in the New Zealand Curriculum

1994, p.55);

"... students could talk about the successes and problems they encountered when undertaking these activities." (Technology in the New Zealand Curriculum 1995, p.51).

From this brief examination of National Curriculum statements it can be seen that the suggestions offered to teachers expect them to adopt a more formative approach to assessment. This in turn requires methods of assessment that will enable them to consult and collaborate with students (Bourke, Poskitt & McAlpine, 1996) as they endeavour to arrive at shared meanings with their pupils (Pollard, 1987), thus implying and supporting a particular view of learning (Cowie & Bell, 1996; Gipps, 1994; Torrance, 1993). These perspectives are based on a constructivist view of learning and are consistent with the assumptions underpinning formative assessment.

While policy documents may endorse and advocate the benefits of using such techniques, the actual benefits to learning will accrue only if teachers are confident and competent in their implementation. Quantitative data gained from the questionnaires showed that there were differences in teachers' reported confidence levels in the use of specific methods for gathering assessment data as well as the degree of usefulness of using specific assessment methods. In addition, as is reported in another section of this chapter, teachers were generally dissatisfied with methods of collecting, recording and reporting assessment information that were underpinned by a behaviourist, technocratic reductionist model of assessment. As Torrance (1995) has argued, there is a need for teachers to understand the curricular and pedagogic implications of using formative approaches to assessment so that the benefits of such involvement can be optimised. It was therefore deemed important to discover in what ways formative approaches were being incorporated into classroom programmes. What benefits did teachers ascribe to assessment methods informed by constructivist principles? How were teachers attempting to involve children in the assessment process? This section reports the findings in answer to these questions.

Observation

During the questionnaire phase of the data collection, teachers reported that a wide range of assessment methods were used. Consistent with other research findings, observation was the most frequently quoted method used (Bachor & Anderson, 1994; Hall et al, 1997). Furthermore the majority of teachers stated they were very confident in the use of this technique and felt that the information gained from observation was very useful to them. Many of the teachers interviewed supported this view. Again they attributed great importance to the value of observation:

“ there’s two I tend to use ... one’s strictly stand back and observe ... that I find tells me more about the child than most other things do ... just sitting back and watching the group read for example, seeing the ones that are watching somebody else tells me more about that child’s confidence than a lot of other things do.” (Int # 4);

“ observation has to number one for me, I can look at a child and say that child needs this or that ... you know how they are thinking and okay they are doing this, the sequencing of it and the logic of it and you think they understand, that they know that and that’s worthwhile learning.” (Int # 5);

“ ... observation I have to say is the one, you can actually see what is happening.” (Int # 10).

From the comments made it would seem that teachers, as they use observation as an assessment tool focus on particular children who are engaged in ongoing classroom activity. When teachers talked of observation as a tool there was no reference to observing an individual activity in relation to some pre-determined outcome or achievement objective. Rather, teachers found benefit in watching children as they worked, believing that this activity provided them with some useful insights into the learning processes children were engaged in as well as the idiosyncratic ways in which learning may occur. In the majority of instances it seemed that teachers used this information intuitively, storing it in their head for future use, rather than recording it in any formal or informal way.

Assessment that supports a constructivist view of learning implies a role for the teacher that involves providing learning opportunities, introducing new ideas and interacting with students to guide and support learning (Cowie & Bell, 1996). Generally most

teachers, across all class levels, showed an acceptance of methods that would enable them to work closely alongside children as well as an awareness of their possible benefits:

" ... there's a lot more conferencing and peer assessment and self assessment and all sorts coming out like that ... I think that is one of the good things." (Int # 1);

" conferencing ... is the other thing that gives me an idea of where to move a child, where to take them." (Int # 10).

Conferencing

Conferencing as an assessment method was reported by teachers in the questionnaire to be both a frequently used and useful way of collecting assessment information. Information gained during the interview phase of this study revealed that this method was used by many of the teachers. However, although not exclusively so, the majority of conference activity focussed on written language and to a lesser degree mathematics and reading. In written language especially, teachers were able to provide a number of illustrative examples of the ways in which learning could be supported as children were set appropriate activities and given appropriate help as the teacher worked alongside them, challenging their previously held conceptions and practices:

" ... with story writing, written language and stuff like that I often have conferencing which allows the children to talk with me about what they are doing and rather than getting their book back full of red marks I can explain why you need to put full stops in there." (Int # 6);

" ... with the writing, I think that's a very fine example with sitting down, conferencing with the child, discussing this is what I can do from the child's perspective and you as a facilitator saying well yes I agree with you, you are doing that, what is now the next step so the situation is almost negotiated ... that to me is a real example of assessing, then straight away using that knowledge ... well this is now the next step we need to focus on and having it in the back of their books so it's accessible to the child so they're actually empowered to actually use that knowledge ... incorporating that conference and the skills in an ongoing way, that you can reinforce with that child, then keep going on in a cyclic way" (Int # 3).

Again there was some evidence from the interview responses that teachers used this information in one of two ways; either intuitively or by making notes to themselves to serve as a reminder for future reference. Teachers rarely documented this information

for reporting purposes:

“ ... while you are conferencing with them actually what you pick up, then keeping a note or notes at that time.” (Int # 1);

“ I do anecdotal notes for that ... you know where they are lacking and then you hold on to that and you push them the next lesson or if they are doing really well you remember you get them going further.” (Int # 6).

Self assessment

Many writers emphasise the importance of involving children in the assessment process, believing that this will help children understand more about the learning that is occurring and how they will be best able to promote and enhance that learning (Black, 1993; Cowie & Bell, 1996, Crooks, 1988, Sadler, 1989). Within this approach decisions are made not only by the teacher but by the children themselves, thus encouraging and empowering children to take responsibility for their own learning. Comments made by several of the teachers interviewed illustrated this notion of shared responsibility:

“ ... in my class then I would keep the other children who say they are not ready to move on, so it's very much up to the child to tell me whether they are ready to move on and I have found that that has worked really well.” (Int # 3);

“ I never used to get children to come up to me and why they did that answer, sometimes, I mean now what I do I get them to come up and say why did they write that answer and they'll explain it, and sometimes they'll say no, no I didn't mean to write that and they'll understand where they went wrong.” (Int # 6).

However this was not indicative of the approach that the majority of teachers took. This may be explained partially by the fact that many students do not expect to be involved in the assessment process. Fontana and Fernandes' (1994) research revealed the traditional beliefs that students held in respect to the teacher's role in the assessment process had a negative effect on teachers' willingness to share the responsibility for assessment with their students. As one deputy principal in the study explained, children are not really used to being a joint partner in the assessment process and need time to understand the benefits that can accrue to them:

" ... children - it took them a while to get there because they felt they had to say yes all the time but when they understood that it was a matter of them deciding when they were ready and they were the ones that were going to benefit by saying I don't quite understand that, understanding that taking risks is a really important thing and being honest about where you're at, they would stay with me until they were ready to leave." (Int # 3).

While teachers did not commonly view assessment as an equal responsibility shared between themselves and the children, they did however provide opportunities for children to evaluate their own performance using self assessment techniques. The questionnaire data showed that self assessment was used fairly frequently. However the majority of teachers reported that they were only moderately confident in the use of this technique and furthermore they felt that the information gained from self assessment was only of moderate usefulness to them. Information elicited from the teachers interviewed provided some possible explanations for the questionnaire responses. A number of the teachers interviewed, usually (but not exclusively) those working with older children, believed that self assessment had the potential to involve the child in the learning process and to encourage ownership and responsibility:

" things like self assessment are also very important if the child sees that not only are they setting their own goals but they are actually going to assess them themselves and have some say in how it is recorded ... that it is going to be used ... so they can see a purpose in their learning." (Int # 3);

" ... the benefit I see is that children are actually learning to assess themselves ... things are in place so that they can actually see where they are going and why this [work] is not as good because they didn't have this or didn't do that." (Int # 8);

" ... yes we've just started working with self assessment ... they [the children] think it is great ... it is my philosophy that children take responsibility and actually monitor where they've come from ... where they are and look at where they are wanting to go." (Int # 10).

But at the same time they had certain reservations and their comments highlighted the superficial way in which self assessment is currently being implemented. One teacher who taught a year five and six class, while using self assessment, admitted that she was unsure whether children had the ability to make accurate assessments of their own performance. In addition this teacher felt that children gave little credence to their own assessments, preferring to allow the teacher to undertake the assessment. Another

teacher felt that the information gained from children's self assessments while interesting had little relationship to the achievement objectives that had been set and was therefore of little help in determining whether objectives had been attained:

" I get the children to self assess ... but I see ups and downs of that too, a lot of children don't perceive it [work] to be assessed if the teacher isn't assessing it ... I don't think it carries the weight of what the teacher thinks of it ... if the teacher doesn't agree it doesn't seem as valid." (Int # 8);
" I am not confident enough and I don't feel that I want to just let them [the children] assess because I often feel that kids don't know." (Int # 8);

" I use children's self evaluation ... that's interesting but it's not really helpful in terms of me measuring whether they have reached objectives, I find that interesting feedback for me and an interesting activity for them to do ... so I think it is valuable but I don't think it is helpful in terms of having an overall picture of where they are in terms of the curriculum." (Int # 11).

In the opinion of these teachers, while self assessment was not fulfilling its potential at this present time, they were however still willing to continue utilising this method. It was not the process that the teachers were critical of but rather they questioned the ability of the participants (themselves and the children) to fulfil their expected roles satisfactorily. They believed that as they themselves became more confident and competent in developing self assessment activities and as the children became more familiar with and gained more skills, additional worthwhile information could be gained:

" ... maybe it is because they still haven't developed enough responsibility for their own learning, which hopefully we are trying to instil." (Int # 8);

" possibly it could be that I'm not preparing particularly wonderful evaluation sheets for them [the children] ... it's sort of fairly new and it may take time for to sort of put together self assessment sheets that are going to tell us what we really want to know." (Int # 11).

However, as several overseas studies have shown (Fontana & Fernandes, 1994; James, 1990), pupil self assessment, which is meaningful to both the learner and the teacher, does not happen by chance. For teachers to feel comfortable, confident and competent to share the responsibility for assessment with their students they need intensive in-service training.

Summary of theme five: Methods of assessment

Current policy documents endorse the use of a range of methods to assess student achievement. Informed by constructivist principles, many of the methods promoted require teachers to work with students in a consultative and collaborative manner. While the teachers in this study used an array of assessment methods, there were reported differences in the usefulness of the information gained from the use of specific techniques and in teacher confidence in the use of those techniques.

Generally teachers recognised the value of utilising methods that enabled them to work closely alongside children. Observation and conferencing were considered to be valuable in terms of providing teachers with insights into the ways in which children were learning. The use of conferencing, especially in the area of written language provided a number of illustrative examples of the ways in which learning could be supported as children were set appropriate activities and given appropriate assistance. In most instances teachers either used this information intuitively or recorded it informally for their use only.

While several teachers showed a critical awareness of the importance of involving children in the assessment process, many others still regarded assessment to be their sole responsibility. There was some evidence that for self assessment to fulfil its potential as an assessment method, teachers and children need to be clearer about their roles and responsibilities in the process, and more confident in the trustworthiness of the information gained.

CHAPTER SIX

CONCLUSION AND FUTURE DIRECTIONS

This final chapter begins with a review of the aims of the research and provides a summary of the major findings, presented as answers to the three major research questions. The high stakes nature of school based assessment activity, implications for formative practice and recommendations for future research are then discussed in some depth. The chapter concludes with limitations of the study and a final comment in relation to the significance of the findings.

Revisiting the aims of the thesis

It is now nearly a decade since the New Zealand education system underwent a radical reconstruction. During this time teachers have been charged with the responsibility to implement, almost simultaneously, a number of curriculum and assessment reforms and schools have experienced tighter controls as they have endeavoured to meet accountability requirements imposed by external agencies such as the Education Review Office. While an emerging body of New Zealand literature has shown that teachers, in general, have been supportive of curriculum reforms (Aikin, 1994; Renwick & Gray, 1995) there is also a substantial amount of evidence which has shown that the implementation of assessment requirements has been far more problematic (Aikin, *ibid*; Baker, 1995b; Faire, 1994). Of importance to this study has been the identification of the 'problematic' and the structures and strategies that could assist teachers to put school based assessment policy into practice. To achieve this, three major research questions were formulated and they became the focus of the study. The three questions were: What do teachers perceive to be the main purposes of school based assessment? What uses are made of the assessment information? What shapes and influences teachers' practice in the area of assessment?

The major findings

Research within the interpretive paradigm does not aim to make predictions or generalisations, rather it aims to provide an authentic account of people's practical realities. In this way the schools and teachers selected for this project were considered to be purposive examples, cases which could be used to describe, understand and illuminate what was happening to particular schools and teachers as official assessment policy requirements were translated into practice. However, in studying a number of cases it was possible to document similarities and common occurrences. The data gathered from the forty three questionnaire and twelve interview responses revealed a number of findings which may have some significance in regard to current assessment practice, insofar as there were consistencies across schools and teachers. Furthermore many of these findings supported those reported in overseas literature.

Teachers' understanding of the purposes of assessment

Educational assessment functions in two distinct ways: one which is essentially formative in nature the other essentially summative. The formative function of assessment is concerned with promoting and enhancing learning whereas the summative function is more concerned with the measurement and reporting of achievement, often for certification and accountability purposes. Within the context of this study, teachers placed a great deal of emphasis on both the formative and summative purposes of assessment. Teachers attributed great importance to the formative potential of assessment and its ability to enhance teaching and learning. Indeed they believed that the new assessment requirements had enabled them to better cater for the individual needs of children. However a more detailed exploration of their articulated practice revealed that while teachers had accepted the basic argument that assessment has a positive role to play in the promotion of student learning they were not able to explain clearly, how within the context of regular classroom activity, they were able to utilise the assessment information gained in such a manner.

Teachers were willing to accept that the state has a role to play in the monitoring of

pupil achievement and school performance, acknowledging that there was a need for schools and teachers to be accountable. Again they believed that the new assessment requirements had increased their accountability. Problematic to teachers was the way in which accountability was conceptualised and legitimised. Often teachers' personal conceptions of accountability were at odds with those of external agencies, especially those held by the Education Review Office. The way in which the Review Office calls schools to account through contractual compliance and the meeting of pre-specified attainment targets had little perceived positive effect on teacher's actual classroom practice. Rather, teachers' believed that they had become more accountable through the identification of individual learning needs and the provision of more appropriate programmes of instruction.

The uses made of assessment information

Evidence from this study indicates that while teachers were using the information gained from school based assessment in both formative and summative ways, there was a definite focus upon the latter. Teachers' descriptions of their practice provided a number of possible explanations for this occurrence: the relevancy of the data collected; their use of, and confidence in particular methods of assessment; their personal content knowledge; their understanding of the key distinction between formative and summative approaches to assessment and the requirement to provide assessment information to a wide range of stakeholders.

In regard to their formative practice, while teachers were able to collect data both formally and informally, it was considerably harder for them to utilise this data formatively. Some evidence demonstrated that teachers' ability to utilise the assessment information in a formative manner was a function of their content and related curriculum knowledge. In curriculum areas where teachers felt confident in their subject knowledge, for example reading, their practice was underpinned by constructivist assumptions to teaching and learning. It appeared that in these areas teachers were able to respond and react to student responses as learning was occurring and thus assessment became an integral part of the teaching learning process.

In many curriculum areas teachers had adopted a behaviourist approach to assessment which enabled them to take ongoing snapshots of pupil performance. While teachers intended the information gathered to be used formatively it could be better described as continuous summative assessment as they checked to determine whether or not learning had occurred. In this way it can be assumed that teachers do not have a clear understanding of the key distinction between formative and summative assessment activity. This is not surprising given that national curriculum statements, which provide the basis for teachers' practice, blur and confuse this distinction.

The use of assessment methods informed by behaviourist assumptions about teaching and learning (for example checklists) had been used frequently by teachers in their initial attempts to assess children's curriculum achievements. These were viewed however quite critically by teachers as they questioned the amount, relevancy, dependability and usefulness of such data. Furthermore they believed that this type of assessment practice had impacted negatively on teaching and learning, encouraging the fragmentation of knowledge and the development of shallow learning by children. There was evidence that teachers were attempting to utilise methods which enabled them to work alongside children as they considered these valuable in terms of providing insights into the learning processes children engaged in. Again the use of such methods were limited to particular curriculum areas, generally ones where the teacher herself was confident in knowledge of the subject and in the learning progressions children could be expected to move through.

The summative purposes for which schools were using assessment data were more readily identified and articulated. There was evidence to show that the results of children's achievements were being used to monitor and show progress over time with the intention of reporting that data to a range of stakeholders within and outside of the school: other teachers, including senior management staff, parents, Boards of Trustees, the Ministry of Education and the Education Review Office. In this way the data gathered was being used for accountability purposes, with schools providing assessment information as hard data to support their professional judgements. This had resulted in teachers often engaging in assessment practices which they perceived had a

negative effect both on their teaching and children's learning.

Factors which have shaped and influenced teachers' practice

In all of the schools in this study, assessment had been both a critical issue for teachers and a focus for school wide development. Working within a professional model of accountability, teachers have been involved in a series of professional activities which has enabled them to work together collectively and collaboratively to effect and manage curriculum and assessment change. Teachers had worked hard to implement a curriculum which is essentially reductionist and technocratic in nature (although they did not seem to conceptualise the curriculum in this manner) and they were pleased with the outcome of their activity, transforming curriculum statements into workable documents applicable to their school community. However, preliminary attempts (based on behaviourist assumptions) to set up assessment systems to support the national curriculum had met with a fair degree of criticism by teachers. Many of these criticisms related to inherent conceptual difficulties which arise as a standards based approach to assessment is implemented (but again there seemed to be little theoretical understanding of this by the teachers). There was however some evidence which indicated that teachers were looking beyond the manageability of assessment and through reflection, personal insights and the development of shared understandings were attempting to define what constitutes good assessment practice.

Carr & Kemmis (1983) have argued that many of the aims and objectives that teachers pursue are not so much a result of conscious choice but rather are a result of the influence of structural forces over which they have little control. Within the context of this study professional attempts to initiate change to assessment practice had been tempered by the expectations and influence of the Education Review Office. This was true for all schools involved in the study as it appeared that the prospect of a review, either in a given year or at some unknown time in the future, loomed large in teachers' minds. EROs requirement that school performance be reported in relation to outputs, contractual compliance and the attainment of specific outcomes had resulted in a professional dilemma for teachers as they participated in certain assessment practices

which were at odds with their personal beliefs about the efficacy of such practice. In an attempt to meet external accountability requirements, teachers engaged in practices, many of which they themselves did not consider relevant to the improvement of teaching and learning, but which they perceived as important if their school was to be judged, by ERO and the wider community, as providing quality education.

The high stakes nature of school based assessment activity: Assessment for accountability purposes

Currently, across much of the western world, quality in education has become synonymous with improved pupil performance (Codd, 1998; Popham, 1999) and has been promoted through increased accountability mechanisms (Mann, 1998). The desire by governments to improve educational 'standards' has resulted in accountability becoming a major focus of educational reform over the past decade. In New Zealand, since the advent of Tomorrow's Schools, greater emphasis has been placed on managerial and contractual control and accountability at the school level. Increasingly teacher performance and productivity has been associated with the achievement of the pupils they teach (Codd, 1998). Inherent within this association is the assumption that pupil performance is related to school effectiveness. If pupil performance is high then the school must be effective or conversely, if pupil performance is low, the school's staff must be ineffective (Popham, 1999).

Within the New Zealand context a further variable has been introduced to promote greater accountability of schools. Again over the past decade, there has been the advocacy by government of educational policies which have increased competition between schools (Robertson et al, 1997). The Tomorrow's Schools reforms (1988) and the Education Amendment Act (1991) abolished many of the mediating structures which had previously allowed schools to co-exist rather than compete against each other. The removal of school zones, the enlargement of maximum roll numbers, the disestablishment of home zones and the balloting for students in oversubscribed schools has subsequently resulted in schools competing with each other for students (Robertson et al, *ibid*; Waslander & Thrupp, 1995). As a result of these policies school

based assessment has become a high stakes activity as the results of pupil achievement are now used to judge the quality of educational provision which in turn either enhances or inhibits a school's ability to compete in the marketplace (Thrupp, 1998).

Teachers perceive particular assessment practices to be either low or high stakes in nature dependent on the long term consequences that such practice has for them (Little & Wolf, 1996). High stakes assessment can be defined as that which has a significant impact on teachers' lives (Gipps et al, 1995). Within the context of this study there was considerable evidence which indicated that school based assessment had moved from a relatively low stakes activity to a high stakes activity. Assessment had become a critical issue for all of the schools as they worked to survive in the marketplace. Significantly, much of the assessment data collected by teachers was for accountability purposes rather than for the enhancement of learning. In many instances the collection of this data was for the benefit of the Education Review Office as schools and teachers strived to 'get it right' and 'give the Review Office what it wanted' even though at times this conflicted with what teachers considered to be important to the improvement of teaching and learning.

Within the New Zealand education system ERO is now considered to be the dominant control agency (Clark, 1998; Codd, 1998; O'Neill, 1998). Certainly teachers within this study supported this view as they attributed ERO with considerable influence to effect change within schools. Problematic to teachers had been the ways in which ERO had conceptualised and legitimised educational accountability. Robertson and her colleagues (1997) identified twenty ways in which the work of ERO was problematic to schools. A number of these were identified by teachers in this study and included:

(i). the creation of a low trust model which disregards an embedded ethic of professional responsibility;

(ii). ERO's preoccupation with paperwork and the associated failure to look at classroom practice;

(iii). an over-reliance on records of practice with only fleeting glimpses of practice which in turn provided few cues as to what may be happening within classrooms;

(iv). the creation of a production regime which has required schools and teachers to make their work visible;

(v). the internalisation by teachers of particular discursive practices including a new set of values about what is important;

(vi). the stressful and negative effect on teachers, leading them to worry about a process over which they had little control.

While ERO was accredited with a considerable amount of influence to effect change upon schools their ability to judge the effectiveness of schools was questioned by many of the teachers in the study. This, however, did not prevent teachers from engaging in many of the discursive practices associated with a managerial-contractual accountability discourse as promoted by ERO. Robertson et al (1997) have argued that within a market context it is important for schools to receive a good ERO report. While this study did not investigate in any detail teachers' reasons for engaging in practices which conflicted with their own (professional-contextual) discourse it can be assumed that they did so because of the possible negative consequences of receiving a poor ERO report.

The high stakes nature of assessment can exert a powerful negative influence on teachers' practices (Black & Wiliam, 1998; Sebatane, 1998) and dominate teachers' work to such an extent that assessment which enhances learning becomes a secondary activity (Black, 1993). Currently, it is this issue which teachers in this study are grappling with as they attempt to balance external accountability requirements, as expressed by ERO, with their personal conceptions of what 'good' teaching and learning entails. Teachers have been faced with a number of professional dilemmas in relation to the changing nature of their work, the way that work is monitored and controlled, the need to make their work visible and the uses made of the assessment

information collected. None of these dilemmas have been resolved fully for the teachers involved in this study.

It can be assumed that as long as ERO has the power to determine the relative effectiveness of schools and the media continue to publish snippets of school reviews which often sensationalise findings (Robertson et al, 1997) then assessment will continue to be a high stakes activity for all schools. This can only impact negatively on the conditions necessary for formative assessment to occur. If this is the case then assessment which can enhance learning will never realise its full potential.

Implications for formative practice

While it is well established in the assessment literature that there is a close relationship between learning and assessment (Gipps, 1994) with approaches to learning, teaching and assessment leading to either deep or shallow learning (Crooks, 1988; Harlen and James, 1997), this is a relationship which is often unclear to teachers (Pryor & Torrance, 1997). While this relationship was not the primary focus of this thesis, there was some indication that teachers had only a limited understanding of these associations. Furthermore teachers' understanding of formative assessment, as underpinned by constructivist assumptions, was not well developed and is an area which needs significant attention. These two findings suggest that, consistent with the findings of Bachor and Anderson (1994), many teachers do not possess the interpretive frameworks necessary to coordinate all the assessment information needed to enhance learning. It is therefore essential that teachers have access to long term professional development opportunities that will increase their knowledge and skills in these areas. Specifically, pre-service and in-service courses on assessment need to pay significant attention to the assumptions about learning which underpin particular curriculum, teaching and assessment approaches, for if teachers do not understand these, they will never be able to enhance and promote learning. Furthermore they will not be able to identify the practices and structures that may be inhibiting them and learners and they will not be able to defend adequately their practice if so required. This last point is particularly important when teachers are required to undergo external reviews by an

agency such as ERO whose policies and practices place more emphasis on summative forms of assessment.

Specifically teachers need to comprehend fully:

(i). the assumptions underpinning specific theories of learning, their strengths and weaknesses and the attendant teaching and assessment practices which will either foster or inhibit learning for children;

(ii). the assumptions underpinning formative assessment and the close relationship between formative assessment and constructivist learning theories;

(iii). the ways in which they can develop understanding in learners and the criteria they utilise in determining whether or not learning has occurred;

(iv). the roles and responsibilities of the teacher and the learner in the development of understanding;

(v). the theoretical and ideological assumptions underpinning the national curriculum and the conceptual difficulties inherent in utilising criterion referenced assessment as a means by which student achievement is interpreted.

Recommendations for future research

While there is an extensive body of overseas literature which has demonstrated that formative assessment can lead to significant learning gains for students (Black & Wiliam, 1998), there is a corresponding amount of evidence which shows that formative assessment is not well understood by teachers and is weak in practice (Crooks, 1998; Daws & Singh, 1996). Indeed a number of the findings reported in this thesis support the view that conceptually teachers are confused about the purpose and effect of formative assessment (Harlen & James, 1997). While the teachers in this study had accepted the basic argument that assessment has a positive role to play in the

promotion of student learning they were not able to articulate clearly how they utilised assessment information to enhance learning within the context of their day to day classroom programmes. Possibly this was due to a combination of factors: the unclear distinction between the formative and summative purposes of assessment promoted in official policy documents, teachers' theoretical knowledge of theories of learning, their understanding of the relationships which exist between learning, teaching and assessment and the depth and breadth of their content knowledge in particular curriculum areas and how this either facilitated or inhibited their ability to assess formatively. The breadth and scope of this thesis did not however allow for a substantial exploration of these factors, any one of which could form the basis of future research.

Formative assessment which is underpinned by constructivist approaches to learning and teaching is a challenging and complex activity; one which requires a reconceptualisation by both teachers and students if deep approaches to learning are to occur. This research, in attempting to identify aspects of teachers' formative activity, only reported on teachers' perceptions of their practice yet it has to be acknowledged that personal perceptions may differ markedly from actual practice. Again the scope of this study could not provide detailed descriptions of teachers' practice based on observational data. However both contemporary literature (Pryor & Torrance, 1997; Sadler, 1998; Torrance & Pryor, 1995) and the findings of this research would indicate that more detailed descriptions of practice would be beneficial to teachers as the nature of the social setting of the classroom is investigated. While there are a number of overseas studies which have focussed on particular aspects of formative assessment practice it would appear that little has been undertaken or reported within the New Zealand primary school context.

In particular, future research could focus on the following aspects of classroom practice for it is these factors that are embedded into the type of formative activity which will encourage deep approaches to learning:

- (i). the nature, quality and timing of the feedback given to learners. The accuracy,

comprehensiveness and appropriateness of such feedback, the ways in which it is communicated to learners and its accessibility to learners;

(ii). the nature of the learning opportunities provided to learners and their relationship to learning outcomes;

(iii). the quality and level of the interactions between teacher and learner as evidenced by questions asked and discussions entered into, with a detailed examination of the ways in which teachers respond to learners' misunderstandings and misconceptions.

Constructivist theories of knowledge construction and learning, attribute great importance to the involvement of the learner in the learning process if learning with understanding is to occur (von Glaserfeld, 1989; Wheatley, 1991). Indeed this view is promulgated by many assessment specialists who contend that the learner must also be involved fully in the assessment process if the gap between current and desired performance is to be achieved (Sadler, 1989, 1998; Elshout-Mohr, 1994). Therefore it seems important to investigate in more depth teachers' understanding and use of specific methods of assessment which may facilitate greater student involvement and participation. In particular, student self assessment seems to be an assessment method which warrants further investigation as it has a great deal of potential to involve the learner in the assessment process yet it is one that a number of teachers in this current study were ambivalent about. Teachers' ambivalence was not related to the self assessment as a method rather, they questioned the ability of the participants (themselves and the children) to fulfil their roles satisfactorily. Therefore research which provides emerging descriptions of the roles and responsibilities of teachers and learners in this process, the ways it could be implemented within classroom programmes and the benefits that may accrue to both the teacher and learner as a result of such participation would help to both increase teachers' awareness of the importance of involving children in the assessment process and give them greater confidence in the trustworthiness of self assessment as a way of facilitating learning.

Limitations of the study

Methodology can be conceptualised as the theory of knowledge and the interpretive framework which guides a particular research project (Kaplan, 1973). Therefore in choosing a particular methodology, the researcher must make her selection based on its appropriateness to the subject of inquiry, aware however, that any methodology will have limitations which could be better addressed by another approach (Candy, 1989). Thus the findings of any study must be considered in relation to both the strengths and drawbacks of the methodology used. The rationale for selecting case study as an approach for this thesis is outlined fully in the method chapter. In the final chapter of this thesis where implications for formative practice and recommendations for future research are discussed, a number of limitations of this study have been identified already.

There are however, several other methodological issues which need to be considered. These issues relate to the sample, not to the way that the schools were selected, but rather to the nature of the participants who responded. Participants were asked to identify their current position and class level taught to determine whether or not these factors influenced teachers' understandings and uses of assessment. However, for a number of reasons, these differences were difficult to ascertain both in the questionnaire and interview phases of the data collection. A possible explanation lies in the response rate from the questionnaires which then influenced the total number of respondents in particular class level categories. There was a much higher response rate from teachers in one particular class level category compared to the others. Teachers who taught in the year one and two area comprised nearly half of the sample while in contrast less than twenty per cent of the respondents taught at the year five and six level. While it appeared that the class level taught had little effect on teachers' understanding and practice, those who chose to respond, especially those respondents who fell in the categories which had lower response rates, may not have been 'typical'. The act of responding to the questionnaire may have minimised rather maximised the difference between respondents (Glaser & Strauss, 1967) and raises questions related to participants' reasons for responding / not responding. It must be acknowledged that

the silence of those teachers who chose not to respond may have maximised differences in relation to the class level taught.

All interview participants were selected on the basis of the depth of their questionnaire responses. In order to maximise the differences between cases, the interview participants represented variations in experience, viewpoint, class level taught and position held. However the data gathered from the interviewees highlighted very few differences in relation to position held or class level taught. In part this may be explained by the small number of teachers interviewed. Twelve (three teachers across each class level and each position) was probably too small a sample to enable patterns or trends to emerge. In retrospect, the nature of the questions asked should have probed more deeply into teacher differences. As discussed in a previous section, direct observation of teachers' practice could have yielded richer data which may have emphasised the difference between cases.

Based on the fact that none of the principals had classroom teaching responsibilities and many of the questions asked of participants related to classroom practice, a decision was made, prior to the study commencing, to exclude principals from the study. However, the exclusion of principals was a definite limitation. As the teachers in each of the schools noted, the principal had a great deal of influence in regard to the implementation of school wide policy. In retrospect, the inclusion of the principals' 'voice' would have strengthened the study by providing further valuable insights into factors that shape and influence teachers' assessment practice. In particular, principals' responses may have contributed significantly to the accountability debate.

A final comment

This study has attempted to identify the 'problematic' and the structures and strategies that can assist teachers in their attempts to put school based assessment policy into practice. Rather than aiming to make predictions or generalisations across populations the study aimed to produce an account that described phenomena occurring in a small study by providing a deeper, more extensive and systematic representation of events

from the perspectives of the individuals involved. However, if it is accepted that findings are generalisable to theoretical propositions (Yin, 1991) then a number of the findings from this study make a valuable contribution to the assessment literature, particularly to the formative / summative debate.

In attempting to meet the requirements of school based assessment the teachers in this study had engaged in both formative and summative assessment activity. While teachers attributed great importance to assessment, recognising its potential to enhance learning, their practice was dominated by summative assessment. This was both due to their lack of understanding of formative assessment (its purpose and effect) and to the meeting of external accountability requirements that often monopolised their time and energy. It is the combination of these two factors which is significant to our understanding of teachers' ability and willingness to translate school based assessment policy into practice.

While school based assessment practice has considerable potential to contribute beneficially to the development of children's understandings, this will only occur if teachers have the ability to use assessment information formatively. The findings from this study revealed that often teachers were unable to articulate clearly how they used assessment formatively within the context of regular classroom activity. This was despite the fact that assessment had been a focus for staff development in each of the schools and highlights the need for long term professional development opportunities which will enable teachers to understand the theoretical notions underpinning formative assessment. Unless this occurs, assessment will never reach its potential and will continue to measure rather than enhance learning.

Moreover, the use of school based assessment information for predominantly summative purposes has confounded the formative issue for teachers further, as assessment has moved from a low stakes to a high stakes activity with the results of children's achievement used to 'prove' the effectiveness of a school. For all of the schools in this study assessment had become a critical issue with much of the assessment data collected by teachers used for accountability purposes rather than for

the enhancement of learning. In many instances the collection of this data was for the benefit of the Education Review Office even though at times this conflicted with what teachers considered to be important for the improvement of teaching and learning.

The tensions and professional dilemmas that schools and teachers faced as they implemented policy requirements have been well documented in this study. In the present climate of contractual-managerial accountability it is unlikely that the state through its agents, will lessen these accountability demands. Therefore, it is vital that the teaching profession itself is able to evaluate, modify and defend its assessment practice. The identification of some of the practices and structures that either inhibit or enhance teaching and learning contributes to an important body of knowledge that is vital to the teaching profession if they are to challenge and modify existing assessment practices so that formative rather than summative activity becomes the primary focus for teachers.

REFERENCES

- Adelman, C., Jenkins, D. & Kemmis, S. (1976). Rethinking case study: Notes from the second Cambridge conference. *Cambridge Journal of Education*, 6(3), 139-150.
- Agar, M. (1979). Themes revisited: Some problems in cognitive anthropology. *Discourse Processes*, 2, 1-31.
- Aikin, S. (1994). Primary problems and the New Zealand Curriculum Framework. In H. Manson (Ed.), *New Zealand Annual Review of Education*. (pp.57-77). Wellington: Victoria University.
- Airisian, P. (1988). Measurement driven instruction: A closer look. *Educational Measurement: Issues and Practice*, 7(4), 6-11.
- Altrichter, H. (1993). The concept of quality in action research: Giving practitioners a voice in education. In M. Schratz (Ed.), *Qualitative voices in educational research*. (pp. 40-56). London: Falmer Press.
- Apple, M. (1992). Ideology and the national curriculum. Paper presented as the John Dewey Lecture, John Dewey Society and AERA, San Francisco.
- Austin, M., Edwards, W. & Parata-Blane, A. (1998). *Achieving excellence: A review of the education external evaluation services*. Report to Ministry of Education and the Ministry of State Services.
- Bachor, D. & Anderson, J. (1994). Elementary teachers' assessment practices as observed in the province of British Columbia. *Assessment in Education*, 1(1), 63-93.
- Baker, F. (1995). Moderation. *Teaching: The Magazine for Professionals in Education*, 33, February, 1 & 3.
- Baker, F. (1995b). The shared understanding approach. *Teaching: The Magazine for Professionals in Education*, 34, March, 4.
- Ball, S.J. (1993). What is policy? Texts, trajectories and toolboxes. *Discourse*, 13 (2), April, 10-17.
- Begg, A. (1995). Constructivism in the classroom. *New Zealand Mathematics Magazine*, 33 (1), 3-17.
- Bell, B. & Cowie, B. (1997). Formative assessment and science education. Report of the Learning in Science Project (Assessment). Centre for Science, Mathematics, Technology Education Research. University of Waikato.
- Bell, B. & Gilbert, J. (1996). *Teacher development*. London: Falmer Press.
- Berlak, H. (1992). The need for a new series of science assessment. In H. Berlak, F. Newmann, E. Adams, D. Archibald, T. Burgess, J. Raven & T. Romberg (Eds.), *Toward a new science of educational testing and assessment*. Albany:

State University of New York.

- Biggs, J. (1998). Assessment and classroom learning: A role for summative assessment? *Assessment in Education*, 5(1), 103-110.
- Black, H. (1986). Assessment for learning. In D. Nuttall (Ed.), *Assessing educational achievement*. (pp. 7-18). Lewes: Falmer Press.
- Black, P. (1993). Formative and summative assessment by teachers. *Studies in Science Education*, 21, 49-97.
- Black, P. & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7-74.
- Blackmore, J. (1988). *Assessment and accountability*. Geelong, Victoria: Deakin University Press.
- Bogdan, R. & Biklen, S. (1982). *Qualitative research for education: An introduction to theory and methods*. Boston: Allyn & Bacon.
- Boston, J., Martin, J., Pallot, J. & Walsh, P. (Eds.). (1991). *Reshaping the state: New Zealand's bureaucratic revolution*. Auckland: Oxford University Press.
- Bourke, R., Poskitt, J. & McAlpine, D. (1996). Assessment for better learning: Realities and rhetoric. Paper presented at the New Zealand Council for Teacher Education Council Conference, Dunedin College of Education, July.
- Broadfoot, P. (1979). *Assessment, schools and society: Contemporary sociology of the school*. London: Methuen Ltd.
- Broadfoot, P. (1988). The national assessment framework and records of achievement. In H. Torrance (Ed.), *National assessment and testing: A research response*. (pp. 3-14). London: British Educational Research Association.
- Broadfoot, P. (1992). Changing priorities in assessment: An international reform agenda. Paper to an international conference organised by the New Zealand Qualifications Authority, Victoria University, Wellington, January.
- Broadfoot, P., Osborn, M., Panel, C. & Pollard, A. (1996). Assessment in French primary schools. *The Curriculum Journal*, 7(2), 227-246.
- Brown, S. & Angus, L. (1997). Reconstructing teacher professionalism in Victoria's schools of the future. *Curriculum Perspectives*, 17(1), 45-56.
- Bryman, A. & Burgess, R.G. (Eds.). (1994). *Analysing qualitative data*. London: Routledge.
- Burgess, R.G. (Ed.). (1985). *Field methods in the study of education*. Lewes: Falmer Press.
- Calderhead, J. & Gates, P. (1993). *Conceptualising reflection in teacher development*. London: Falmer Press.
- Candy, P.C. (1989). Alternative paradigms in educational research, *Australian Educational Researcher*, 16(3), 1-11.

- Carr, W. & Kemmis, S. (1983). *Becoming critical: Knowing through action research*. Victoria: Deakin University Press.
- Castle, J. B. (1997). Toward understanding professional development: Exploring views across a professional development school. *Teachers and teaching: Theory and practice*, 3(2), 221-242.
- Clark, J. (1998). ERO's 'The capable teacher': An inadequate model for teacher education. Paper presented to the New Zealand Teacher Education Conference, University of Waikato, October.
- Cobb, P. (1994). Where is the mind? Constructivist and sociocultural perspectives on mathematical development. *Educational Researcher*, 23(7), 13-20.
- Codd, J. (1988). The construction and deconstruction of educational policy texts. *Journal of Educational Policy*, 3(3), 235-247.
- Codd, J. (1990). Policy documents and the official discourse of the state. In J. Codd, R. Harker & R. Nash (Eds.), *Political issues in New Zealand education today*. (pp.133-149). Palmerston North: Dunmore Press.
- Codd, J. (1992). Contractualism, contestability and choice: Capturing the language of educational reform in New Zealand. Paper presented at the AARE/NZARE Joint Conference, Deakin University, Geelong, Victoria.
- Codd, J. (1993). Educational reform and the contradictory discourses of evaluation. Paper presented at the Annual Conference of the New Zealand Association for Research in Education, December.
- Codd, J. (1994). Educational reform and the contradictory discourses of evaluation. *Evaluation and Research in Education 1 & 2*, 41-54.
- Codd, J. (1998). Professional accountability and the education of teachers. Paper presented to the New Zealand Teacher Education Conference, University of Waikato, October.
- Codd, J., Gordon, L. & Harker, R. (1990). Education and the role of the state: Devolution and control post Picot. In H. Lauder & C. Wylie (Eds.), *Towards successful schooling*. (pp. 15-33). London: Falmer Press.
- Codd, J., Harker R. & Nash, R. (Eds.). (1990). *Political issues in New Zealand education*. Palmerston North: Dunmore Press.
- Codd, J., McAlpine, D. & Poskitt, J. (1991). The Achievement Initiative: Myths and mysteries of assessment. Paper presented at the Annual Conference of the New Zealand Association for Research in Education, University of Otago, December.
- Codd, J., McAlpine, D. & Poskitt, J. (1992). The reform of student assessment in New Zealand: Whose agenda? What effects? Paper presented at the AARE/NZARE Joint Conference, Deakin University, Geelong, Victoria, November..
- Codd, J., McAlpine, D. & Poskitt, J. (1995). Assessment policies in New Zealand: Educational reform or political agenda? In R. Peddie & B. Tuck (Eds.), *Setting the standards*. (pp. 32-63). Palmerston North: Dunmore Press.

- Cohen, L. & Manion, L. (1985). *Research methods in education (2nd ed.)*. Kent: Croom Helm.
- Cohen, L. & Manion, L. (1994). *Research methods in education (4th ed.)*. London: Routledge.
- Cowie, B. & Bell, B. (1996). Validity and formative assessment in the science classroom. Keynote paper to the symposium on validity in educational assessment, University of Otago, July.
- Coxon, A.P. (1979). Bringing accounts back in: Formal data and subjects' accounts. Paper presented to British Psychological Society Conference, City University.
- Crocombe, G., Enright, M. & Porter, M. (1991). *Upgrading New Zealand's competitive advantage*. Auckland: Oxford University Press.
- Crooks, T. (1988). The impact of classroom evaluation practices on students. *Review of Educational Research*, 58(4), 438-481.
- Crooks, T. & Flockton, L. (1996). *Music assessment results*. National Education Monitoring Report 4. Dunedin: Educational Assessment Research Unit.
- Dale, R. (1990). The impact of the restructuring of education in New Zealand and Britain. Paper presented to the 2nd Research into Educational Policy Conference, Wellington, August.
- Dale, R. (1994). The state and education. In A. Sharp (Ed.), *Leap into the dark: The changing role of the state in New Zealand since 1984*. (pp.68-88). Auckland: Auckland University Press.
- Dale, R. & Jesson, J. (1992). Mainstreaming education: The State Services Commission and education. In H. Manson (Ed.), *Annual Review of Education in New Zealand*. (pp.7-34). Wellington: Victoria University.
- Darling-Hammond, L. (1989). Accountability for professional practice. *Teachers College Record*, 91, 59-80.
- Darling-Hammond, L. (1994). Performance based assessment and educational equity. *Harvard Educational Review*, 64(1), 5-30.
- Darling-Hammond, L. (1997). *The Right to Learn*. San Francisco: Jossey-Bass.
- Darling-Hammond, L., & Falk, B. (1997). Using standards and assessments to support student learning. *Phi Delta Kappan*, November, 190-199.
- Darling-Hammond, L., Wise, A. & Klein, S. (1995). *A license to teach: Building a profession for 21st century schools*. Boulder: Westview Press.
- Daugherty, R. (1996). In search of teacher assessment - its place in the National Curriculum assessment system of England and Wales. *The Curriculum Journal*, 7(2), 137-152.
- Davis, A. (1998). Special Issue: The limits of educational assessment. *Journal of Philosophy of Education*, 32(1), 1-155.

- Daws, N. & Singh, B. (1996). Formative assessment: To what extent is its potential to enhance pupils' science being realised? *School Science Review*, 77(281), 93-100.
- D'Cruz, J. (1977). Towards an inclusive notion of accountability. In P. Chippendale & P. Wilkes (Eds.), *Accountability in education*. (pp.184-203). St. Lucia: University of Queensland Press.
- Denzin, N.K. (1978). *The research act in sociology: A theoretical introduction to sociological methods*. London: Butterworth Group.
- Dwyer, C. (1998). Assessment and classroom learning: Theory and practice. *Assessment in Education: Principles, Policy & Practice*, 5(1), 131-138.
- Elley, W. (1993). Curriculum reform: Forwards or backwards? In H. Manson (Ed.), *Annual Review of Education in New Zealand*. (pp. 37-51). Wellington: Victoria University.
- Elley, W. (1995). What's wrong with standards based assessment? In R. Peddie & B. Tuck (Eds.), *Setting the standards*. (pp.78-98). Palmerston North: Dunmore Press.
- Elliot, J. (1992). *Action research for educational change*. Milton Keynes: Open University Press.
- Elliot, J., Bridges, D., Ebbutt, D., Gibson, R. & Nias, J. (1981). *School accountability: The SSRC Cambridge accountability project*. London: Grant McIntyre.
- Elshout-Mohr, M. (1994). Feedback in self instruction. *European Education*, 26, 58-73.
- Ewing, J. (1977). Accountability in education: A New Zealand viewpoint. In P. Chippendale & P. Wilkes (Eds.), *Accountability in education*. (pp. 43-54). St. Lucia: University of Queensland Press.
- Faire, M. (1994). *Recording and reporting: An exploratory study*. Hamilton: University of Waikato.
- Fontana, D. & Fernandes, M. (1994). Improvements in mathematics performance as a consequence of self assessment in Portuguese primary school pupils. *British Journal of Educational Psychology*, 64, 407-417.
- Fullan, M. (1991). *The new meaning of educational change*. London: Cassell.
- Gipps, C. (1990). *Assessment: A teacher's guide to the issues*. London: Hodder & Stoughton.
- Gipps, C. (1994). *Beyond testing: Towards a theory of educational assessment*. London: Falmer Press.
- Gipps, C. (1995). Teacher assessment and teacher development in primary schools. *Education*, 23(1), 3-13.
- Gipps, C. (1996). Assessment matched to learning. Paper presented at the British

Educational Research Association Conference, September.

- Gipps, C., Broadfoot, P., Dockerell, B., Harlen, W. & Nuttall, D. (1992). Problems in national assessment: A research critique. In P. Broadfoot, B. Dockerell, C. Gipps, W. Harlen & D. Nuttall (Eds.), *Policy issues in national assessment, Bera Dialogues*, No.7.
- Gipps, C., Brown, M., McCallum, B. & McAlister, S. (1995). *Intuition or evidence?* Buckingham: Open University Press.
- Gipps, C. & James, M. (1996). Assessment matched to learning. Some ideas towards a pamphlet on assessment and learning. Paper presented at the BERA Conference, University of Lancaster, September.
- Gipps, C., McCallum, B. & Brown, M. (1996). Models of teacher assessment among primary school teachers in England. *The Curriculum Journal*, 7(2), 167-184.
- Gipps, C. & Murphy, P. (1994). *A fair test? Assessment, achievement and equity*. Buckingham: Open University Press.
- Glaser, B. & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine Publishing.
- Glaser, R. (1963). Instructional technology and the measurement of learning outcomes: Some questions. *American Psychologist*, 18, 519-521.
- Goodson, I. (1997). 'Trendy theory' and teacher professionalism. *Cambridge Journal of Education*, 27(1), 7-22.
- Gordon, L. & Codd, J. (1991). Education policy and the changing role of the state. *Delta Studies in Education*, 1.
- Grace, G. (1990). The New Zealand Treasury and the commodification of education. In S. Middleton, J. Codd & A. Jones (Eds.), *New Zealand educational policy today: Critical perspectives*. (pp.27-39). Wellington: Allen & Unwin.
- Griffin, P. & Nix, P. (1991). *Educational assessment and reporting: A new approach*. Marrickville: Harcourt Brace Jovanovich.
- Gronlund, N. & Linn, R. (1990). *Measurement and evaluation in teaching*. New York: Macmillan Publishing.
- Hall, K., Webber, B., Varley, S., Young, V. & Dorman, P. (1997). A study in teacher assessment at Key Stage 1. *Cambridge Journal of Education*, 27(1), 107-122.
- Hammersley, M. & Atkinson, P. (1983). *Ethnography: Principles in practice*. London: Tavistock.
- Hargreaves, A. (1989). *Curriculum and assessment reform*. Milton Keynes: Open University Press.
- Hargreaves, A. (1992). Cultures of teaching: A focus for change. In A. Hargreaves & M. Fullan (Eds.), *Understanding teacher development*. (pp 216-240.). New

York: Teachers College Press.

- Hargreaves, A. (1994). *Changing teachers, changing times*. London: Cassell.
- Hargreaves, A. & Fullan, M. (Eds.). (1992). *Understanding teacher development*. New York: Teachers College Press.
- Harlen, W. & James, M. (1997). Assessment and learning: Differences and relationships between formative and summative assessment. *Assessment in Education*, 4(3), 365-379.
- Harlen, W. & Malcolm, H. (1996). Assessment and testing in Scottish primary schools. *The Curriculum Journal*, 7(2), 247-258.
- Harlen, W., Malcolm, H. & Byrne, M. (1995). Teachers assessment and national testing in primary schools in Scotland: Roles and relationships. *Assessment in Education*, 2, 126-144.
- Harlen, W. & Qualter, A. (1991). Issues in SAT development and the practice of teacher assessment. *Cambridge Journal of Education*, 21(2), 141-152.
- Hattie, J. & Jaeger, R. (1998). Assessment and classroom learning: A response to Black and Wiliam. *Assessment in Education: Principles, Policy & Practice*, 5(1), 111-122.
- Hill, M. (1995). Self assessment in primary schools: A response to student teacher questions. *Waikato Journal of Education*, 1, 61-70.
- Hill, M. (1997). Planning valid and valuable school assessment systems: A possible model for New Zealand schools. *Teachers and Curriculum*, 1, 85-98.
- Ingvarson, L. (1995). *Professional credentials*. Standards for primary and secondary science teaching in Australia. A discussion paper. (pp.17-31). Canberra, ACT: Australian Science Teachers' Association.
- Ingvarson, L. & Chadbourne, R. (1994). *Valuing teachers' work: New directions in teacher appraisal*. Melbourne: Australian Council for Educational Research.
- Irving, J. (1992). Monitoring the education system. Paper presented at the Auckland Primary Principals' Association Conference, Auckland, April.
- Irving, J. (1993). Policies and future directions for assessment of the individual and the system in New Zealand education. Paper presented at the Conference on Assessment and Learning in New Zealand: Challenges and Choices. Palmerston North College of Education, September.
- Irving, J. (1995). Teachers need to value their professional judgement. *NZEI Rourou*, 13, 3.
- Izard, J. (1991). *Assessment of learning in the classroom*. Geelong: Deakin University Press and the Australian Council for Educational Research.
- James, M. (1990). Negotiation and dialogue in student assessment. In T. Horton (Ed.), *Assessment debates*. (pp.104-115). London: Hodder & Stoughton.

- Jesson, B. (1988). The libertarian right. In B. Jesson, A. Ryan & P. Spoonley (Eds.), *Revival of the right*. Auckland: Heinemann Reed.
- Jesson, J. (1995). Curriculum in New Zealand: Is it policy by dodgemes? *Educational Review*, 47(2), 143-155.
- Kaplan, A. (1973). *The conduct of inquiry*. Aylesbury: Intertext Books.
- Lacey, C. & Lawton, D. (Eds.). (1981). *Issues in evaluation & accountability*. (pp. 1-31). London: Methuen.
- Lang, C. (1996). Preparedness for teaching: Beginning teachers' views of the pre-service programme and their first year of teaching. Unpublished Master of Education thesis, University of Waikato.
- Lange, D. (1988). *Tomorrow's schools: The reform of educational administration in New Zealand*. Wellington: Government Printer.
- Lauder, H. (1990). The New Right revolution. In S. Middleton, J. Codd & A. Jones (Eds.), *New Zealand educational policy today: Critical perspectives*. (pp.1-26). Wellington: Allen & Unwin.
- Lauder, H., Wylie, C. & Parker-Taunoa, R. (1990). Citizens or consumers? The politics of educational reform: An introduction. In H. Lauder & C. Wylie (Eds.), *Towards successful schooling*. (pp.1-13). London: Falmer Press.
- Lincon, Y. & Guba, E. (1985). *Naturalistic inquiry*. Beverley Hills: Sage.
- Little, A. & Wolf, A. (1996). (Eds). *Assessment in transition: Learning, monitoring and selection in international perspective*. Oxford: Pergamon Press.
- Livingstone, I.D. (1994). The workloads of primary schools teachers: A Wellington region survey. Wellington: Chartwell & NZEI.
- Lofty, J.S. (1993). Can Britain's national curriculum show America the way? *Educational Leadership*, 50(2), 52-55.
- McCallum, B., McAlister, S., Gipps, C. & Brown, M. (1993). Teacher assessment at Key Stage 1. *Research Papers in Education*, 8, 305-327.
- McCallum, B., Gipps, C., McAlister, S. & Brown, M. (1995). National curriculum assessment: Emerging models in the classroom. In H. Torrance (Ed.), *Evaluating authentic assessment*. (pp.57-88). Buckingham: Open University Press.
- McCallum, B., Gipps, C., McAlister, S. & Brown, M. (1995). Teachers' own assessments. In A. Craft (Ed.), *Teaching and learning in the primary school*. Milton Keynes: Open University Press.
- McDonald, G. (1990). Assessment and evaluation: What's in it for Tomorrow's Schools? *Education Today*, 2(7), 28-30.
- Macpherson, R. (1998). Contractual or responsive accountability? Neo-centralist 'self-management' or systemic subsidiary? Tasmanian parents' and other stakeholders' policy references. *Australian Journal of Education*. 42(1), 68-89.

- Mann, L. (1998). Matching assessment with curriculum. *Education Update*, 40(4), June, 1-3.
- Mansfield, J.E. (1995). The death of the dance of the cave weta. The marginalisation of the arts within state education. Unpublished Master of Arts thesis, Auckland University.
- Marshall, J. (1994). Introduction. In J. Marshall (Ed.), *Revisiting the reforms in education*. (pp.1-5). The Faculty of Education Annual Lectures, University of Auckland.
- Mason, J. (1994) Linking qualitative and quantitative data analysis. In A. Bryman. & R.G. Burgess (Eds.). (pp. 89-110). *Analysing qualitative data*. London: Routledge.
- Massey, L.E. (1980). An analysis of curriculum change. Unpublished Ph.D thesis, University of Auckland.
- Massey, L.E. (1995). Ideological shifts in curriculum policy in New Zealand 1984-1994. Unpublished paper, Auckland College of Education.
- Mathison, S. (1988). Why triangulate? *Educational Researcher*, 17, 13-17.
- Mavrommatis, Y. (1996). Classroom assessment in Greek primary schools. *The Curriculum Journal*, 7(2), 259-270.
- Meadmore, D. (1995). Linking goals of governmentality with policies of assessment. *Assessment in Education: Principles, Policy and Practice*, 2(1), 9-23.
- Ministry of Education. (1991). The Achievement Initiative. *New Zealand Education Gazette* 70(7), 1-2.
- Ministry of Education. (1992). *Mathematics in the New Zealand Curriculum*. Wellington: Learning Media.
- Ministry of Education. (1993). *The New Zealand Curriculum Framework*, Wellington: Learning Media.
- Ministry of Education. (1993). *Science in the New Zealand Curriculum*. Wellington: Learning Media.
- Ministry of Education. (1994). *Assessment: Policy to practice*. Wellington: Learning Media.
- Ministry of Education. (1994). *English in the New Zealand Curriculum*. Wellington: Learning Media.
- Ministry of Education. (1995). Assessment issues. *New Zealand Education Gazette*, 74(5), 1-2.
- Ministry of Education. (1995). *Technology in the New Zealand Curriculum*. Wellington: Learning Media.
- Ministry of Education (1997). *Social Science in the New Zealand Curriculum*. Wellington: Learning Media.

- Newmann, F., King, B. & Rigdon, M. (1997). Accountability and school performance: Implications for restructuring schools. *Harvard Educational Review*, 67(1), 41-69.
- New Zealand Treasury. (1984). *Economic Management: Brief to the Incoming Government*. Wellington: Government Printer.
- New Zealand Treasury. (1987). *Brief to the Incoming Government, Vol 2, Education Issues*. Wellington: Government Printer.
- Nitko, A. (1995). Curriculum based continuous assessment: A framework for concepts, procedures and policy. *Assessment in Education*, 2, 321-337.
- Nuttall, D. (1986). (Ed.). *Assessing educational achievement*. Lewes: Falmer Press.
- Olssen, M. & Morris Matthews, K. (Eds.). (1995). *Education, democracy and reform*. Auckland: NZARE / RUME, University of Auckland.
- O'Neill, J. (1998). ERO in pursuit of the capable teacher - measuring time, motions and baseball fields. Paper presented to the New Zealand Teacher Education Conference, University of Waikato, October.
- Organisation For Economic Co-operation and Development. (1983). *Review of national policies for education: New Zealand*. Paris: OECD.
- Organisation For Economic Co-operation and Development. (1990). *The teacher today*. Paris: OECD.
- Organisation For Economic Co-operation and Development. (1995). *Measuring the quality of schools*. Paris: OECD.
- Owens, R. (1995). *Organisational behaviour in education*. Boston: Allyn & Bacon.
- Peddie, R. (1992). *Beyond the norm: An introduction to standards based assessment*. Wellington: New Zealand Qualifications Authority.
- Perrenoud, P. (1998). From formative evaluation to a controlled regulation of learning processes. Towards a wider conceptual field. *Assessment in Education: Principles, Policy & Practice*, 5(1), 85-102.
- Peters, M. (1992). Reform and the politics of the national curriculum. Unpublished paper, University of Canterbury.
- Pollard, A. (1987). *Children and their primary schools: A new perspective*. London: Falmer Press.
- Popham, J. (1987). The merits of measurement driven instruction, *Phi Delta Kappa*, May, 679-682.
- Popham, J. (1999). Why standardised tests don't measure educational quality. *Educational Leadership*, 56(6), March, 9-15.
- Powney, J. & Watts, M. (1987). *Interviewing in educational research*. London: Routledge & Kegan Paul.

- Pryor, J. & Torrance, H. (1996). Teacher-pupil interaction in formative assessment: Assessing the work or protecting the child? *The Curriculum Journal*, 7(2), 205-226.
- Pryor, J. & Torrance, H. (1997). Making sense of 'formative assessment'. *International Studies in Educational Administration*, 25(2), 115-125.
- Rae, K. (1993). Ano te hutinga o te harakeke - The plucking still of the flaxbush. New Zealand self-managing schools and five impacts in 1993 from the ongoing restructuring of educational administration. A paper presented at the National Conference of the New Zealand Association for Research in Education, Waikato University, December.
- Ramsay, P., Harold, B., Hill, D., Lang, C. & Yates, R. (1997). A model for school based curriculum development. *Teachers and Curriculum*, 1, 105-112.
- Renwick, W. (1983). Accountability: A tangled skein. Opening address to the 3rd New Zealand Educational Administration Society Conference, January.
- Renwick, M. & Gray, A. (1995). *Implementing the New Zealand Curriculum*. Wellington: New Zealand Council for Educational Research.
- Ritchie, G. & Carr, K. (1992). A constructivist critique of mastery learning in mathematics. *New Zealand Journal of Educational Studies*, 27(2), 191-201.
- Robertson, S., Thrupp, M., Dale, R., Vaughan, K. & Jacka, S. (1997). *A review of ERO: Final report to the PPTA*. Auckland: Auckland Uniservices.
- Rowntree, D. (1989). *Assessing students: How shall we know them?* London: Nichols.
- Russell, T., Qualter, A. & McGuigan, L. (1995). Reflections on the implementation of National Curriculum Science policy for the 5-14 age range: Findings and interpretations from a national evaluation study in England. *International Journal of Science Education*, 17, 481-492.
- Sadler, R. (1989). Formative assessment and the design of instructional systems. *Instructional Science*, 18, 119-144.
- Sadler, R. (1998). Formative assessment: Revisiting the territory. *Assessment in Education: Principles, Policy & Practice*, 5(1), 77-84.
- Salomon, G. (1997). Novel constructivist learning environments and novel technologies: Some issues to be concerned with. Paper presented at the 7th European Conference for Research on Learning and Instruction, Athens, August.
- Sammons, P., West, A. & Hailes, J. (1996). Teacher assessment in the inner city at Key Stage 1. *Educational Studies*, 22(2), 261-276.
- Schon, D. (1983). *The reflective practitioner*. New York: Basic Books.
- Schon, D. (1987). *Educating the reflective practitioner*. San Francisco: Jossey Bass.
- Sebatane, E. (1998). Assessment and classroom learning: A response to Black and

- William. *Assessment in Education: Principles, Policy & Practice*, 5(1), 123-130.
- Shepard, L. (1991). Psychometricians beliefs about learning. *Educational Researcher*, 20, 7.
- Shepard, L. (1992). Will National tests improve student learning? CSE Technical report 342, Boulder: University of Colorado.
- Shepard, L. (1995). Using assessment to improve learning. *Educational Leadership*, 52(5), 38-43.
- Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform, *Harvard Educational Review*, 57, 1-22.
- Simpson, M. (1990). Why criterion referenced assessment is unlikely to improve learning. *The Curriculum Journal*, 1, 171-183.
- Smyth, J. (1989). A pedagogical and educative view of leadership. In J. Smyth (Ed.), *Critical perspectives on educational leadership*. (pp.179-201). Lewes: Falmer Press.
- Smythe, K. (1996). What are we to do about the Review Office? *Auckland Education*, October, 3 & 7.
- Snook, I. (1992). Teacher education: A sympathetic appraisal. Keynote address to the Teacher Education Conference: An investment for New Zealand's future, Auckland College of Education, June.
- Snook, I. (1993). Learning and assessment. Paper presented at the Conference on Assessment and Learning in New Zealand: Challenges and Choices, Palmerston North, September.
- Snook, I. (1994). Challenges to schooling. A paper presented to a regional conference of branch managers, PPTA, Auckland region, March.
- Snook, I. (1994b). Revisiting the reforms. In J. Marshall (Ed.), *Revisiting the reforms in education*. (pp. 6-18). The Faculty of Education Annual Lectures, University of Auckland.
- Stake, R.E. (1994). Case studies. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research*. (pp.236-247). Thousand Oaks: Sage.
- Sullivan, K. (1994). The impact of educational reform on teachers' professional ideologies, *New Zealand Journal of Educational Studies*, 29(1), 3-20.
- Sullivan, K. (1997). They've opened Pandora's box: Educational reform, the New Right and teachers' ideologies. In M. Olssen & K. Morris Matthews (Eds.), *Education policy in New Zealand: The 1990's and beyond*. (pp.251 -282). Palmerston North: Dunmore Press.
- TGAT. (Task Group on Assessment and Testing). (1988). *Task group on assessment and testing: A Report*. London: DES/WO.
- Thrupp, M. (1997). Shaping a crisis: The Education Review Office and South Auckland schools. In M. Olssen & K. Morris Matthews (Eds.), *Education*

- policy in New Zealand: The 1990s and beyond.* (pp.145-161). Palmerston North: Dunmore Press.
- Thrupp, M. (1998). The politics of blame: How can teacher educators best respond? Paper presented to the New Zealand Teacher Education Conference, University of Waikato, October.
- Tom, A. (1984). *Teaching as a moral craft*. New York: Longman.
- Torrance, H. (1993). Formative assessment: Some theoretical problems and empirical questions. *Cambridge Journal of Education*, 23(3), 333-343.
- Torrance, H. (Ed.). (1995). *Evaluating authentic assessment*. Buckingham: Open University Press.
- Torrance, H., & Pryor, J. (1995). Investigating teacher assessment in infant classrooms: Methodological problems and emerging issues. *Assessment in Education*, 2(3), 305-320.
- Tunstall, P. & Gipps, C. (1995). Teacher feedback to young children in formative assessment: A typology. Paper presented at the IAEA Conference, Montreal, June.
- Turnbull, M. (1997). The first teaching practicum: The perceptions of Early Childhood student teachers. Unpublished Master of Education thesis, University of Auckland.
- Valli, L. (1992). (Ed.). *Reflective teacher education: Cases and critiques*. New York: State University.
- von Glaserfeld, E. (1989). Constructivism in education. *The International Encyclopaedia of Education: Research and Studies*, Supplementary Volume. (pp.162-163). New York: Pergamon Press.
- Walker, R. (1989). The conduct of educational case studies: Ethics, theory and procedures. In M. Hammersley (Ed.), *Controversies in classroom research*. (pp.163-195). Buckingham: Open University Press.
- Wagner, R. (1989). *Accountability in education: A philosophical inquiry*. New York: Routledge, Chapman & Hall.
- Waslander, S. & Thrupp, M. (1995). Choice, competition and segregation: An empirical analysis of the New Zealand secondary school market 1990-1993. *Journal of Education Policy*, 10, 1-26.
- Willis, D. (1992). Assessment trends in 1992: Future directions handicapped by a legacy from the past? In H. Manson (Ed.). *Annual Review of Education in New Zealand*. (pp.245-260). Wellington: Victoria University.
- Willis, D. (1994). School based assessment: Underlying ideologies and their implications for teachers and learners. *New Zealand Journal of Educational Studies*, 29(2), 161-174.
- Wheatley, G.H. (1991). Constructivist perspectives on Science and Mathematics learning. *Science Education*, 75(1), 9-21.

- Wylie, C. (1992). *Monitoring Today's Schools: Assessment & evaluation*. Monitoring Today's Schools Research Project, Report 12, University of Waikato.
- Wylie, C. (1994). *Self managing schools in New Zealand: The fifth year*. Wellington: New Zealand Council for Educational Research.
- Yeoman, M. (1995). Reviewing the Review Office. *New Zealand Principal*, April, 5-12.
- Yin, R.K. (1991). *Case study research: Design and methods*. New York: Sage Publications.

APPENDICES

APPENDIX A

QUESTIONNAIRE

Your name is not required on this questionnaire.
However you are asked to name your school.
You can be assured that confidentiality will be
respected.

Please complete the questionnaire by:

circling the appropriate number for your response

OR

ticking the appropriate box(es)

OR

ranking responses in order of importance

Some questions ask you to elaborate. Please feel free
to write as much as you wish.

QUESTIONNAIRE

1.0 BIO DATA

1.1 Gender

M / F

- 1.2 Educational Qualifications**
- | | |
|-------------------------------|-----|
| Trained Teachers' Certificate | [] |
| Diploma of Teaching | [] |
| Higher Diploma of Teaching | [] |
| Advanced Diploma of Teaching | [] |
| Bachelors Degree | [] |
| Masters Degree | [] |
| Other | [] |

1.3 Other Professional Qualifications (Please specify) _____

2.0 SCHOOL INFORMATION

2.1 School _____

- 2.2 Current Position held**
- | | |
|---------------------|-----|
| Deputy Principal | [] |
| Assistant Principal | [] |
| Senior Teacher | [] |
| Scale A Teacher | [] |
| Beginning Teacher | [] |

- 2.3 Class level**
- | | |
|------------------------|-------|
| Junior Year 1 & 2 | [] |
| Middle Year 3 & 4 | [] |
| Senior Year 5 & 6 | [] |
| Other (please specify) | _____ |

3.0 ASSESSMENT REQUIREMENTS IN SCHOOLS

The New Zealand Curriculum Framework is the official policy for teaching, learning and assessment in New Zealand schools. Assessment policy at local and national level is outlined with 5 contexts for assessment identified. The document clearly states that assessment is carried out for a number of purposes.

3.1 Do you think it is important for teachers to know the assessment requirements at a national level? YES / NO

WHY/WHYNOT _____

3.2 There are a number of new assessment requirements outlined in the New Zealand Curriculum Framework. Please identify which requirements you are familiar with. (Tick as many as appropriate)

- school based assessment []
- national monitoring []
- key transition points []
- records of achievement []
- assessment for qualifications []

3.3 Why do you think these assessments requirements have been introduced?

4.0 COLLECTING, RECORDING AND REPORTING ASSESSMENT INFORMATION

4.1 How confident do you feel in the following aspects of assessment?

	not confident			very confident	
methods of collecting data	1	2	3	4	5
methods of recording data	1	2	3	4	5
methods of reporting data to parents	1	2	3	4	5
methods of reporting data to others	1	2	3	4	5

4.2 Indicate the degree to which you feel confident to assess children's learning in the following curriculum areas

	not confident			very confident	
Art	1	2	3	4	5
Health	1	2	3	4	5
Mathematics	1	2	3	4	5
Music	1	2	3	4	5
Physical Education	1	2	3	4	5
Reading	1	2	3	4	5
Science	1	2	3	4	5
Social Studies	1	2	3	4	5
Technology	1	2	3	4	5
Written Language	1	2	3	4	5

4.3 Rank in order of importance the factors that could have contributed to your confidence level (1= most important, 5= least important)

Attendance at in - service courses	_____
Development of assessment exemplars / criteria within the school / syndicate	_____
Familiarity with NZ Curriculum Documents	_____
In school support in implementing assessment procedures	_____
Familiarity with specific assessment resources	_____
Other(s), please specify _____	_____

4.4 What data collection methods are used in your school?

	yes	no
conferencing	[]	[]
portfolios	[]	[]
standardised test / tasks	[]	[]
checklists	[]	[]
running records	[]	[]
prose inventories	[]	[]
pupil self assessment	[]	[]
peer assessment	[]	[]
rating scales	[]	[]
observation	[]	[]
other, please specify _____		

4.5 How confident do you feel in using the assessment techniques listed below?

	not confident				very confident
conferencing	1	2	3	4	5
portfolios	1	2	3	4	5
standardised test / tasks	1	2	3	4	5
checklists	1	2	3	4	5
running records	1	2	3	4	5
prose inventories	1	2	3	4	5
pupil self assessment	1	2	3	4	5
peer assessment	1	2	3	4	5
rating scales	1	2	3	4	5
observation	1	2	3	4	5

4.6 Rank in order of importance to you as a teacher the usefulness of the following data collection methods (1= most important, 10 = least important)

- conferencing _____
- portfolios _____
- standardised tests / tasks _____
- checklists _____
- running records _____
- prose inventories _____
- pupil self assessment _____
- peer assessment _____
- rating scale _____
- observation _____

Comment _____

4.7 In what ways has assessment been of assistance to you in your teaching?

4.8 In what ways has assessment helped the children you teach in their learning?

Since 1992 the Education Review Office has been conducting effectiveness reviews in state schools. Reports of these reviews inform the Minister responsible for the Education Review Office, boards of trustees and the public about the extent to which each school has through its teaching services, management systems and practices, made a difference to the achievement of its students (Assessing Student Achievement, 1995).

4.9 Since 1992 what significant changes have occurred within your school in terms of collecting and recording assessment information-

4.10 Who has initiated these changes? Rank in order of influence (1 = has had the greatest influence, 7 = the least influence)

- principal _____
- assistant / deputy principal _____
- Education Review Office _____
- Board of Trustees _____
- parents _____
- teachers within the school _____
- Ministry of Education _____
- other (please specify) _____

4.11 How have the changes been introduced and implemented?

4.12 Why do you think the changes occurred?

Curriculum and assessment policies and requirements outlined in the New Zealand Curriculum Framework (1993) and the National Education Guidelines specify that schools must report student achievement to parents, Boards of Trustees, the community and other agencies.

4.13 Since 1992 what significant changes have occurred within your school in terms of reporting assessment information?

4.14 Who has initiated these changes? Rank in order of influence (1 = has had the greatest influence, 7 = the least influence)

- principal _____
- assistant / deputy principal _____
- Education Review Office _____
- Board of Trustees _____
- parents _____
- teachers within the school _____
- Ministry of Education _____
- other (please specify) _____

4.15 How have the changes been introduced and implemented?

4.16 Why do you think the changes occurred?

4.17 Rank in order of importance the uses that are made of assessment information in your school (1 = most important, 9 = least important)

- to help students take responsibility for their own learning _____
- to cater for the individual needs of children _____
- to report to parents _____
- to report to the Ministry of Education _____
- to report to the Education Review Office _____
- to build up a profile of individual achievement _____
- to assist in future programme planning _____
- to make changes to current teaching _____
- to report to the Board of Trustees _____

5.0 IMPLICATIONS OF ASSESSMENT REQUIREMENTS

The New Zealand Curriculum Framework (1993) states that assessment should be an integral part of the curriculum with the primary purpose of school based assessment being to improve students' learning and the quality of the teaching programmes. Using a variety of assessment strategies teachers are now required to assess knowledge, skills and attitudes, the learning processes that children engage in as well as the final product. There is a requirement that the seven essential learning areas and eight essential skills be assessed and reported against achievement objectives. The Education Review Office through Effectiveness Reviews now determine how successful schools have been in assessing student achievement in comparison to the levelled achievement objectives

5.1 What do you consider are the advantages of the new assessment requirements?

5.2 What do you consider are the disadvantages of the new assessment requirements?

5.3 What do you think the implications of the new assessment requirements are for:

children _____

teachers

schools

parents

6.0 IN-SERVICE TRAINING

6.1 What in-service training has been of the most benefit to you?

Why?

6.2 What further training would you like in the area of assessment?

6.3 How adequate has your in-service training been in the area of assessment?

inadequate	fair	adequate	good	excellent
1	2	3	4	5

6.4 Is there any further information related to this questionnaire that you feel is important to consider in this research project.

THANK YOU VERY MUCH FOR PARTICIPATING IN THIS RESEARCH PROJECT.
PLEASE CHECK THAT YOU HAVE COMPLETED ALL RELEVANT QUESTIONS IN THE QUESTIONNAIRE.
YOUR COOPERATION IS GREATLY APPRECIATED. THANK YOU AGAIN FOR YOUR TIME

Helen Dixon

APPENDIX B

**CONSENT TO PARTICIPATE IN THE
RESEARCH**

TITLE OF THE STUDY: The Effect of Policy on Practice: An
Analysis of Teachers' Perceptions of School Based Assessment Practice

RESEARCHER:

Helen Dixon

I have been given an explanation of this research project. I have been given an opportunity to ask questions and have them answered. I understand the nature of the research. I understand that my privacy will be respected. I have the right to withdraw at any stage.

I agree to take part in this research.

Signed:

Name:

Date:

Approval for this study was given by the Auckland College of Education
Research Ethics Committee on 25.10.96.

APPENDIX C

PARTICIPANT INFORMATION SHEET

TITLE OF THE STUDY: The Effect of Policy on Practice: An Analysis of Teachers' Perceptions of School Based Assessment Practice.

Thank you for agreeing to participate in this research study which is being undertaken to fulfil the requirements of a Master of Educational Administration degree at Massey University. Professor John Codd, Department of Policy Studies and Dr. Jenny Poskitt, Department of Educational Psychology, Massey University are co-supervisors.

The aim of this study is to identify some of the problems and tensions that schools and teachers face in the implementation of the assessment requirements of the New Zealand Curriculum Framework (1993). In gathering this information it is hoped that teachers' perceptions of the purposes and functions of school based assessment procedures used in primary schools are identified as well as determining what is shaping and influencing teachers' practice. Four schools in the Auckland area are being used to describe, understand and illuminate what is happening to particular schools and teachers when official policy requirements are translated into actual practice.

The research project has two phases. During the first phase you will be requested to complete a questionnaire. After the questionnaires have been completed I will be interviewing a selected sample of teachers from each school. If you are selected I will contact you and invite you to participate in the interview at a time and place suitable to you. Each phase will take approximately forty minutes to complete.

All information will be treated confidentially. Your name is not required on the questionnaire. It is important that you understand that your participation is voluntary and that you may withdraw from the project at any time.

The results of the study will be shared with each school.

If you have any questions related to this research project please do not hesitate to contact **Helen Dixon**, telephone 376.1477 (H) or 623.8899 extn 8547 (W). I can also be contacted in writing at 4/24, Westend Road, Herne Bay.

Approval for this study was given by the Auckland College of Education Research Ethics Committee on 25.10.96.

APPENDIX D

Stage 2 Data Collection : Interview Questions

1. Since the introduction of the New Zealand Curriculum Framework (1993) changes have occurred in the area of school based assessment
 - a) What changes do you see as being beneficial? Why?
 - b) What changes do you see as being detrimental? Why?
2. Teachers have indicated that they feel more confident assessing some curriculum areas compared to others. Are there some areas that you feel more confident with ? Why do you think this is?
3. Can you describe the types of assessment procedures that have been of most help to you? Why?
4. Can you describe the types of assessment procedures that have been of the least help to you? Why?
5. The participants surveyed in the questionnaire stated that one of the purposes of assessment was to improve teaching and learning. Do you agree with this?
 - a) Can you give me some examples of how you use assessment within the classroom to improve teaching and learning?
 - b) What methods of assessment have you used that help you to achieve this?
6. Many teachers in this study stated that assessment had taken valuable time away from teaching.
 - a) Do you agree with this? Can you give me some examples of how this is occurring?
 - b) If you do not agree with this, can you give me some examples of how you integrate learning / teaching and assessment.
7. In what ways have you been helped and supported to implement the new assessment requirements?
8. In what ways have you / your school linked assessment requirements with curriculum requirements?
9. Many teachers in the sample have stated that increased assessment requirements have made teachers and schools more accountable? What do you think this means? Who do you think you are accountable to?
10. What relationship do you see between assessment and educational standards?
11. How do you think assessment is being used to provide more equitable opportunities and outcomes for children?

APPENDIX E
AN EXAMPLE OF THE CONSTRUCTION OF CONTENT
CATEGORIES

4.10 In what ways has assessment helped the children you teach in their learning?

STEP 1: COMMENTS COMPILED UNDER EACH QUESTION

1. It has put them in a peer group that is more suited to their level and progress, to enable independent and individual progress, towards personal goals and success. It has also encouraged them along the right tracks.
5. It has helped children by allowing them to reach a goal to the best of their ability. To be aware of what they can do and areas they can improve upon. Valuable skills that will encourage and develop their learning. Also the children can be supportive and encourage each other.
6. It helps them understand where the weaknesses lie. It gives them a sense of achievement and confidence in what they are doing. Shows a progression. Can sometimes allow them to set their own goals.
8. The children know the goals they are working towards and they will be assessed accordingly
9. If I am teaching to their needs they will be successful and their assessments will give them positive encouragement. It can help them to focus on their weaknesses and motivate them to want to try harder in certain areas.
10. Some testing shows immediate results and when children can see their gains recorded they are encouraged to make continued efforts esp y NESB chn. Chn can understand the "next step" in many cases and learning is often accelerated because of this.
21. helped them to focus on their strengths
15. Deeper learning occurs, self assessment has made them become more self critical and responsible for their own learning
14. Children with difficulties are indicated and subsequently given extra help. Chn progressing quickly are able to move to a higher level. Children know they are expected to be achieving.
33. with self assessment it shows them where / how they have progressed. It can also focus their attention
32. I have refined my methods based on assessment done. Encourages pupils to persevere in areas they are doing well and work to achieve specific goals that can be set eg conferencing.
27. To monitor what learning is taking place. To provide feedback to students 1
- 26 They feel success they can be set up. satisfaction, motivation
- 25 Self and peer assessment has enabled children to their own focus into learning. Tcher assessment has allowed chn to develop their learning more effectively and efficiently.
24. It has helped to pinpoint children's individual needs. Assessment can be used to provide feedback to students. Constructive feedback encourages students and helps to increase their confidence. I have experienced this.
22. Gives the children clear goals to achieve, they know what is expected of them.
35. They love on going assessment. I use it alot. I usually teach Y6 as classes but presently only groups of 16-20 from Years 3-6 (CWEA) I always get them to individually assess during my programmes and often use peer assessment also. They input and I input continually and we recheck our criteria often.
37. I think it is more child centred than teacher driven. It has also helped the children take some responsibility for their own goal setting and achievement.
39. Gives firm achievement levels, encourages children to see their own achievements, gives do=reaction for teaching , allows to build on pupils prior knowledge

41. They work at their own individual level and get success at their level. They feel successful when they achieve the objectives set out.

42. As I said I know what they're capable of and this means they are not pushed beyond their limits, but are pushed enough to have a "little something" to strive for. It also means that I teach them relevant things not repeating things they already know.

STEP 2: KEY WORDS / CONCEPTS AND IDEAS HIGHLIGHTED

1. It has put them in a peer group that is more suited to their level and progress, to enable independent and individual progress, towards personal goals and success. It has also encouraged them along the right tracks.

5. It has helped children by allowing them to reach a goal to the best of their ability. To be aware of what they can do and areas they can improve upon. Valuable skills that will encourage and develop their learning. Also the children can be supportive and encourage each other.

6. It helps them understand where the weaknesses lie. It gives them a sense of achievement and confidence in what they are doing. Shows a progression. Can sometimes allow them to set their own goals.

8. The children know the goals they are working towards and they will be assessed accordingly

9. If I am teaching to their needs they will be successful and their assessments will give them positive encouragement. It can help them to focus on their weaknesses and motivate them to want to try harder in certain areas.

10. Some testing shows immediate results and when children can see their gains recorded they are encouraged to make continued efforts esp. NESB chn. Chn can understand the "next step" in many cases and learning is often accelerated because of this.

21. helped them to focus on their strengths

15. Deeper learning occurs, self assessment has made them become more self critical and responsible for their own learning

14. Children with difficulties are indicated and subsequently given extra help. Chn progressing quickly are able to move to a higher level. Children know they are expected to be achieving.

33. with self assessment it shows them where / how they have progressed. It can also focus their attention

32. I have refined my methods based on assessment done. Encourages pupils to persevere in areas they are doing well and work to achieve specific goals that can be set eg conferencing.

27. To monitor what learning is taking place. To provide feedback to students

26 They feel success they can be set up. satisfaction, motivation

25 Self and peer assessment has enabled children to their own focus into learning. Tcher assessment has allowed chn to develop their learning more effectively and efficiently.

24. It has helped to pinpoint children's individual needs. Assessment can be used to provide feedback to students. Constructive feedback encourages students and helps to increase their confidence. I have experienced this.

22. Gives the children clear goals to achieve, they know what is expected of them.

35. They love on going assessment. I use it alot. I usually teach Y6 as classes but presently only groups of 16-20 from Years 3-6 (CWEA) I always get them to individually assess during my programmes and often use peer assessment also. They input and I input continually and we recheck our criteria often.

37. I think it is more child centred than teacher driven. It has also helped the children take some responsibility for their own goal setting and achievement.

39. Gives firm achievement levels, encourages children to see their own achievements, gives do=reaction for teaching , allows to build on pupils prior knowledge

41. They work at their own individual level and get success at their level. They feel successful when they achieve the objectives set out.

42. As I said I know what they're capable of and this means they are not pushed beyond their limits, but are pushed enough to have a "little something" to strive for. It also means that I teach them relevant things not repeating things they already know.

STEP THREE: CONTENT CATEGORIES ESTABLISHED

1. More involved in the learning process
2. Children more responsible for their own learning
3. grouped more appropriately
4. individual needs are identified and catered for
5. programme offered is of a higher / better quality

STEP FOUR: RETURN TO THE RAW DATA TO CODE UNDER EACH OF THE CATEGORIES

1. More involved in the learning process

1. It has put them in a peer group that is more suited to their level and progress, to enable independent and individual progress, towards personal goals and success. It has also encouraged them along the right tracks. 1/3/4
5. It has helped children by allowing them to reach a goal to the best of their ability. To be aware of what they can do and areas they can improve upon. Valuable skills that will encourage and develop their learning. Also the children can be supportive and encourage each other. 1/2
6. It helps them understand where the weaknesses lie. It gives them a sense of achievement and confidence in what they are doing. Shows a progression. Can sometimes allow them to set their own goals. 1/2
8. The children know the goals they are working towards and they will be assessed accordingly 1
9. If I am teaching to their needs they will be successful and their assessments will give them positive encouragement. It can help them to focus on their weaknesses and motivate them to want to try harder in certain areas. 1
10. Some testing shows immediate results and when children can see their gains recorded they are encouraged to make continued efforts espy NESB chn. Chn can understand the "next step" in many cases and learning is often accelerated because of this. 1
21. helped them to focus on their strengths 1
15. Deeper learning occurs, self assessment has made them become more self critical and responsible for their own learning 1/2
14. Children with difficulties are indicated and subsequently given extra help. Chn progressing quickly are able to move to a higher level. Children know they are expected to be achieving. 1/4
33. with self assessment it shows them where / how they have progressed. It can also focus their attention 1
32. I have refined my methods based on assessment done. Encourages pupils to persevere in areas they are doing well and work to achieve specific goals that can be set eg conferencing. 1/5
27. To monitor what learning is taking place. To provide feedback to students 1
- 26 They feel success they can be set up. satisfaction, motivation 1
- 25 Self and peer assessment has enabled children to their own focus into learning. Tcher assessment has allowed chn to develop their learning more effectively and efficiently. 1/2
24. It has helped to pinpoint children's individual needs. Assessment can be used to provide feedback to students. Constructive feedback encourages students and helps to increase their confidence. I have experienced this. 1/4
22. Gives the children clear goals to achieve, they know what is expected of them. 1
35. They love on going assessment. I use it alot. I usually teach Y6 as classes but presently only groups of 16-20 from Years 3-6 (CWEA) I always get them to individually assess during my programmes and often use peer assessment also. They input and I input continually and we recheck our criteria often. 1
37. I think it is more child centred than teacher driven. It has also helped the children take some responsibility for their own goal setting and achievement. 1/2
39. Gives firm achievement levels, encourages children to see their own achievements, gives do=reaction for teaching , allows to build on pupils prior knowledge 1/4

41. They work at their own individual level and get success at their level. They feel successful when they achieve the objectives set out. 1/5

42. As I said I know what they're capable of and this means they are not pushed beyond their limits, but are pushed enough to have a "little something" to strive for. It also means that I teach them relevant things not repeating things they already know.1/6

2. Children more responsible for their own learning

37. I think it is more child centred than teacher driven. It has also helped the children take some responsibility for their own goal setting and achievement.1/2

5. It has helped children by allowing them to reach a goal to the best of their ability. To be aware of what they can do and areas they can improve upon. Valuable skills that will encourage and develop their learning. Also the children can be supportive and encourage each other. 1/2

6. It helps them understand where the weaknesses lie. It gives them a sense of achievement and confidence in what they are doing. Shows a progression. Can sometimes allow them to set their own goals. 1/2

15. Deeper learning occurs, self assessment has made them become more self critical and responsible for their own learning 1/2

25 Self and peer assessment has enabled children to their own focus into learning. Tcher assessment has allowed chn to develop their learning more effectively and efficiently. 1/2

3. grouped more appropriately

36. They are at their correct level, particularly in English and maths. More accurate evaluations of units of work can be made not generalisations 3/4/5

39. Gives firm achievement levels, encourages children to see their own achievements, gives do=reaction for teaching , allows to build on pupils prior knowledge 1/3

1. It has put them in a peer group that is more suited to their level and progress, to enable independent and individual progress, towards personal goals and success. It has also encouraged them along the right tracks. 1/3/4

12. It has helped in grouping children at their appropriate level 3

4. individual needs are identified and catered for

36. They are at their correct level, particularly in English and maths. More accurate evaluations of units of work can be made not generalisations 4/5/6

38. To find out what they can do and what they need to learn.4

40. I have made my programmes needs based.4

41. They work at their own individual level and get success at their level. They feel successful when they achieve the objectives set out. 1/4

1. It has put them in a peer group that is more suited to their level and progress, to enable independent and individual progress, towards personal goals and success. It has also encouraged them along the right tracks. 1/3/4

2. Able to move up levels as objectives are met, helps to individualise progress rather than moving on with group achievement, able to set expectations and appropriate programmes 4/5

3. It has helped them to develop more as individuals or small groups with similar needs 4

4. By being able to teach to their specific needs and improve the quality of my programme and the activities I present to them 4/5

7. Hopefully they are being given appropriate work for their level and are being moved along 4

20. enables you to see when they've grasped something and are ready to move on 4

19.It helps identify areas of specific needs especially for reading and writing and where children need some extra support - also with parents - some things they can try at home, to support their children 4/5

18. I am better able to set tasks which will be helpful for their learning and at the right level 4

17. Working at the correct level, working within expectation range, not bored, not repeating work 4

14.Children with difficulties are indicated and subsequently given extra help. Chn progressing quickly are able to move to a higher level. Children know they are expected to be achieving. 1/4

13.Helps pin point strengths and weaknesses; to reteach where necessary and extend chn where appropriate 4/5

11. I don't think it alters what chn learn but points out areas that need revisiting (most tchs know

this without results) 4

30. It means their individual needs are identified and catered for. 4

29. They are getting taught to their individual needs 4

28. They can learn relevant and meaningful things not mark time, nor feel that they are out of their depth but work at a pace and in a style as suitable to their needs as I can organise it to be. 4/5

24. It has helped to pinpoint children's individual needs. Assessment can be used to provide feedback to students. Constructive feedback encourages students and helps to increase their confidence. I have experienced this. 1/4

23. Able to distinguish problem areas. Show where progress is made 4

34. Problem areas are highlighted and dealt with. 4

5. programme offered is of a higher / better quality

36. They are at their correct level, particularly in English and maths. More accurate evaluations of units of work can be made not generalisations 4/5/6

42. As I said I know what they're capable of and this means they are not pushed beyond their limits, but are pushed enough to have a "little something" to strive for. It also means that I teach them relevant things not repeating things they already know. 1/5

43. They help me see what is missing in their learning and so enable it to be filled in. 5/4

2. Able to move up levels as objectives are met, helps to individualise progress rather than moving on with group achievement, able to set expectations and appropriate programmes 4/5

4. By being able to teach to their specific needs and improve the quality of my programme and the activities I present to them 4/5

19. It helps identify areas of specific needs especially for reading and writing and where children need some extra support - also with parents - some things they can try at home, to support their children 4/5

16. I know what I will be assessing at the end of the topics - so I aim to meet those requirements. I know where I am heading, I have a focus so the children are benefiting there. It is not a hit and miss 5

13. Helps pin point strengths and weaknesses; to reteach where necessary and extend children where appropriate 4/5

32. I have refined my methods based on assessment done. Encourages pupils to persevere in areas they are doing well and work to achieve specific goals that can be set eg conferencing. 1/5

28. They can learn relevant and meaningful things not mark time, nor feel that they are out of their depth but work at a pace and in a style as suitable to their needs as I can organise it to be. 4/5

APPENDIX F
AN EXAMPLE OF AN INTERVIEW TRANSCRIPT

Interview Number 3

Helen: Y I've got eleven questions to ask you. The first question is: Since the introduction of the New Zealand Curriculum Framework in 1993, changes have occurred in the area of school based assessment. What changes do you see as being beneficial and why and what changes do you see as being detrimental and why?

Okay, school based you say?

Helen: Yes just school based.

Okay. I think one of the major benefits in school based assessment is that if done properly it can focus on a child and their learning then it benefits the child in that you're meeting needs and therefore quality learning takes place. I can also see the benefits of systems in place, aggregation data which benefit the school and that school based teaching is its quality in that you can get the budgets meeting the needs of children because of buying appropriate resources. As far as the major problems with it, is that I've seen schools become too heavy on checklisting, they're collecting a lot of samples of work that have very limited validity and reliability, that it has caused a lot of stress on teachers that the assessment hasn't necessarily changed what is happening in the classroom and therefore not necessarily giving quality teaching, that the assessment isn't, sometimes I've heard teachers who have actually assessed at home, so they're actually doing it for the wrong reasons, they're doing it because they are told they have to and therefore the changes that are happening in the classroom is actually minimal.

Helen: You were talking about what you thought it was beneficial for a school to aggregate the data.

Yes

Helen: In what way do you see that as being beneficial?

Identifying perhaps particular groups within the school that may need assistance say for example Maori children, maybe you are finding that they have a lower, yes they're not achieving as well as the school would hope, therefore you could look at the resources

on the programme that's better for me to put those children and alter it to suit their needs or maybe bring in resources outside of the school to try and make the programme meet the needs of the children.

Helen: So you're talking about changes, aggregating data school-wide and then maybe not only the teachers but the school itself making some changes to the way that they provide opportunities?

Yes

Helen: Teachers have indicated that they feel more confident assessing some curriculum areas compared to others. Are there some areas that you feel more confident in, or with, and why do you think this is?

I feel confident assessing children over all curriculum areas. I feel I have a real clarity about what I am doing and why. Some documents are easy, curriculum documents I feel are easier to assess against the others. I feel that English documents particularly in reading is very woolly and the document itself is quite woolly therefore people find it very hard to identify what the AOs are and how to grade the children, or assess the children against those AOs. In areas like Maths, I find it particularly easy because there is a distinct clarity about what the AOs are and I find it a lot easier to actually break those objectives down into specific skills.

Helen: And would there be anything else that you think has added to your confidence, other than your familiarity with the curriculum documents themselves and the clarity of those documents?

I guess if you've got a particular interest in a curriculum area that does help you because you become familiar with the document. If you have an understanding of how children learn, I think that helps you in your assessment and I think if you have clarity in what you're trying to achieve and why that can go across all curriculum areas so that you can think hard about what is it that I'm trying to achieve for this child or group, or with this class.

Helen: Do you think that maybe schools spend more time focussing on particular curriculum areas?

At the moment I think most schools focus on the current document and have In-service within the school to help the clarity come about and i feel that i have received enough school development to have clarity about the document but I think also people need to take a step back and be reflective about assessment as a whole rather than assessment in particular areas and to think very clearly about what it is they are wanting to achieve,

what are they trying to find out about the learning for this child.

Helen: Thank you Y. I wonder, can you describe the types of assessment procedures that have been of most help to you and why? The sorts of things that you have actually found helpful in your classroom.

Well I've definitely moved away from doing a lot of checklisting, although there is a place for that and I like to do that in an observation role while they're actually participating in an activity that I feel shows whether that child has mastered that particular skill or not. I like self assessment and peer assessment, particularly in areas where I feel it is not so imperative that I have a very fine understanding of the skills or levels that they're at. I think samples of work are very worthwhile as long as it's actually used well, and there is an understanding of what are you trying to prove with this sample of work and I think that having a sample of work, that can go into another curriculum area and show the process, not necessarily the end result but the process the child went to get where they were or hoping to go and that it was perhaps then went through a system of benchmarking. I think that is a very useful thing to do. I think field observations are very important. I think we underestimate the gut reaction in that, how as teachers we do a lot of observing of children and we actually do understand our students very very well in that I think there's been an over emphasis on you've got to prove it all the time, or document it, yes that there's got to be ticks next to names, yes, I think we've gone overboard on that, on the checklist area and that we forget that teachers do have a fine understanding of children's needs.

Helen: Why do you think we went with checklisting?

I think sometimes we put these things on ourselves, that it wasn't necessarily a directive from the Ministry but it was like we had to be more accountable as teachers, that was definitely coming through with the changes in government. As a profession we were going to be more accountable, particularly with Tomorrow's Schools, therefore we had to prove, to prove we needed to be on paper was the unwritten thing, therefore we put ourselves in a situation that we needed to checklist but I think we've come through that, or coming through that and that schools are starting to realise the system actually leads to better learning for children.

Helen: Why do you think that is?

A lot of it is because it doesn't show the process and I think it's also saying that that's the only way you can assess children when in fact I actually think the best assessment is in what's happening while the child is learning. You know for example in writing, most teachers have in the back of the book, I am working on, I can do type things. There's a wonderful wealth of knowledge there on the child and where they're at and

where they're going to and yet at the end of the year we tend to just chuck that out or not actually see that as documentation of a year's movement with that child and very fine teaching has gone on. I think we ignore that type of thing.

Helen: I think we've touched on this a bit, but the next part of the question was saying, can you describe the types of assessment procedures that have been of the least help to you? You talked about checklists.

Yes, I think the overburdening of checklists, is probably the least valuable thing I think it can focus on the wrong thing. Often from what I've seen in my role of some of the skills and knowledge that has been checked off is surface level learning, can child name four shapes or maybe not shapes, can name types of clouds, that's surface stuff as far as I'm concerned. It doesn't show the processes the child went through to get to that or something of the learning process.

Helen: Or the understanding they take?

Yes

Helen: The participants surveyed in the questionnaire stated that one of the purposes of assessment was to improve teaching and learning. First of all do you agree with this?

Yes

Helen: Okay, then the next part of the question is, can you give me some examples of how you use assessment to improve teaching and learning within the classroom?

Okay. That whole example I said before was, you know, with writing, I think that's a very fine example with sitting down conferencing with the child, discussing this is what I can do from the child's perspective and you as a facilitator saying well yes I agree with you, you are doing that, what is now the next step so that the situation is almost negotiated but with someone acting as a facilitator and guiding them in the right direction, that to me is a real example of assessing, then straight away using that knowledge at the time to then rebuild on - well this is now the next step that we need to focus on and having it in the back of their books so that it's accessible to the child so they're actually empowered to use that knowledge as well as me as a facilitator to sort of keep going back and referring to it, just seeing how the child is, is incorporating that conference and the skills is an ongoing way that you can reinforce that with the child, then keep going on in a cyclic way.

Helen: So when teachers talked about planning, saying that they used assessment for their planning, you're saying that the planning is one stage and you write that for your documentation, but you also deviate from that plan?

Yes, in terms of individual children.

Helen: In terms of the programme that you provide for them?

Yes, I will have an overview in the plan, I will be looking at John, Ruth and be quite clear about the strands and the objectives I am hitting. At the same time children have individual goals based on where they are at because you are assuming that the goal that you're hitting, the objective you're trying to hit is accessible to all children when in fact there might be some areas that each child needs to actually learn as part of achieving their objective.

Helen: So when you are working with someone in your class and you might have a group of four people there and you know you've hit the objective with several of them, then what do you do with the others?

The rest of the class?

Helen: Or the other two that are in the group that haven't achieved, or you know that they still have not generalised this into their behaviour or understanding?

If I had a group down with me, we're looking at a specific skill, I actually get the children a lot of the time to say, okay who understands this skill and say well I do, okay well off you go and I will have an activity already prearranged for them to get on with or a learning centre with a lot of learning centre activities in my class, then I would keep the other children who say they are not ready to go, so it's very much up to the child to tell me whether they are ready to move and I've found that that has worked really well. Children, it took them awhile to get there because they felt that they had to say yes all the time when they understood that it was a matter of them deciding when they were ready and they were the ones who were going to benefit by saying I don't quite understand that, understanding that taking risks is a really important thing, and being honest about where you are at, they would just stay with me until they were ready to leave.

Helen: The next part of the question has probably been covered, I think somewhat in question three as well, but what would you say are the best assessment strategies that you've used to help improve children's

learning?

Assessment strategies, that the strategy of always incorporating the learner, in the setting up of goals so that they're empowered, so they know what they are and that it is that goal is actually accessible to them and wherever it's decided that it's recorded. Ownership of what the goals are, incorporating what I know the next goal is class wise as well as going into what individual children need as well.

Helen: You've talked about the fact that you find it really good if you're going to improve learning children have to know what it is that you're trying to achieve and they have got to take responsibility for that but what about other factors like time?

Well then that needs to be part of the whole programme, that for example the whole, it comes down to learning theory as well. How do you believe that children learn and what is the best environment for children and I believe that children need to be responsible for themselves, you need to be honest with them about where you are going with them, what the objectives are. You also need to give them a lot of say on what they're going to learn and even in instances what topics are going to be studied so they can have total ownership of their learning and that's where things like self assessment are also very important if the child sees that not only are they setting their goals but they are actually going to assess them themselves and have some say in how this is recorded and they have access to that information whether it be in a portfolio or in their books and they know that that is going to be used, that sample was going to be shown to mum so they can see a purpose in the learning.

Helen: So things like observation then, questioning and talking to children and planning the time to do that within your class programme.

Well that has to be incorporated in it, if you have an approach of children being responsible for themselves then how do you actually go about in the classroom on a day to day level and that has to be - you have to look at not only what you're teaching but how you teach it and what are the mechanisms within the classroom to give children the opportunity to practice all those things that you say are important.

Helen: Well we'll go on to the next question because I think this builds on what you've been saying. Many teachers in the study stated that assessment had taken valuable time away from teaching. Do you agree with this or not?

I can see that for many people that is true but when I think that maybe the school has imposed on them or maybe they have imposed on themselves a certain way of

interpreting what assessment is and I don't find that it is for me, that is not true because I have not interpreted that way. To me it is just part of the programme that involves the child and because it involves the child it is not an add on, it's not something I'm going to do on a Friday. I've heard of a school where they do assessment one week a term so the last week of the term is the assessment which says to me that they don't actually have an understanding, from my perception, of what assessment is all about. It's just part of the day's programme that you are watching, observing, you're working alongside children, you're empowering them to discover what their goal is and negotiate with them what it is and talk to them about that, so no I don't see it as an add on, it's just part of good teaching.

Helen: So you've probably answered the next part of the question because then I've said, if you don't agree that assessment has taken time away from teaching, can you give me some examples of how you integrate learning, teaching and assessment? You've probably already given me some examples.

I also think self assessment is a big one here. We're presuming that by a child sitting down to this particular task, is taking away from the learning and yet the whole experience is a learning experience, that any task that does some assessment for children, particularly if it's in a situation where there is discussion, that it is not a learning experience when it can be.

Helen: So can you pick a curriculum area and tell me how you've done that? How you've turned it into a learning experience for them.

Well it might be the children who as a group do a mind map on what they know on a particular topic, say social studies, and that might be your formative assessment and then you go back again and say well lets add on to this mind map, what do you know so the whole thing of how a mind map works as a teaching experience, there's a lot of discussion happening but I can still assess the children as to what do they know about a particular topic and what we've covered.

Helen: And you might go faster or slower?

Depending on where as a class I've sort of levelled them at.

Helen: This question really looks at moving away from the classroom more to the school level, so I wonder if you could tell me in what ways you've been helped and supported to implement the new assessment requirements.

Well for me its a lot of, I've done a lot of personal reflection on it. I mean there's a group of us who have got together to talk about assessment. Because I've been on contracts and part of each contract has been the assessment side for that particular curriculum area, that has given me the details of it but then I've wanted to step back from that and see it on a bigger picture as to what we are assessing and why because even on the contracts I've been concerned at the amount of assessment that they're actually asking from us and to me the big question is what changes are happening for children, what is happening in the classroom because I see a lot of teachers see this as an add on, as I was saying before not as part of the total programme. So yes I've been involved in contracts, I've been involved in, as I've said, a group of us getting together regularly over a number of years to actually reflect on what each of us are doing within our schools, what's worked, what hasn't worked. Being in the situation that I am in you see a lot of profiles coming in, portfolios of children and you see what different schools are doing and it's interesting to see there's a lot of booklets published by schools but often they are very empty which suggests to me that they are not serving the purpose they're intended for.

Helen: So coming back to when you've been on contracts, how have those contracts worked in terms of getting teachers involved? You know your school's on a contract, what happens then?

Often, depending on the school and their philosophy, you then most of the time, it has been and then you come back and relay the information via syndicate meetings or staff meetings, do modelling with the teachers, having teachers come in and see.

Helen: So what are the advisers doing with you? How did they incorporate assessment into looking at their particular document?

Often we have to bring samples of work along or else we would have to, we took an assessment from an adult's point of view, then we do some work, then assess that using the same process as we might use in our school but from a different perspective.

Helen: So how did they address say the levels and give help to schools in determining....

the levels within the document? How you get to know the levels of the children. We take a sample of work and then we diagnose what the child could actually do on that sample of work, what was the next step, where was the best fit as far as the curriculum document. I've been on X's course and we've talked about doing a similar thing but probably in a lot more depth of getting class wise, samples of work, fitting them into three stages within each level and then coming up with the school's standard portfolio but then that wasn't with the contract. The contracts didn't tend to look at assessment

very strongly. It was more looking at activities. I felt that they didn't tend to link it strongly with what they were teaching us.

Helen: So you talked about the contract and then you feel you have been really helped and supported in terms of working with a group of teachers, not from the same school.

It's more looking at the philosophy of what assessment is all about and why we are doing it, questioning the tracking systems that are in place, the booklets that people have come up with in schools and discussing with each other the process they went through and how useful at the end the school has found it, or the parents have found it. Yes, I think that would be one of the most important things of that networking.

Helen: Again this question follows on from the previous one. In what ways have you or your school linked assessment requirements with the curriculum requirements?

Having only been here over a term I haven't done as much here at this school but I can talk about at my last school. What we would do to link it in with that, once we'd have our overview coming from the schemes at deciding what topics we'd be looking at, that part of the planning was to identify their achievement objectives and the process that we were going to focus and then looking at the formative and summative assessment tools that we would use to actually assess the children for that objective so that there was a clear understanding of, well this what we hope the children achieve, this is how we're going to do it and this is how we are going to assess them at the end. I have been through a whole process of benchmarking where we've brought in samples of work together so that we have fine understanding of what one person interpreted as a particular level, say developing at level two, was the same as the next person and then accumulated all that information having gone back and sort of fitted the children in the best fit and then coming up with school wide assessment of where our children were and we were going through that process and then going back say two terms later and doing similar assessment tasks to see if there was any movement.

Helen: With the same children?

All the children, all the children in the school were involved with the assessment.

Helen: So that's looking at how you were linking your assessment requirements with curriculum in terms of the children themselves. What about in terms of for the school, in terms of the development of policies or schemes?

Yes, that's an interesting one because often you get schools who have got schemes that are outdated so that what we were doing at our last school was actually coming up with revamping all the schemes. The school actually needs to go right back to the beginning, which we're starting to do here as well and have a look at what are the needs of the children and our community as far as what we're actually going to teach them, what context we're going to teach so that making sure your scheme is a workable document. With a statement as to how you're actually going to assess, written at the front, possibly with each curriculum area you might want to have something there as well so that you make sure that there's coverage because that is the concern that coverage isn't part of a school so you don't know whether you're hitting on all strands or not.

Helen: And could that be a difficulty if children are leaving from school to school?

I think that's something that's already been identified, is that one of the problems of children, is not just that they may not be covering the strands but the way the children are assessed, you have one booklet then you move them on to the next school and all that information is normally chucked out, so you start afresh and it's the same from primary to intermediate.

Helen: Many teachers in the sample stated that increased assessment requirements had made teachers in schools more accountable. What do you think this means and who do you think you are accountable to?

I think some teachers think that by having a lot of checklists that makes them accountable which I don't agree with. Who are we accountable to? We are accountable to children and to show that there is learning happening. We're accountable to parents, to the Ministry. We're accountable to the Principal and the BOT but I guess we're really often, I believe that it's very hard to go in, no I take that back, I believe that a lot of assessment has taken place which to the observer may look like there is assessment happening when in fact the validity of it is very shallow.

Helen: And who do think that assessment is for then?

I think it is for senior teachers, principals.

Helen: Anyone else?

They may have system where it is also used as part of the reporting mechanism towards parents, particularly if it's graded and so there it serves a purposes but whether it actually goes back to good learning, good teaching, is not necessarily there.

Helen: Would you say that it's a worry that schools are trying to use the

results of children's learning to justify what they are doing?

Yes I think there are schools out there who very much, their assessment, the types of assessment they are doing, and the types of teaching that they are doing to keep, to give, the results of assessment can promote their school, and that is actually surface level teaching and assessment is going on, that the purpose of it is not accurate.

Helen: Quite different from what's it's intended to be?

Yes.

Helen: The next question, I guess, follows on from that as well. I want to ask you a question about educational standards, not in terms of standards in terms of class levels but standards of achievement. What relationship do you see between assessment and educational standards?

There is a relationship between the two. I mean tracking children diagnostically gives you an idea of where they are and obviously part of achievement statements you might be stating we would be expecting our children to be achieving here at this age. At the same time I believe that the whole ipsative thing of where children are and where they're going, how much learning has taken place is imperative that the reason why a particular child may not have reached that particular standard there would be many reasons for that but yes teachers should have an understanding of where they're heading with their children, but have an understanding of individual needs at the same time.

Helen: Are you saying then, that that's the sort of thing that may increase achievement, not just assessing it?

Yes

Helen: The last question now. How do you think assessment is being used to provide more equitable opportunities and outcomes for children?

The whole thing of aggregated data can help. Looking at particular ethnic groups or looking at boys against girls but of course you're assuming that the assessment task is one which can judge that. I think we have to be careful about how we assess particularly for boys and girls because we do know that certain types of assessment do disadvantage girls and that needs to be taken into account and I think we need to be careful about what we are assessing so that it is equitable, taking in different cultures and yes the way we assess does allow for children to actually give the knowledge across to you in a way that can be assessed.

Helen: We can find those things out about children but will that make it more equitable for them just by knowing it?

Well it depends what you're going to do with that information. I think often we do collate information but we do nothing with it which goes back to the point of why are we collecting the data. If it is so we can present it to ERO, I think then it is very dubious. If you're using it to look at how we could change our programmes, or change our philosophy or bring in resources then I think yes you're using the information in a very valid way.

Helen: And do you think that is happening in schools?

No.

Helen: Would you have any comment as to why you don't think it's happening?

Well because you're presuming that maybe the leadership team have a fine understanding of what they're looking for. Especially if you're looking at cultural and gender issues that I think if it's done at all, it's done at a very surface level because for a lot of people they don't really want to see change anyway.

Helen: Thank you for all your contributions Y.

APPENDIX G

AN EXAMPLE OF DESCRIPTIVE AND CONCEPTUAL CATEGORIES DEVELOPED FROM THE INTERVIEW DATA

Interview Question: Many teachers in the sample stated that increased assessment requirements had made teachers in schools more accountable. What do you think this means and who do you think you are accountable to?

Examples of descriptive categories used to index raw data

Accountability to whom such as:

- children
- parents
- Boards of Trustees
- Principal, senior staff
- outside agencies
- themselves

Accountability for what such as:

- achievement of pupils
- opportunities to learn

The ways in which teachers demonstrate increased accountability by such things as:

- catering for needs of children
- policies and procedures in place
- detailed planning, records
- engagement in professional activities

Examples of conceptual categories used to explain the data

Accountability models such as:

- professional / contextual models of accountability
- managerial / contractual models of accountability

Factors which influence teachers' behaviour such as:

- their personal beliefs
- perceived expectations of ERO
- type and amount of support received within the school

APPENDIX H: TABLES

Table 15

Summary of one way ANOVAs of teachers' reported familiarity with New Zealand Curriculum framework assessment contexts by school.

Requirement	F	df	p
School based	1.00	3,39	1.00
National monitoring	0.39	3,39	0.76
Key transition points	1.05	3,39	0.38
Records of achievement	0.98	3,39	0.41
Assessment for qualifications	1.13	3,39	0.35

* $p < .05$

Table 16

Summary of one way ANOVAs of teachers' reported confidence in assessing children's learning in particular curriculum areas

Curriculum area	F	df	p
Art	0.36	3,39	0.79
Health	1.20	3,38	0.32
Mathematics	1.85	3,37	0.15
Music	0.51	3,38	0.68
Physical Education	0.67	3,38	0.57
Reading	0.51	3,39	0.67
Science	1.95	3,39	0.14
Social Studies	1.45	3,39	0.24
Technology	2.84	3,38	0.05*
Written Language	0.46	3,39	0.70

* $p < .05$

Table 17

Summary of one way ANOVAs of reported confidence in assessing children's learning in particular curriculum areas by teacher experience

Curriculum area	F	df	p
Art	0.007	1,41	0.93
Health	1.07	1,40	0.29
Mathematics	0.13	1,39	0.71
Music	0.12	1,40	0.72
Physical Education	1.61	1,40	0.21
Reading	1.10	1,41	0.32
Science	0.01	1,41	0.90
Social Studies	0.01	1,41	0.90
Technology	1.08	1,40	0.31
Written Language	2.96	1,41	0.09

* $p < .05$

Note: The two groups of teachers consisted of those with more than two years experience and less than two years experience.

Table 18

Summary of one way ANOVAs of reported use of specific data collection methods across schools.

Method	F	df	p
Conferencing	0.70	3,38	0.56
Portfolios	2.68	3,38	0.06
Standardised Tests/Tasks	1.59	3,38	0.20
Checklists	0.83	3,38	0.48
Running Records	0.65	3,38	0.59
Prose Inventories	2.21	3,38	0.10
Self Assessment	5.17	3,37	0.004*
Peer Assessment	6.53	3,37	0.001*
Rating Scales	4.80	3,38	0.006*
Observation	0.65	3,38	0.59

* $p < .05$

Table 19

Summary of one way ANOVAs of reported confidence in using specific data collection methods across schools.

Method	F	df	p
Conferencing	1.37	3,37	0.29
Portfolios	1.19	3,36	0.33
Standardised Tests/Tasks	3.38	3,36	0.30
Checklists	1.60	3,39	0.20
Running Records	1.75	3,39	0.17
Prose Inventories	2.24	3,30	0.10
Self Assessment	0.45	3,36	0.72
Peer Assessment	1.65	3,36	0.19
Rating Scales	1.60	3,31	0.21
Observation	1.37	3,39	0.27

* $p < .05$