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

IS WORKPLACE ASSESSMENT WORKING?

A Critical Theory Analysis of the Stated Intentions for NQF Workplace
Assessment in NZ; and their Realization in a Case Study in the Ambulance
Service.

A thesis presented in partial fulfilment of the requirements for the degree of

Masters of Education (Adult Education)

at Massey University, Wellington Campus, Wellington,
New Zealand.

Penny Hoy-Mack

2003

ABSTRACT

Workplace Assessment (WPA) of National Qualifications Framework (NQF) competency standards has assumed significance as an alternative pathway for vocational qualifications for the NZ workforce.

The stated intentions of the initiators of workplace assessment of NQF qualifications were multiple, an, at times, uneasy alliance of differing ideologies. These intentions included: an increase in the capability of the workforce, unified qualifications, social well-being and upward mobility for workers, the widening of participation in education, more fair and valid assessment and public choice.

These official narratives for WPA are viewed through a critical theory 'lens', which is then focussed on a case study within the NZ Ambulance Service. The qualitative field work constitutes semi-structured interviews of six workplace assessors and eight candidates employed by Wellington Free Ambulance service.

This research indicates that the intention to increase skill levels was partly realised in the valid and direct assessment of performance offered by WPA. Yet, competition with university qualifications detracted from the unified nature of the NQF; its qualifications were relegated to lower levels of the ambulance service. The intention to provide equitable pathways encountered barriers, particularly for volunteer ambulance officers. Moreover, lessened provider capture has resulted in inconsistencies in assessment practice.

However, the assessors' holistic evidence-gathering methodologies employed an interplay model, integrating atomistic competencies and holistic judgements of ambulance work. This hermeneutic knowledge counters tendencies to reductionist assessment of ambulance work. A further model of workplace assessors' practice is developed showing how the level of closeness or distance between assessors and candidates influences the candidates' confidence and therefore fairness in workplace assessment. Participatory practices and positive closeness favourably affected assessment events.

Costs, particularly the time required for WPA, are partly borne by the ambulance workers, with a resulting intrusive effect into the 'lifeworld' of these workers. The study concludes that WPA is a site where the ongoing contest for emancipation is played out, where workers may challenge the subjectivity of the learning organisation. Yet, candidates saw WPA as a way to meet their personal and career aspirations and valued the rewards attached to the qualifications gained, which offered them protection from the vagaries of the labour market.

ACKNOWLEDGEMENTS

I would like to acknowledge and thank Nick Zepke of Massey University for his thought-provoking and steadfast encouragement in the supervision of this thesis.

Thanks also to Fran Hunia for her helpful suggestions made on the final draft.

TABLE OF CONTENTS

ABSTI	RACT		11
ACKN	OWLEDGE	MENTS	IV
LIST (F ILLUSTR	ATIONS	viii
LIST (F ILLUSTR	ATIONS	vm
CHAP'	TER ONE:	INTRODUCTION	1
1.1	SETTING TH	IE SCENE FOR WORKPLACE ASSESSMENT	1
1.2		INTEREST	
1.3		DY	
1.4		RCH QUESTIONS	
Re		on One:	
		on Two:	
Re	search Questi	on Three:	7
Re		on Four:	
1.5		ND INFORMATION ON AMBULANCE VOCATIONAL TRAINING	
1.6	JUSTIFICAT	ION FOR THE RESEARCH PROJECT	9
CHAP'	TER TWO:	WHAT WERE THE STATED INTENTIONS FOR WORKPLACE ASSESSMENT? A LITERATURE SURVEY	11
2.1		LISHMENT AND GROWTH OF THE NQF	
In	e Initial Estal	olishment of the NQFlogical Coalition Underpinning the NQF	11
		New Right Thinking and Businessal Justice & Wider Participation in Vocational Education	
		PNQF: the Historical Ebb and Flow	
2.2		RE OF THE NQF: RESEARCH AND DEBATE	
		Behaviourist Theoretical Basis of Competencies	
		er Involvement	
		Educational Traditionalists	
		ses to the Dominance of Public Choice and Centralised Accountability	
		earch: Comparing Intentions and Experience of the NQF	
2.3	WORKPLA	CE ASSESSMENT: DESCRIPTION AND ANALYSIS	23
		A: NQF in the Workplace	
		gins of WPA	
		earning Theory	
		rganisation and Total Quality Management Theories	
		e and Public Choice	
		dology of Assessors	
		r Practice	
2.4		E ASSESSMENT: DEBATE & CRITIQUE	
		Holistic Assessment	
		Costs of Workplace Assessment	
		nent and Consistency	
2.5:	SO WHAT W	/ERE THE STATED INTENTIONS?	36
СНАР	TER THREE	: THEORETICAL FRAMEWORK FOR THE ANALYSIS OF NOF	
	KPLACE AS	[2] 보고 있는데 보고 있는데 1일	35
100			
3.1		THEORY AS A THEORETICAL LENS TO VIEW WORKPLACE ASSESSMENT	
0)	Jicial Narrati	wes for the NQF and Workplace Assessment	39

Struggle, Counternarratives and Workplace Assessment. The Potential of Critical Theory: Unmasking Reality	47 51 52 54
The Potential of Critical Theory: Unmasking Reality Postmodern Critique	47 51 52 54
Postmodern Critique	48 51 52 54
3.3 USING THE LENS: ISSUES FOR INVESTIGATION OF COMPETENCY-BASED EDUCATION Competencies as Behaviourism	51 52 54
Competencies as Behaviourism	52 54
Vested Power Interests Worker Support for Workplace Learning	54
Worker Support for Workplace Learning	
3.4: FOCUSSING THE LENS: ISSUES FOR FIELD WORK ON WORKPLACE ASSESSMENT	
	57
CHARGED FOUR. METHODOLOGY AND METHODO	
CHAPTER FOUR: METHODOLOGY AND METHODS	60
4.1 METHODOLOGY AND EPISTEMOLOGY	60
Methodology and Methods	
Contrasting Qualitative and Quantitative Research Methods	
Considering Symbolic Interactionism and Grounded Theory	
The Selection of Qualitative Interviews	
Ethical Considerations	
Reliability	
Validity	
4.2 A DESCRIPTION OF METHODS IN THE RESEARCH PROCESS	70
Selecting and refining the research problem.	
Sampling	
The Interviews	
Coding	
The Use of Computer-aided Coding and Collation of data	
Bridging Analysis: NVivo Node Coding Reports, Coding Stripes and Attributes	
4.3 Presentation, Interpretation and Implications of the Research Data	/8
CHAPTER FIVE: PRESENTATION OF FINDINGS OF THE INTERVIEWS	81
5.1 THE VALUE OF NQF QUALIFICATIONS AND MOTIVATIONS FOR INVOLVEMENT	
Value and Motivations for Candidates	
The value of the NQF role for Assessors	
	84
5.2 THE ASSESSMENT OF KNOWLEDGE AND CRITICAL REASONING: HOW IT IS BEST DONE	86
How knowledge was assessed	86 87
How knowledge was assessed	86 87 89
How knowledge was assessed	86 87 89 91
How knowledge was assessed	86 87 89 91
How knowledge was assessed	86 89 91 91
How knowledge was assessed Competing with other Qualifications 5.3 ASSESSOR JUDGMENTS: OBJECTIVITY AND THE NATURE OF EVIDENCE. Objectivity and Fairness The Nature of Evidence. Judgement: Holistic and Atomistic.	8689919192
How knowledge was assessed Competing with other Qualifications 5.3 ASSESSOR JUDGMENTS: OBJECTIVITY AND THE NATURE OF EVIDENCE. Objectivity and Fairness The Nature of Evidence. Judgement: Holistic and Atomistic 5.4 THE RELATIONSHIPS BETWEEN ASSESSORS AND CANDIDATES	868791919296
How knowledge was assessed Competing with other Qualifications 5.3 ASSESSOR JUDGMENTS: OBJECTIVITY AND THE NATURE OF EVIDENCE Objectivity and Fairness The Nature of Evidence Judgement: Holistic and Atomistic 5.4 THE RELATIONSHIPS BETWEEN ASSESSORS AND CANDIDATES Distance as Difference, Closeness as Sameness	868791929698
How knowledge was assessed Competing with other Qualifications 5.3 ASSESSOR JUDGMENTS: OBJECTIVITY AND THE NATURE OF EVIDENCE Objectivity and Fairness The Nature of Evidence Judgement: Holistic and Atomistic 5.4 THE RELATIONSHIPS BETWEEN ASSESSORS AND CANDIDATES Distance as Difference, Closeness as Sameness Perceptions of Closeness.	8687919192969899
How knowledge was assessed Competing with other Qualifications 5.3 ASSESSOR JUDGMENTS: OBJECTIVITY AND THE NATURE OF EVIDENCE Objectivity and Fairness The Nature of Evidence Judgement: Holistic and Atomistic 5.4 THE RELATIONSHIPS BETWEEN ASSESSORS AND CANDIDATES Distance as Difference, Closeness as Sameness Perceptions of Closeness Negative Closeness or Distance	86879192969899100102
How knowledge was assessed Competing with other Qualifications 5.3 ASSESSOR JUDGMENTS: OBJECTIVITY AND THE NATURE OF EVIDENCE Objectivity and Fairness The Nature of Evidence Judgement: Holistic and Atomistic 5.4 THE RELATIONSHIPS BETWEEN ASSESSORS AND CANDIDATES Distance as Difference, Closeness as Sameness Perceptions of Closeness Negative Closeness or Distance 5.5 CONSISTENCY: ASSESSORS AND ASSESSMENTS	86879192969890100102103
How knowledge was assessed Competing with other Qualifications 5.3 ASSESSOR JUDGMENTS: OBJECTIVITY AND THE NATURE OF EVIDENCE Objectivity and Fairness The Nature of Evidence Judgement: Holistic and Atomistic 5.4 THE RELATIONSHIPS BETWEEN ASSESSORS AND CANDIDATES Distance as Difference, Closeness as Sameness Perceptions of Closeness Negative Closeness or Distance	86879192969890100102103
How knowledge was assessed Competing with other Qualifications 5.3 ASSESSOR JUDGMENTS: OBJECTIVITY AND THE NATURE OF EVIDENCE Objectivity and Fairness The Nature of Evidence Judgement: Holistic and Atomistic 5.4 THE RELATIONSHIPS BETWEEN ASSESSORS AND CANDIDATES Distance as Difference, Closeness as Sameness Perceptions of Closeness Negative Closeness or Distance 5.5 CONSISTENCY: ASSESSORS AND ASSESSMENTS	86879192969899100102103
How knowledge was assessed Competing with other Qualifications 5.3 ASSESSOR JUDGMENTS: OBJECTIVITY AND THE NATURE OF EVIDENCE Objectivity and Fairness The Nature of Evidence Judgement: Holistic and Atomistic. 5.4 THE RELATIONSHIPS BETWEEN ASSESSORS AND CANDIDATES Distance as Difference, Closeness as Sameness Perceptions of Closeness. Negative Closeness or Distance 5.5 CONSISTENCY: ASSESSORS AND ASSESSMENTS Double and Triple Crewing of Ambulance Vehicles	86899192969898100102103104
How knowledge was assessed Competing with other Qualifications 5.3 ASSESSOR JUDGMENTS: OBJECTIVITY AND THE NATURE OF EVIDENCE. Objectivity and Fairness The Nature of Evidence. Judgement: Holistic and Atomistic. 5.4 THE RELATIONSHIPS BETWEEN ASSESSORS AND CANDIDATES Distance as Difference, Closeness as Sameness Perceptions of Closeness. Negative Closeness or Distance. 5.5 CONSISTENCY: ASSESSORS AND ASSESSMENTS Double and Triple Crewing of Ambulance Vehicles A National Standard?	86899192969898100102103104106
How knowledge was assessed Competing with other Qualifications 5.3 ASSESSOR JUDGMENTS: OBJECTIVITY AND THE NATURE OF EVIDENCE. Objectivity and Fairness The Nature of Evidence Judgement: Holistic and Atomistic 5.4 THE RELATIONSHIPS BETWEEN ASSESSORS AND CANDIDATES Distance as Difference, Closeness as Sameness. Perceptions of Closeness Negative Closeness or Distance 5.5 CONSISTENCY: ASSESSORS AND ASSESSMENTS Double and Triple Crewing of Ambulance Vehicles A National Standard? Variations in Assessment Practice	86899192969899100102103104107109
How knowledge was assessed Competing with other Qualifications 5.3 ASSESSOR JUDGMENTS: OBJECTIVITY AND THE NATURE OF EVIDENCE. Objectivity and Fairness The Nature of Evidence Judgement: Holistic and Atomistic. 5.4 THE RELATIONSHIPS BETWEEN ASSESSORS AND CANDIDATES Distance as Difference, Closeness as Sameness. Perceptions of Closeness Negative Closeness or Distance 5.5 CONSISTENCY: ASSESSORS AND ASSESSMENTS Double and Triple Crewing of Ambulance Vehicles. A National Standard? Variations in Assessment Practice 5.6 ORGANISATIONAL FACTORS, THE COSTS AND VOLUME OF WORKPLACE ASSESSMENT 5.7 CONCLUSION: BRIDGING THE PROJECT AND ITS MEANING	869191969899100102103104106107113
How knowledge was assessed Competing with other Qualifications 5.3 ASSESSOR JUDGMENTS: OBJECTIVITY AND THE NATURE OF EVIDENCE. Objectivity and Fairness The Nature of Evidence Judgement: Holistic and Atomistic. 5.4 THE RELATIONSHIPS BETWEEN ASSESSORS AND CANDIDATES Distance as Difference, Closeness as Sameness Perceptions of Closeness. Negative Closeness or Distance 5.5 CONSISTENCY: ASSESSORS AND ASSESSMENTS Double and Triple Crewing of Ambulance Vehicles A National Standard? Variations in Assessment Practice 5.6 ORGANISATIONAL FACTORS, THE COSTS AND VOLUME OF WORKPLACE ASSESSMENT.	869191969899100102103104106107113
How knowledge was assessed Competing with other Qualifications 5.3 ASSESSOR JUDGMENTS: OBJECTIVITY AND THE NATURE OF EVIDENCE. Objectivity and Fairness	86879192969899100102103104106107113
How knowledge was assessed Competing with other Qualifications 5.3 ASSESSOR JUDGMENTS: OBJECTIVITY AND THE NATURE OF EVIDENCE. Objectivity and Fairness The Nature of Evidence Judgement: Holistic and Atomistic. 5.4 THE RELATIONSHIPS BETWEEN ASSESSORS AND CANDIDATES Distance as Difference, Closeness as Sameness Perceptions of Closeness. Negative Closeness or Distance. 5.5 CONSISTENCY: ASSESSORS AND ASSESSMENTS Double and Triple Crewing of Ambulance Vehicles A National Standard? Variations in Assessment Practice 5.6 ORGANISATIONAL FACTORS, THE COSTS AND VOLUME OF WORKPLACE ASSESSMENT. 5.7 CONCLUSION: BRIDGING THE PROJECT AND ITS MEANING. CHAPTER SIX: CRITICAL INTERPRETION OF THE RESEARCH FINDINGS.	868791929699100103104106107113115
How knowledge was assessed	869192969899100102103104105113115
How knowledge was assessed Competing with other Qualifications	86879192969899100102103104105113115118
How knowledge was assessed Competing with other Qualifications	86879192969899100103104106107113115117118
How knowledge was assessed Competing with other Qualifications	868791929699100103104106113115117118120123

6.4	HOLISTIC AND ATOMISTIC: INTERPRETIVE ASSESSMENT KNOWLEDGE	130	
6.5	HOW THE ASSESSORS MAKE THEIR DECISIONS: THE INTENDED PRESCRIPTIONS FOR PRACT	ΓICE AND	
THE	RESEARCH FINDINGS		
Direct Evidence			
Vo	ılid Evidence	133	
Su	Sufficient Evidence		
H_{ϵ}	ow the Assessors Make their Decisions: Claims of Objectivity and Truth	135	
6.6	RELATIONSHIPS BETWEEN ASSESSORS AND CANDIDATES: DISTANCE AND CLOSENESS		
Po	ositive Closeness	137	
6.7	CONCLUSIONS: STATED INTENTIONS AND AMBULANCE WORKPLACE ASSESSMENTS	140	
D_{i}	eveloping the Skill Level of the Workforce	140	
	a Equitable Alternative Pathway		
	eakening Provider Capture		
	Assessment Practice		
Er	nancipation for Workers	142	
CHA	APTER SEVEN RECOMMENDATIONS AND IMPLICATIONS	143	
7.1	LIMITS OF THE RESEARCH	143	
7.2	VALIDITY OF WORKPLACE ASSESSMENT	143	
7.3	INTEGRATING ATOMISTIC AND HOLISTIC APPROACHES: HERMENEUTIC KNOWLEDGE	144	
7.4	FRAGMENTATION AND INCONSISTENCY	144	
7.5	PARTICIPATORY PRACTICES AND POSITIVE CLOSENESS	145	
7.6	THE INTERESTS OF WORKERS	145	
.A	ppendix One: Request for Interview Letter	146	
	opendix One: Request for Interview Letter		
	opendix Two: Information Brochure		
	opendix Three: Consent Form		
A	opendix Four: Interview Schedule One	152	
	opendix Five Interview Schedule Two		
	opendix Six: List of Coding Nodes		
	,		
IBLE	OGRAPHY	158	

LIST OF ILLUSTRATIONS

Figure One:	Table Showing Relationships between Candidate Attributes	100
Figure Two	A Continuum Model of the Relationship between 'Distance' &	
	'Closeness' and Factors in the Assessment	138
Figure Three	A Model Showing Negative Closeness and Degree of Candidate	
	Confidence	139

CHAPTER ONE: INTRODUCTION

1.1 Setting the Scene for Workplace Assessment

Foodstuffs, a major retail group employing approximately 25,000 people nation-wide, was reported in 2001 as having 2,000 enrolled students/workers in workplace training and to be drawing government funding for this National Qualifications Framework (NQF)-based training (Ovens, 2001). This statistic is one indication of the impact of workplace training and assessment, although it should be noted that Foodstuffs had used the mechanism of their 'own' Private Training Establishment (PTE), rather than pure workplace assessment to manage its training programme. Despite earlier reports of low uptake of New Zealand Qualifications Authority (NZQA) certificates in workplaces (Irwin, 1997; Smithers, 1997), the proportion of workplace assessment as part of the total number of assessments of NQF qualifications is now certainly growing. In 1997, a mere 15% of NQF qualifications were gained through industry traineeships (Irwin, 1997:13) with 4,726 workplace assessors (ETSA, 1998). In June 2002 statistics showed 66,380 workplace traineeships regulated by Industry Training Organisations (ITOs) (Skill NZ, 2002a), and 81,000 in July 2003 (TEC, 2003). In the context of government policy planning, this growth was not unexpected. A 1993 policy planning document set a target for the year 2001 of "a qualification through training in industry at Level 4 for 20% of current adult population" (NZ Govt, 1993:33). Somewhat less ambitious, the Tertiary Education Commission (TEC) set, in 2003, a target of 150,000 trainees in workplace training by 2005 (TEC, 2003).

Workplace assessment was promoted as a policy vehicle for both equity of opportunity and an increase in capability for the present workforce (NZQA, 1993, 1997a, 1997b; Skill NZ, 2001b). This aspect of government policy presently continues unchanged; however it has departed from earlier tenets in the weakening of the competitive market model for the provision of vocational education (TEC, 2001; 2002a, 2003). Government (whether Labour or National-led) vocational education policy statements continue to emphasise the upskilling of the workforce as a response to global economic uncertainties. With an upskilled and market-savvy workforce (Catching the Knowledge Wave Conference, 2001), New Zealand will supposedly chase and capture shifting global capital. Interestingly, this

rationale for vocational education policy is used in other developed nations which are also competing for a slice of the global pie. Lifelong learning has been tied to competency assessment and the NQF. Its adjusted aim is to situate New Zealand favourably in the competitive global economy, giving a "competitive advantage for a broader base of the population, rather than an elite" (Bowen-Clewley & Strachan, 1996:12). In the context of reforms of the public sector throughout the 1990's, arguments for competitiveness, whether international or within NZ, became hegemonic and defined public debate about vocational education. (Hegemonic ideas are those of a dominant group which are so prevalent that they become common-sense or unquestioned.) Vocational training is increasingly a commodity in the market place to be purchased by clients: "formal instruction is something that teams and sites buy in when they identify a need" (Web Research, 1996:28). Moreover, educational policy advanced by NZQA (NZ Govt White Paper, 1989; NZQA 1991, 1993) intended to establish a nation-wide network of workplace assessors in a comprehensive sweep of the nation's workplaces, as part of the "grand vision." of the NQF (Viskovic, 2000).

The adoption of workplace assessment in New Zealand was part of a larger 'project', the establishment of the NQF. The NQF may be described as a hierarchy of discrete and interlinking competency standards arranged according to levels of difficulty and fields of knowledge, or industries. These unit standards are the modularised components of qualifications, which are regulated and administered by NZQA and Industry Training Organisations (ITOs). Unit standard qualifications are premised upon a simple understanding of competence as "the ability to apply particular knowledge, skills, attitudes and values to the standard of performance required in specified contexts" (NZQA, 2002:1) although the level descriptors promulgated by the NZQA (1996) do point to a more complex understanding of competency as they cover cognitive demands. The NZQA vision of the NQF is that of a flexible learning pathway (NZQA, 1997b), beginning with schools and progressing into the tertiary sector. Tertiary sector involvement in the NQF is thus far restricted to vocational training in workplaces, polytechnics and PTEs. Universities are nominally part of the NQF but have continuously resisted integration into the competency framework.

Concerns about the implications of workplace assessment under the NQF have been expressed by polytechnic tutors (Woods, 1998), who fear their interests are damaged by the workplace assessment project. Other concerns about current vocational education policy are more thoroughgoing, as in the following arguments from Finger and Asun (2000). They believe the social and economic context of the present conflation of adult education and vocational training is that of increasing globalisation of capital, where adult education is "offered as a means of instrumentalisation and commodification" (ibid:110), in order to make societies or organisations competitive. Alongside the withdrawal of the state from welfare activities, post-modern culture has become increasingly individualised, and adult education increasingly privatised. Learners are offered personalised advice to increase their chances on the competitive market place for employment and adult education is in danger of becoming a promoter of "turbo-capitalism - or a means to ameliorate its most damaging effects for sections of populations designated at risk" (ibid:110). Such concerns foreground the aims of this research, which describes and interprets NQF-based workplace assessment in New Zealand since 1990, with particular reference to a case study in the Ambulance Service. The critical hermeneutic 'lens' developed in this research is a link in a "hermeneutic circle" (Kincheloe & McLaren, 2000). It explores, as a worthwhile research agenda for critical adult education, connections between the wider issues and concerns and what people participating in workplace assessment say about their experiences.

1.2 Personal Interest

Since 1993, adult education "providers" have trained thousands of New Zealanders to become workplace assessors through the application of NQF unit standards in Adult Education and Training. Trainee workplace assessors are usually nominated to attend such courses by managers in their workplaces as part of the development of an ITO qualifications pathway within their enterprises. The trainee workplace assessors are frequently team leaders with a thorough knowledge of their own job, endowed with personal characteristics such as good communication skills, the ability to motivate others and a keenness to pass on their vocational skills. The assumption of the training providers and the ITOs appears to be that the assessors would return to their workplaces around New Zealand to assess their colleague's performance at work. My work as an adult educator,

who has trained some hundreds of active workplace assessors, led me to question what I was doing. I asked how those trainee assessors had fared; were they, indeed, assessing in the workplace and how do they, and the colleagues they assess, perceive their experiences? Moreover, as an adult educator with a socialist and feminist outlook, I was curious to understand these experiences in terms of a critical theory model, within the wider social and political context of workplace training. This led me to question whether possible changes to the model could be identified and warranted.

For me, as the researcher, the project has become a way to connect the heart with the brain, the personal motivations for my work with the thinking and analysis that is part of adult education practice. In short, this thesis theorises about what I had felt as a gut instinct about many of my working-life experiences - that the workplace assessment project, like much of education, is a site of conflict, compromises or accord (Apple, 1996) between the social justice model of vocational education and that of the new right. The new right can be used to mean the interweaving of ideas, economic reforms and social policies that promote individualism, economic libertarianism and a marked change in the relative power of business and labour that occurred in NZ (and other Western countries) between the early 1980s and the present. My personal values for vocational education derive from the social justice tradition: promoting public responsibility for and ownership of education, advocating power for learners and employees and equity of access to education. These values colour my research questions and will inevitably colour the methodology and the conclusions.

1.3 Pilot Study

The research questions identified below follow on from my earlier 'pilot' study of workplace assessors in the ambulance industry (Hoy-Mack, 2000), which sought to understand how they perceive their experiences. The central question of the pilot study was also "Is Workplace Assessment Working?" This was shorthand for two questions: firstly, is workplace assessment happening at all and secondly, how do the assessors perceive their own practice? Following a literature survey of competency-based assessment in the workplace, six Wellington Free Ambulance service workplace assessors were interviewed,

along with an Ambulance ITO manager. These interviewees represented the total number of workplace assessors for Wellington Free Ambulance at July 2000, plus one officer from the Wairarapa Ambulance Service. The interviews explored the descriptive, cognitive, normative and explanatory layers of workplace assessment in the ambulance industry. A combination of the analysis of the literature on workplace assessment and a process of identifying emergent issues within the interview data, borrowed from Glaser (1992) revealed six broad categories.

The first category was the cost and volume of workplace assessment. The study concluded that criticisms of unwieldy cost and volume that were levelled at the workplace assessment model (Smithers, 1997) were not borne out by the experiences of these assessors. The next heading was the atomisation of learning and assessment, the study revealed that workplace assessors were acutely aware of this issue and promoted holistic assessment methods. The third category was the issue of assessor judgement, with sub-categories of intuition, objectivity and consistency. Ambulance assessors valued intuition derived from experience while endeavouring to be fair and objective in their judgements. Cost constraints did emerge as a factor that created inconsistencies in assessment methods and possibly assessment results. The extent of learner-directedness was the fourth category, the study revealed learner self-management rather than self-direction, meaning that trainees provided motivation and impetus for their workplace learning but could not choose the goals and content of their learning. The role of workplace assessors was the next category and the study showed that ambulance workplace assessors combined roles of manager, tutor and assessor so that assessors already held considerable power within the ambulance service. The sixth category was recommendations for changes; the research participants were keen to describe the support systems they felt they needed and to suggest improvements to their own practice. In conclusion, the study showed that, in the view of the assessors involved, some aspects of workplace assessment were indeed working, other aspects appeared more problematic.

1.4 The Research Questions

This thesis extends from the pilot study into an analysis of workplace assessment which employs a critical theory 'lens'. The research analysis covers assessor interview data from the pilot study as well as a significant body of fresh data from interviews with eight candidates for workplace assessments in Wellington Free Ambulance. The following four research questions were formulated upon which to base this further research.

Research Question One: What were the stated intentions of those who initiated the workplace assessment project in New Zealand since 1990?

The question explores the establishment of the NQF through a literature survey (Chapter Two) of the intentions of employers, unions, Industry Training Organisations, government policy-makers and influential educators, both in New Zealand and overseas, since 1990. The survey then describes the philosophy and theory of workplace assessment, embedded as it is in a wider philosophy of competency-based education. The ensuing debate around the implementation of the NQF contextualises the review of the literature on workplace assessment. A further part of this review establishes the stated intentions for the practice of workplace assessment. What is the philosophy of workplace assessment? What has been established and recommended as "working" or "best practice"?

Research Question Two: How can the intentions of the initiators of workplace assessment be analysed in terms of critical theory?

The critical theory chapter (Chapter Three) develops a theoretical base for analysis of the workplace assessment model, as envisaged by its initiators; it is also a theoretical lens to view the field work undertaken in the ambulance service, which is the subject of the third research question. The competency-based training and assessment movement certainly has had its detractors as well as its prophets and the intensity of the fervour with which competency ideas have been promulgated has met with correspondingly harsh criticism. Criticisms of competency-based training and workplace assessment in the literature are in themselves often eclectic, ranging from a conservative nostalgia for examinations to a more liberal or radical constructionist criticism of behaviourism. The chapter reviews critical

theory in some educational literature and develops a critical theory analysis to view workplace assessment of NQF qualifications.

Research Question Three: How do assessors and candidates in a nominated case study, the Ambulance Industry, perceive their experiences of workplace assessment?

This question is one for field research, focussing on the gathering and collation of data on workplace assessment in a very specific case study. The data gathered in the pilot study is combined with new data gained through in-depth interviews of candidates for ambulance workplace assessments of training. The field work seeks to understand the experiences of assessors and candidates in the ambulance industry, using analytical categories identified in the initial literature survey, particularly relating to the intentions of workplace assessment. Chapter Four covers the description of the methodology for the field work and Chapter Five constitutes a presentation of the research findings.

Research Question Four: To what extent and in what ways have the intentions of the initiators of the workplace assessment model been realised?

The experiences, opinions and thoughts of these ambulance officers are then analysed using the critical theory model developed in the thesis. This discussion of the findings, covered in Chapters Six and Seven, contrasts the stated intentions with the present practice and experience of those involved in workplace assessment of vocational learning. What are the constraints operating on the realisation of the intentions of the different interest groups in terms of the critical model developed in question two? If the intention of workplace assessment was to provide a more valid and fair way to assess vocational learning and thereby to raise the level of performance in industry, has this been reflected in the field interviews? A concomitant question is what recommendations for change in vocational education policy and practice can be identified in light of critical analysis of the experiences of assessors and candidates?

1.5 Background Information on Ambulance Vocational Training

Some background information on the Ambulance Services in New Zealand and their vocational training serves to contextualise the data presented and interpreted in later chapters. Ambulance workplace assessment is part of a system of competitive,

decentralised provision of ambulance training at the level of National Certificates and Diplomas, which was introduced in 1996. The National Ambulance Officers Training School (NAOTS) at Auckland University of Technology (AUT) then became no longer the only "provider" of ambulance training. This NZQA-inspired decentralisation of vocational education involves "the delegation of power and authority to lower levels" (Martin, 1991:268 in Codd, 1997:1) and it "produces a structure in which political and economic costs can be more effectively controlled" (Codd, 1990 in Codd, 1997:1). Each geographical region, or ambulance service, has its own PTE, which tenders for government funding. (There are strong links between regional ambulance services and regional training providers, although there is a legal distinction between the two in each case). The NQF ambulance qualifications remain a centralising force within ambulance training, regulating the competitive "providers" through the mechanisms of funding, as there is a clear and definite link, in all forms of government-funded tertiary or vocational education, between funding and the credit value of qualifications.

Workplace assessment of the National Certificate of Ambulance Care (Level 4) is the threshold for entry into the paid ambulance service and is regulated by the NZ Ambulance Education Council (NZAEC), which is the ambulance ITO. Assessment of learning in the ambulance industry is also conducted in training environments in each of the PTEs, using scenarios, skill tests and written assessments as each qualification is initially taught inservice, in training classrooms. However, in order to become an ambulance officer, responsible for emergency care in a callout and therefore able to apply for paid positions in the ambulance service, trainees must be signed off as competent in workplace assessment. Five unit standards in the National Certificate at Level Four are workplace assessed. These units cover driving an ambulance in operational callouts and aspects of management of patient care during these callouts. The more advanced qualification, the National Diploma in Ambulance Care (Level Five), covers more complex aspects of patient care in emergency situations and follows the same pattern, with initial in-service classroom training followed by workplace assessed units.

A 1999 study, which was prepared for the New Zealand Ambulance Education Council (NZAEC), on the training aspirations of NZ Ambulance Officers (OPRA & Plimmer

Buchannan, 1999) recommended improvements to officer training by enhancing trainer abilities and increasing the diversity of training offered. The study revealed a difference between volunteer staff (often the trainees) and permanent staff (often the trainers and assessors), throwing into sharp relief the power imbalance between the two groups. The study also noted that the majority of NZ ambulance officers (75%) are, perhaps surprisingly, volunteers, many of whom aspire to permanent employment in the ambulance service (ibid). Since the 1999 study, ambulance training has become more diverse, with, for example, the introduction of university qualifications into Wellington Free Ambulance training in 2001. Aspiring ambulance officers can now apply to enrol for a programme run by Wellington Free Ambulance in conjunction with a distance-mode degree offered by Victoria University of Melbourne. The university qualification has also been offered and taken up by some senior officers, as an alternative to the National Diploma in Ambulance Care (Level Five), although the level of the degree is clearly higher.

The ambulance workplace assessment interviews that are presented in the following chapters are a small case study and cannot stand as representative of all workplace assessment in NZ. They may constitute typical and interesting samples of the ways in which workplace assessment is working and serve as an example of how NQF training in workplaces is caught up in wider issues.

1.6 Justification for the Research Project

An initial literature survey of workplace assessment of vocational learning revealed a number of projects that focus on the implementation of competency-based assessment in New Zealand (Callister, 1994; Webb, 1996; Web Research, 1996; Bowen-Clewley & Strachan, 1997, Smithers, 1997). There was certainly space for a research project contrasting the intentions and experiences of workplace assessment, as minimal further exploration of workplace assessment and competency-based vocational learning in New Zealand was revealed by a meta-analysis by Stephenson in 2000.

To be ethically justifiable, research should "improve the situation of human beings." (Snook, 1999:73) This project adds to the body of knowledge about vocational learning and workplace assessment. The ensuing conclusions may be useful when developing

guidelines for good practice in workplace assessment or they may question continued adherence to the model in light of experience. In addition, the research may prove interesting for policy-makers concerned with planning future developments in vocational training and assessment.

The ambulance industry was selected for field interviews as it presented an area of vocational training where the blending of knowledge and practical skill appears to have a particular and special importance. My motivation for selecting the ambulance service was also in its vital and essential nature as a social service and that the thesis could add to the body of knowledge underpinning this branch of vocational education.

CHAPTER TWO: WHAT WERE THE STATED INTENTIONS FOR WORKPLACE ASSESSMENT? A LITERATURE SURVEY

The first research question addressed in this project is to identify the stated intentions of those who initiated NQF workplace assessment, in New Zealand, since around 1990. What did education policy-makers and educationalists expect, hope and intend when they designed the NQF? Why did workplace assessment become established and how is it embedded into the NQF? The answers to these questions are not monolithic. This chapter attempts to explain multiple answers through a historical survey of the NQF and the ideological debates surrounding its development, with a similar survey of workplace assessment. Issues of debate and interest identified in this chapter will be revisited in the analysis of the field interviews, described in later chapters.

2.1 The Establishment and Growth of the NQF

The Initial Establishment of the NQF

The NQF was established in the early nineties, when educational reform led by the NZQA had an almost evangelical character (Hall, 1996) and progressed at a rapid rate. Later developments throughout the nineties traced an ebb and flow in the influence of the NQF.

Early intimations of the thoroughgoing changes in the policy and provision of vocational education were contained in a 1983 report from the Organisation for Economic Cooperation and Development (OECD), which criticized New Zealand's workforce and its vocational training as under-skilled and inadequately prepared for the competitive challenges of the world economy. Other criticisms pointed to a confusion of certifying bodies and systems (NZ Govt, 1987).

The 1989 NZ government white paper "Learning for Life" heralded a public policy for competency-based learning in NZ. The then Labour government was dissatisfied with what it saw as ineffective management by pressure groups in tertiary and vocational education. The paper advocated decentralization of this sector by introducing new funding mechanisms for private educational institutions and on-job training. This move towards

gaining qualifications in multiple ways was characterised as "gate-opening" rather than "gate-keeping" (NZ Govt, 1989:8). It aimed to avoid the distinction between education and training, the discredited academic vocational divide, and to provide for greater participation in tertiary education (ibid). New structures would simplify vocational qualifications and NEQA, as NZQA was then known, was charged with developing a unified framework for qualifications that should bring closer links between employment and education and training (ibid:26). This later became the NQF.

Tertiary education sector reforms, stemming from Learning for Life, were put in place by a new National government through the Education Amendment Act in 1990. The 1992 Industry Training Act established Industry Training Organisations (ITOs), which were tasked with the design of work-related qualifications and made responsible for the monitoring and regulation of industry training. A later government green paper in 1993 reiterated the view that vocational education standards in NZ were low, pointing to an OECD report that saw the "lack of skills training in NZ as a barrier to the country's economic progress" (NZ Govt, 1993:15). Multiple pathways within the NQF were again championed by the then Prime Minister, who encouraged NZ school-leavers to see "workplace training as a real alternative to education in tertiary institutions' (ibid:16). Furthermore, workplace training would be extended across all industries, including those where formal training was new (ibid).

An Uneasy Ideological Coalition Underpinning the NQF

The ideological underpinnings of the NQF were diverse, at first coalescing and later becoming more hotly contested. Competency standards have had the curious quality of appealing to very different groups of educators and policy makers. Hager observed that "political allegiances seem to be no guide to a person's position on competency standards" (1994:3). This tendency towards unexpected coalitions over the NQF has also been noted by Hornblow (1996). Such diverging world-views included the "new right", business interests and proponents of widening participation in vocational education, who saw it as a means of achieving social justice. Jessup's (1992) presentation of experience from the UK argued for a congruence of purpose between greater economic competitiveness and better access to education for individuals. An outcomes based system of qualifications with pre-

set standards, encompassed in a single unitary framework such as the National Vocational Qualifications in the UK or the NQF in NZ, promoted learning that was "more effective and efficient" (ibid:347) and would further serve to bridge the vocational academic divide. Similarly, the experiences of the Scottish (SCOTVEC) competency-based system for vocational qualifications unitary framework (McCool, 1992) added a popularist impetus for the NQF. A similar framework was being established in Australia and some of their thinking about competency-based training (CBT) was also prompted by a coalition of concerns: low rates of participation in post-school education (Godfrey, 1992) and the lack of competitiveness of Australian industry (Hayton, 1992).

Perhaps revealingly, the NZ Council of Trade Unions and the Employers Federation concurred in their support for a National Qualifications Framework (Foulkes, 1992; NZ Employers Federation, 1993), although probably not for the same reasons (Hall, 1995). They were united in the view that increased skill levels amongst the workforce could increase New Zealand's international competitiveness and that graduates of educational institutions with competency-based qualifications may be more effective employees than the "failed rejects' of educational institutions" (Bowen-Clewley & Strachan, 1997:12).

Influences from New Right Thinking and Business

The historical context of the introduction of the NQF was the privatization of the public sector, based upon the new right belief in market solutions to develop the economy and bring about tighter control of public expenditure, including education (Codd, 1997). The "new right" can be used to mean the interweaving of ideas, economic reforms and social policies that promote individualism, economic libertarianism and a marked change in the relative power if business and labour. Education policy change was justified by making reference to the need to increase its international competitiveness (Hood, 1992; NZ Government, 1993; NZQA, 1994). Parallels with other 'Anglo Saxon' countries were drawn; they were also struggling to compete in the world market against the self-confident, well-educated 'tiger' economies of the east – Japan, Taiwan, Korea and Malaysia (pre-1999 Asian economic crash!). Moreover, the NQF offered a means to measure outcomes in education and thereby provide accountability of educators to government. Accountability to purchasers figured strongly in arguments for the NQF, whether those purchasers were

government, students, or employers. In this way public choice theory, which is aimed at, among other things, reducing the power of pressure groups in education, takes on the mantle of the defender of the disadvantaged and the promoter of equity. Ironically, the sharing of costs by the learner or consumer, or the philosophy of private good, has reduced equity of access in many areas (Lauder, Hughes & Watson, 1999).

Australian and UK reforms in vocational education were tied into the restructuring of remuneration awards (Godfrey, 1992; Wolf, 1995), the removal of the time-based focus for training and the creation of a national training free market. They were, as in New Zealand, an expression of the reforms aimed at "public choice". NZ employers had the opportunity to "have their say in what national standards should be" (Marshall, 1992:2), and the NZ Employers' Federation supported the inception of the NQF and its introduction into workplaces. NQF standards were said to bring a rigour to workplace assessment that was not present in performance appraisal, which was merely an annual event that lacked the ongoing quality of the new evidence-gathering methodology of competence assessment (ibid:992). Human Resources consultants proffered competency training as the new (or reinvented) "weapon in your corporate armoury" (Holdsworth & Anderson, 1992:1). The introduction of competency based assessment in the workplace "makes good sense for a business ... so that quality outcomes in goods and services are produced" (Employers Association, 1993:3).

Influences: Social Justice & Wider Participation in Vocational Education

The establishment of the NQF was also perhaps paradoxically underpinned by calls for social justice and equity of access and achievement in education and assessment. This equitable access was intended to widen the participation in higher and vocational education for sections of the population (Hood, 1992). The NQF and standards-based assessment were justified as being fairer than the old system of norm-referenced assessment (NZQA, 1991), which was criticized as elitist. Criterion-referenced or standards-based assessment, whereby a transparent set of outcomes or standards is clearly specified, meant that anyone could "put themselves forward for assessment without interference" (Wolf, 1995:8). Proponents of the (then) new qualifications system identified the inhibiting effect on learning of 'traditional' assessments, which compared learners with each other, rather than

against a publicly identified standard (Gipps, 1994; Crooks, 1988, in Bowen-Clewley & Strachan, 1997:16). Examinations were characterised as gate-keeping as they allowed only a certain pre-determined number of graduates through, regardless of the standard of their performance (ibid:11). Zepke (1997) argues that learners justifiably want useful outcomes from their learning in terms of their social, personal and vocational needs. The appeal of standards based assessment is summarised as: "the positive effect on learners, integration into learning, and the public and employers' perception that assessment should be tied to a set standard" (Bowen-Clewley & Strachan, 1997:11).

Organised labour was attracted to the NQF, but had some reservations. The NZ Council of Trade Unions (CTU) was pragmatically supportive of the foundation of the NQF and the ITOs, seeing a structured role for unions in the makeup of the ITOs (Foulkes, 1992) and feeling that their own aims of equality of opportunity and career and learning progression in a high-skill, high-value economy were being furthered. However, the CTU criticised aspects of the implementation of the ITOs as not fully meeting workers' aspirations because of barriers of funding (there was no compulsory levy on employers), attitude and people resources. Furthermore, unions felt that ITOs were not sufficiently broadly based because worker participation was not fostered and skills-training was not linked to rewards (ibid). They advocated that "learning should be socialised" (ibid:451) and that government should take responsibility for curriculum development, in order that it not be dominated by any particular industry or agency. Nonetheless, in the historical climate of the Employment Contracts Act, in the early to mid 1990's, trade unions were struggling to survive and there was a rapid decline in relative union and worker power (Kelsey, 1997). This coincided neatly with the weak legislative imperative to collective worker representation on ITOs. Of the then 51 ITOs, few had union representation on their executive body and there was little development of a meaningful role for worker representation in ITOs or government policy agencies. Representation on ITOs was in most cases weighted heavily in favour of employers (Law, 1993).

In conclusion however, a certain coalition of interest between business and labour is apparent in the introduction of the NQF. Thus competency-based assessment and the NQF "speaks to reformers of both right and left" (Wolf, 1995:6).

Responses to the NQF: the Historical Ebb and Flow

The mid-nineties signalled increased rejection of the NQF in some quarters. The universities, including critical educationalists, made strange bedfellows for the Business Roundtable (a grouping of then influential business people committed to radical right probusiness policies) and an uneasy alliance of detractors of the NQF was formed. The universities were vociferous in their arguments against government pressure aimed at the introduction of unit standards into degrees (Roberts, 1997; Hall, 1995). The NQF became less popular with some earlier supporters, such as the Business Roundtable and employers, who possibly feared the demise of a pragmatic system for sorting potential employees and identifying potential members of the workforce elite. The Education Forum, the education policy think-tank of the Business Roundtable, advocated a return to external examinations by advancing arguments for norm-referenced assessment and scaling (Smithers, 1997; Irwin, Elley & Hall, 1995). The Business Roundtable itself tempered enthusiasm after a time, questioning the link between training and increased productivity and profit (Kerr, 1994). The Minister of Education Wyatt Creech spoke, in a government green paper, of "watering down" the NQF, acknowledging that this would be disappointing for some (NZ Govt, 1997) and indicating that support for the activities of the NZQA may be curtailed. Martin Eadie recalled that when "the framework was under threat" (NZQA, 2000b:10), the CTU, employers and the ITOs had to unite to lobby the government for the continued existence of the ITOs and the NOF.

Despite this wavering of government resolve, alongside the growing debate around the NQF there continued an uneven pattern of overall growth, particularly with the change in government in late 1999. The NZQA reported that 700 new National Certificates and Diplomas and over 18,000 unit standards had been developed by 2000. The NQF was tenacious, as Eadie further recalled "The biggest achievement of the Framework so far is its existence" (ibid:13). Workplace learning was presented as "coming of age" by the government industry training agency Skill NZ (2001a), having achieved a certain acceptance within society and in terms of numbers. By 2000, there were 55,000 ITO traineeships, according to NZQA. There may be some discrepancy with Skill NZ figures, which held that in 2000, 22,353 employers and over 80,000 trainees participated in

industry training, completing 6,241 National Certificates (Skill NZ, 2001b). In 2002 there were 66,380 and in 2003 81,000 people in industry training, meaning that a very significant group undertake training in NQF qualifications whilst employed (TEC, 2003).

The implementation of the Tertiary Education Commission (TEC) significantly altered the landscape of tertiary and vocational education in NZ (TEC, 2002a, 2002b). The Tertiary Education Reform Act passed in 2002 further centralised government agencies responsible for vocational and tertiary education and lessened competition between education providers. ITOs now need to show they have worker representation on their governing boards, potentially releasing them from earlier employer domination. Centrally planned provision for all tertiary education must match "desirability" with public funding and national development goals (TEC, 2003).

Is the pendulum swinging back? It seemed in 2003 that the NQF was back on track as a favoured vehicle for the promotion of government social and educational policy. It remains all things to all people (Capper, 2000); entrusted with promoting equity and increased participation in vocational learning, realizing social and economic well-being amongst NZ's population and developing the workforce of businesses in conditions of global capitalism and change.

In order to really appreciate just how tenacious the NQF had been and just how contested a site the NQF is, it is advisable to review the ongoing and vigorous debate around the nature of the NQF, competencies, standards and assessment.

2.2 The Nature of the NQF: Research and Debate

Criticisms of the Behaviourist Theoretical Basis of Competencies

Numerous commentators point to the behaviourist origins of competencies, including problems with their "technicist" nature and their limited compatibility with post-modernist views, which are said to focus on interpretative understandings and complexity (Bagnall, 1994:18). The disjuncture between the dominant constructivist theories of learning and the behaviourist basis of competency standards has been analysed by Blunden (1998), who typifies competency standards as being based on realist metaphysics, "a belief in the real

world, in mind-independent knowledge about it and ... skills to work effectively in it ... based on a container or banking model of pedagogy" (Blunden 1998:37). Behaviourist objectives or outcomes lead to learning that is "limited in scope and scale, myopic and simplistic" (Priestly 1996:148). Weaknesses of behavioural objectives are said to be that such objectives can change during learning and that the emphasis on outcomes devalues the importance of the learning process (Tennant, 1988; in Priestly, 1996). Irwin (1994) addresses the attempt to coax, or even coerce, universities into the NQF and criticises the adherence of the NZQA to a narrow competency-based approach. The NZQA was said to have a flawed understanding of important educational research, for example on the transferability of generic skills, which can only develop through the application of a body of knowledge (Hall, 1995). Problems with behaviourism as a reductive epistemology were noted by Philipps (1998) in his analysis of the NZQA reforms.

The absence of a curriculum, and emphasis on behavioural outcomes, has been proffered as both a strength (Jessup 1992; NZQA 1992) and weakness (Priestly, 1996) of the NQF and the NVQs in the UK. The supposed benefit is that providers and consumers can select the mode of curriculum that is best suited to their needs, "many roads to Rome". However, Priestly concludes it "leads in practice to a syllabus that is narrow" (ibid:145), channelling the learner into a narrow behavioural pathway that limits teacher and student autonomy. A related assertion is that competency standards lead to the fragmentation of the curriculum into a series of lower level learning outcomes lacking in overall integrity (Codd, McAlpine & Poskitt, 1995: 44; Eagle & McDonald, 1997).

However proponents of competency standards, notably a group of educational academics based in Australian universities, argue that there has been an adaptation and sophistication of Skinnerian operant conditioning or narrow behaviourism (Hager, 1994, 1995a; Gonczi & Hager, 1992; Griffin, 1995). Their "third way" (Hager, 1995a) is an integrated concept of competence whereby knowledge, abilities, skills and attitudes are assessed in a chosen context of occupational tasks. The selection of key tasks or elements for an occupation captures the holistic nature of practice and competence is inferred from performance, rather than directly observed (ibid). This is arrived at after critiquing two less satisfactory approaches to assessment. Firstly, behaviourist checklists of tasks, which ignored personal

attributes, group processes and other aspects of knowledge, and secondly the identification of generic attributes essential to performance (communication skills, problem solving, planning analysis or pattern recognition), which lacked context and a recognition that expertise is domain specific and not generic (Eraut, 1984, in Hager, 1995a).

Extent of Learner Involvement

Another feature of the debate around the NQF concerns the extent of learner-directedness possible within that framework. NZQA literature (1993, 1996) promoted the view that in order for competency-based training and assessment in the workplace to become successful, it should meet learner needs including literacy and wider learning as well as employer needs. Learners do much of the work that is involved in competency training and assessment, and they probably make calculations in terms of its benefit to their future careers (Wolf, 1995; Zepke, 1997). However, Hall (1995) argues that the NZQA mistakenly assumed that flexibility of learning is possible where learning outcomes are pre-set. Contrastingly, Bowen-Clewley and Strachan (1996:10) appear to feel working with a "computer based package" constitutes self-directed learning, yet it may be argued that it is only pace that these learners choose, not learning goals or even methods (Strathdee, 1994). Learners are possibly self-directed in the practice of Recognition of Prior Learning (RPL) and the NZQA has been a proponent of this process (Benton, 1995). RPL enables learners to gain credit for prior learning through the presentation of evidence; frequently in the form of a portfolio which the learner him or herself has gathered together (Cohen, 1992). However, a research survey of workplace literacy needs in NZ pointed to exclusion of employees with low literacy and language levels from NQF training and assessment (Moore & Benseman, 1996). In Australia, competency-based training was reported (Mulcahy & James, 1999:94) to place little emphasis on the innovative construction of knowledge by workers themselves. Similarly, Web Research (1996) found that the NQF had been promulgated as a means to learn for organizational or team success but that learner success is not considered. There were nevertheless some indications that combining workplace and personal learning needs of workers is possible (Brooks, 1995:5). It is clear from this brief outline that the issue of learner self-direction is contested within the NQF, held out as a possibility but only conflicting evidence is found of its practice.

Responses from Educational Traditionalists

The lack of a grading system in competency standards, which leads to an inability to distinguish between levels of performance, attracted considerable criticism (Hall, 1995; Irwin, 1994 & 2000; Priestly, 1996; Smithers, 1996). Defenders of the competency system advance competent/not competent grading systems, contending that multiple grades are elitist (NZQA, 1996; Bowen-Clewley & Strachan, 1996). Grades are perceived by some commentators as a protective reaction, conserving privileges that had been conferred on those who had been successful in traditional education (Barker, 1995). Significantly, the harshest critiques of competency are from universities, which are based on success in academic learning. The NQF was intended to bridge the academic versus vocational divide and the dichotomy between education and training. The myriad of distinctions: "mind vs. body, head vs. hand, mental vs. manual, knowledge vs. skills, pure vs. applied, knowing that vs. knowing how, theory vs. practice, general vs. particular" (Barker, 1995:16) underwent critique as it served to justify the binary system of learning and subsequent division of social and financial rewards (ibid). The needs of employment and industry were seen to be a blending of these two types of learning and the NQF was the vehicle for achieving this blend. However, just how the simplification of grades actually relates to the integration of knowledge and skill has not yet been significantly addressed by the NZQA publications on assessment of competence (NZQA, 1996).

Other traditionalist responses emphasised the freedom of the individual and the value of the market model. Michael Irwin, a policy analyst commissioned by the Business Round Table, criticized the government's aspirations to control curricula and the "inner life of children" (Irwin, 2000:126). ITOs were the subject of a report prepared for the Education Forum by Smelt (1994), who pointed to the tensions, in the formation of ITOs, between employer and trainee interests that served to undermine their initial brief. The monopoly rights of ITOs to set standards and purchase provider training was reported to provoke further tensions between firms, employers, trainee interests and provider interests, yet "the discipline of market forces in resolving these tensions is lacking" (ibid:iii).

Critical Responses to the Dominance of Public Choice and Centralised Accountability

Law (1993, 1995) and Strathdee (1994) criticised the establishment of the NQF as overly influenced by business interests. Lifelong learning had been "reformulated" (Law, 1993:18) by the new right, to emphasise economic growth and the rights of capital, rather than the original UNESCO emphasis on worker rights to education and participatory sharing in power. Law posited that new right ideology grew from the 1970's crisis of welfare capitalism "concerned at the inability of the welfare state to provide the conditions of capital accumulation" (ibid:8). Resistance to "provider capture" and advocacy of "public choice" was part of the "pressure to abandon completely ... the fundamental assumption of the welfare state compromise" (Law, 1993:2). By 1994, Strathdee saw business "driving" the NQF, denying public compromise and reducing post-compulsory education in NZ to individualistic consumerism; it was the "private project of industry" (Strathdee, 1994:84).

The educational reforms of the early nineties are seen as stemming from contested theories of public choice, human capital theory, agency theory, new public management and economics of organizations. De Bruin and Eagle (2000) assert that the argument of socially beneficial self-interest, which justified user pays education, was faulty on several counts. It has not been empirically tested, the link between economic development and education is unclear and the assumption that markets should apply in education is merely ideology. The critical responses to NQF centralisation of assessment and quality control were mirrored in the school sector. Codd (1999) argues that the "culture of distrust" and economic rationalism typified in the educational policies of the new right leads to a "vicious cycle of decline into managerialism, as exhibited in the obsession with quality in education" (ibid: 47). A preferable alternative is "social capital, or the ethic of trust in social interaction, and is best represented in professional accountability" (ibid: 51), which is defined as commitment and moral responsibility on the part of teachers and other educators. The work of the Education Review Office was similarly described by McKenzie (1999) as centralised quality control. Lauder, Hughes & Watson's (1999) critique of the introduction of markets in New Zealand is also aimed at the school sector. Locke (2001) surveyed English teachers in 1999, concluding that competency-based forms of assessment did not fit easily with the teaching and learning of English, and that teachers were "manifesting an intellectual resistance to ... assessment reforms, that have taken place in New Zealand since the early 1990's" (ibid: 21). Their resistance fits easily with the resistance to the NQF within tertiary education.

A Cluster of Research: Comparing Intentions and Experience of the NQF

'Policy-checking' research was underway by 1997, when NZQA commissioned a quality assurance research report on competency assessment between 1992 and 1997 (Bowen-Clewley & Strachan, 1997). The report made rather polemical "suggestions for progress" (ibid:64), centred on assessment system quality improvement. The authors argued for funding support and public information to popularise the ideals of the competency assessment. They also recommended upskilling of assessors and consistency between assessors and independent research from outside the NZQA. In contrast, Alan Smithers' 1997 report on the NQF for the Education Forum questioned the ascendance of competency based training.

A later cluster of New Zealand education research contrasts the intentions and the realisation of the NQF. Viskovic (2000) explored the experience of the National Qualifications Framework and found that the 'grand vision" of a unified framework was not realised, particularly because of the universities' unwillingness to accept competencies. Hodgetts & Hodgetts (1999) explored the process of establishing the NQF and growing concerns about the NZQA with a group of NZQA officials. The charge that the administrative burden of the NQF was "nightmarish" (Roberts, in Hodgetts et al, 1997: 69) was answered by the officials as a being misrepresentation; the workload would lessen over time. The "dumbing down" charge levelled at the NZQA was also denied, the NQF was open and learner centred, they saw the academic/vocational divide as arbitrary and unclear. They also refuted charges of the reduction of learning to information and skills by reference to the complex nature of performance. The respondents agreed that the NQF could be seen as too rigid; however they felt this was a 'trade-off' in the interests of consistency. Hodgetts and Hodgetts see the 'bad press' earned by the NZQA as resulting from the government coupling the NQF with the introduction of market reforms. In a Massey University study of the use of the NQF qualifications in PTEs, Terrell (2000) noted gaps "between NZQA intentions for the NQF and the realities in the implementation" (Terrell, 2000:i), particularly in the area of assessment practice.

This project will contrast a selection of 'stated intentions' with data gathered in subsequent field interviews with a group of workplace assessors and candidates.

2.3 Workplace Assessment: Description and Analysis

NZQA publications from the early 1990's note advances in technology and changes in the economy. The "modern worker," they state, must "change direction" and gain skills and knowledge to adapt to changed circumstances (NZQA, 1991:2). The aim of the NQF was to be responsive to the needs of the individual, employers and society and to provide a coherent system of fair and clearly stated standards against which to assess the performance of employees and others (NZQA, 1993). Like the NQF, workplace assessment appealed to diverse interests. Social justice aspirations were ostensibly met by ITOs having to demonstrate that they represented their industry and that they were responsive to those traditionally under-represented in training, particularly Maori, Pacific Island peoples and women (ETSA, 1992). Moreover, the NQF reformers were self-characterised as radical (Hood, 1992), possibly appealing to a wider audience than would otherwise be the case. ITOs felt that NQF standards were 'owned' by industry, because industry was consulted in the design of these qualifications in an extensive training needs analysis. However 'industry' was, not unexpectedly, defined in differing ways by the different 'stakeholders'.

Purposes of WPA: NQF in the Workplace

Workplace assessment was promoted as an equal and alternative pathway to gain NQF qualifications in clearly identifiable competency standards (NZQA, 1997). No longer would workplaces need to send employees away to expensive off-job training, skills taught on the job would be recognised in a cost-effective alternative qualification, without any production downtime (NZQA, 1991, 1998). Workers would receive credit for what they were already doing in the workplace and their qualifications would be obtained outside formal systems of education and training, thus removing barriers to career development for many workers (NZQA, 1991). Skill New Zealand developed guidelines, a "company use model," to promulgate the use of the NQF as a human resources and performance management tool (NZQA, 1998). Companies were encouraged to use the resources and subsidies available from ITOs and to devise training pathways for their workers making

use of unit standards from the NQF. NZQA admitted that entire qualifications may not be usable for different workplaces as they may not 'do' all the units in a certain qualification, but noted that units were written in a generic way to enable different workplaces to use the same standards (ibid).

Along with the NQF, workplace learning and assessment "came of age" (NZQA, 2000:12) by virtue of its survival and growth. "Qualifications that work" were said to be firmly embedded into workplaces and workers reportedly spoke confidently about the process and benefits of workplace training and assessment within the NQF (NZQA, 1999c:1). Employers also reported returns on their involvement in the NQF, including increased productivity, reduced absenteeism and raised morale (NZQA, 2000). ITOs, being responsible for administrating and organising workplace assessment, have come to depend on it for funding. Competency based training continues, in the early 2000's, to be a cornerstone of industry training and the NOF is assumed by many to provide the vehicle for credentials in industry training. Government policy still assumes that public standards and qualifications in workplace learning will benefit the whole workforce. This highly skilled workforce, capable of continuous learning, will create a 'knowledge economy" and improve NZ's position in the global marketplace, leading to social and economic wellbeing (Skill NZ, 2001a). "Private good" arguments advanced by the previous government are also still emphasised. Workplace learning benefits workers' "personal intellect and wellbeing" and is important in "reducing inequality" (ibid:7). Disadvantaged workers would become less vulnerable to the vagaries of the labour market through the adoption of workplace-assessed qualifications and increased generic (including literacy) skill training (ibid).

The Tertiary Reform Act in 2002 required that industry training be a partnership between employers, employees and their representatives and provided for collective representation of employees in the governance of the ITOs (NZ Govt, 2002). New policy directions required more accountability for ITOs and discouraged fragmentation and competition with tertiary education providers, particularly for high level qualifications. At present many registered workplace assessors are operating in workplaces throughout NZ, apparently thoroughly enmeshed into vocational training provision. Workplace assessment

is set to grow as it is planned to extend workplace training to small and medium firms, as well as firms where there is no current training culture (Skill NZ, 2001a)

Theoretical Origins of WPA

Like the NQF, the theoretical origins of workplace assessment are found in diverse 'camps' of education/learning/assessment theory, in management theory promulgating the "learning organization" and in new right public policy theory.

Education and Learning Theory

Comfortably located in the first 'camp,' experiential learning (Kolb, 1984) provides clues to the theoretical origins of assessment of learning in the workplace. Accordingly, the workplace environment is regarded as the most suitable for learning about the demands of jobs. Moreover, experiential learning matches the learning styles of a large group of the population (ibid), or of adults (Hawke & Oliver, 1992) and is therefore more equitable. However, experience can be seen as a 'text' (Usher, Bryant & Johnston, 1997) to be critically read, rather than taken as fundamental, natural and authoritative. Therefore, experiential learning has the potential to be emancipatory or oppressive in its effects (ibid:105). Workplace assessment of learning outcomes also has origins in the division of learning into three domains: the cognitive, which is further divided according to complexity (Bloom, 1956), the psychomotor, and the affective (McCurry, 1992). Hawke and Oliver (1992) describe workplace assessments, where candidates are observed doing a "wide variety of real tasks" as accurately describing overall occupational performance; they are "the most direct and realistic tests of competence" (McCurry, 1992:236) They are also contrasted with traditional practical tests and pen and paper assessments used in vocational education and training (ibid) which constitute the "front end" model of learning (Beckett & Hager, 2002). The front end model takes place before work and is less valuable, Beckett and Hager argue, than the active, engaged model where learning about vocational practice takes place in the middle of "messy" practical action that is contextual and holistic. In his research into the balance between on-job and off-job training and assessment, Hager (2000) posited that off-job training was best suited to the formative development of performance skills but that on-job training and assessment was better suited to the overall evaluation of whole job, autonomous competency. Hager also argued (1998) for a balance and combination of on and off-job assessment. Harris, Guthrie, Hobart & Lundberg (1995) point to an ethical issue raised by the assessment of competence; in high stakes jobs like a doctor or airline pilot the consequences of faulty assessments may be fatal; they posit that real work assessments are more likely to be accurate and thus ethical.

Another educational theory (or more accurately a set of practices) in which workplace assessment finds its roots is the recognition of prior learning (RPL) (Wolf, 1995; Benton, 1995). The myriad contexts for RPL include and emphasise the workplace. RPL, it is argued, widens access to education and validates previous experiential learning, enabling disadvantaged groups to take opportunities within the marketplace to improve their skills (Benton, 1995). Moore & Benseman (1996) however, question whether RPL is simply another form of assessment which suits those who are already advantaged in the educational system.

The Learning Organisation and Total Quality Management Theories

Further origins of workplace assessment are found in the "learning organisation" theories (Argyris & Schon, 1974; Senge,1990; Watkins & Marsick, 1993), which advocate the development of workers who "think differently and more deeply about themselves, their work and their relationship to the organization" (Marsick, 1990:23). Workers engage in "double loop learning" (Argyris & Schon, 1974), which is a combination of goal-based learning and critical reflection on their own performance. The notion of the post-Fordist workplace, which encourages participation and collaboration in decision making, underpins workplace learning and assessment. Knowledge and skill are seen as important resources for the development of the enterprise, making it more competitive. A development of this notion is the characterization of work in the global economy as "hot action" and "anticipatory learning" (Beckett & Hager, 2002). This involves making practical judgments in changing circumstances, and is reflected in the integrated model of competence that makes much of the practitioner's personal attributes and the context in which the judgments are made. "Reciprocal participatory practices" and guidance are central to such workplace pedagogy (Billet, 2002:27). The whole person, or "embodied

performance" is the basis for this work (Beckett & Hager, 2002) and workplace assessment captures its complex nature through being directly related to workplace tasks.

Provider Capture and Public Choice

As a direct outcome of its embedding in the NOF, some further ideological and policy roots for workplace assessment are found in the notion of "provider capture," which is integral to public choice theory or the market model for education, promulgated by new right thinking (Eagle & McDonald, 2000). Provider capture theory characterizes special interest groups as taking advantage of their powerful position as recipients of public funding in order to capture increased funding and strengthen their own relative positions. This process is perceived as detrimental to the taxpayer, as this ever-increasing funding is seen not only as self-serving but also as wasteful and superfluous (ibid). In NZ, vocational education was previously the almost exclusive preserve of polytechnics and trades apprenticeship boards, providing little "public choice". The antidote to provider capture was in contestability (Codd, 1999:46) whereby consumers of education could choose between different providers in a competitive marketplace. Public choice theory also aims for greater choice and diversity in education and greater responsiveness to the needs of industry. Hence governments have established the provision of alternative ways to gain qualifications, including workplace assessment. This change was purported to give equity of access to a greater range of learners. It has become problematic as workplace assessment provides a qualification pathway that stands, in some industries, in direct competition to tertiary education institutions (TEAC, 2001). Workplace assessment is therefore implicated in the new right reform of vocational education, providing a disjuncture with social justice motivations for workplace assessment.

Role and Methodology of Assessors

Workplace assessors are not specialist adult educators. They are front line managers, charge hands, team leaders, supervisors or experienced peers. Nevertheless, the adult education training of workplace assessors to unit standard 4098 "Use standards to assess candidate performance" has been seen as an essential part of the "company use model." developed by the NZQA (Beckford, 1996) and is a common requirement for ITO registration. Other criteria are industry experience, expertise in the competencies they are

assessing, knowledge of the competency standards, personal characteristics such as good communication and organisational skills, and willingness to become involved in workplace training and assessment (Bloch, Clayton & Favero, 1995). Assessors' other complex roles in the workplace such as manager or trainer may impinge on, complement or conflict with the role of assessment of performance against national qualifications (Wolf, 1995). A further "cast of characters" (Webb, 1996:12) may be involved in workplace assessment, including the candidate/trainee, a different trainer, a training facilitator, and training managers. Usually however, assessors themselves are the main resource-person for candidates who are seeking advice and guidance. The role is not a small task: the assessor (trained to the standards of unit 4098 (NZQA, 2001a)) is expected to provide judgements about competence, to prepare candidates for assessment and to provide them with feedback on their performance. Assessors also frequently have an administrative role in that they are expected to report the results of assessments to ITOs and meet their moderation requirements.

Workplace learners work together with registered assessors to gather evidence of their competency against standards (Miller & Bowen-Clewley, 1997; NZQA, 1997b). NZQA (1996) suggest that evidence be gathered in an ongoing way, to reflect the consistent nature of competent performance. Training literature for the workplace assessor qualification emphasises positive interpersonal relationships between assessors and candidates (HVP, 2001; TOPNZ, 2001). This is done, in part, by the workers themselves, following research from the UK (Mitchell & Sturton, 1993). In the promotion of the NQF in workplaces, much emphasis has been laid on the role of the worker in planning their own assessment process "each individual is in charge of his or her own assessment" (NZQA 1997b:3). Emphasis is also laid on the feeling of achievement gained by workers who had achieved credit for their work (NZQA, 1991, 1993, 1996, 1997b). The analogy between legal judgment and the assessment of evidence of competence (Bailey, 1995) is reflected in later NZQA recommendations (NZQA, 1996) as was the argument "for a broad range of evidence" which formed the conclusions of an Australian literature survey by Toohey, Ryan, McLean & Hughes (1995).

Early case studies by Skill NZ (Beckford, 1996) reported a few companies that assessed naturally occurring evidence on the job. Bowen-Clewley (2000) presents this as a "farm gate model" of workplace assessment, collecting naturally occurring evidence on the job and avoiding interruptions to work. In their advice-kit for Registered Training Organisations (RTOs)¹ assessors in Australia, Booth, Clayton, House, & Roy (2002) describe guidelines for gathering third party evidence and provide examples of such collaborative assessment methods. Chapman (2002) advises Australian and NZ workplace assessors to create simple individualized training plans for the collection of evidence on the job. However, a sizeable Australian audit of workplace training and assessment (Allen & Woodhouse, 2002), which undertook intensive interviews and document audits in ten RTOs, concluded that the majority of training and assessment materials they saw were "geared for attainment of business goals and not for the assessment and achievement of competence" (ibid:103), the assessment processes limiting flexibility, fairness and reliability.

There is a little New Zealand research into workplace assessment methodology (ITF, 2001), which could replicate the results of the Australian research described above. There are however, a number of prescriptions for practice.

Prescriptions for Practice

In a recent literature survey of desirable attributes for assessment, the probable basis for some NZQA prescriptions for assessment practice is outlined - "it should be realistic, consistent with workplace activity, multi-dimensional, recognise both product and process assessment, span the simple and the complex, be open-ended and recognise the role of human judgement in scoring" (Hayton & Wagner, 1998, in Stephenson, 2000:102). Furthermore, assessment should be based on gathering appropriate information about performance from direct, indirect and supplementary sources - "valid, authentic, current and sufficient evidence to enable appropriate and accurate decisions of competence" (Griffin & Gillis, 1998:6). The stated intentions for workplace assessment in NZ are best summarised in the main prescriptions for practice for workplace assessors. Firstly, the NQF assessment and moderation unit standards 4098, 11551 and 11552, offer direction for

¹ RTOs are like PTEs.

assessment methodology (NZQA, 2001a, 2001b, 2001c). These are translated into widespread training for assessors. Secondly, a key NZQA publication on assessment and the moderation of assessment (NZQA, 1996) makes further recommendations for practice. Methods should also be integrated with learning, appropriate, open and manageable (ibid). There are also normative prescriptions (ibid) about the qualities of evidence gathered to demonstrate competency: validity, currency, authenticity, sufficiency, repeatability of performance and directness (being close as possible to actual performance of real tasks). In addition to these prescribed qualities of evidence, assessors themselves should be fair and consistent in their judgements. A fair assessor does not allow candidates to be disadvantaged by the assessment process and so facilitates equity of access to qualifications. Thirdly, the moderation practices of ITOs and NZQA National Moderators directly regulate assessment practices; although these have not been investigated deeply in this thesis. Lastly, prescriptions are offered by the widely promulgated "Principles of Best Practice in Assessment" (ITF & APNZ, 2000: NZPPC & ITF, 2001), which are in part a response to ongoing criticism of NQF practices in assessment. The three 'principles' are summarised as follows by Lamburn (2002). Firstly, assessment should occur at the level of the elements or outcomes of a unit standard, rather than focus on checklists of performance criteria. It is designed to rectify the earlier atomisation of assessment. Principle two refers to assessment decisions being based on a consideration of all the performance criteria, rather than leaving out some performance criteria which had led to inconsistency in some earlier practice. The third principle discourages over-assessment, insofar that the assessor should use the least possible amount of evidence that is needed "for the assessors to make a valid professional judgement" (ITF & APNZ, 2000:2). The above publications, when combined, offer a body of prescriptions for assessment practice.

2.4 Workplace Assessment: Debate & Critique

Web Research undertook a 1996 literature review of international good practice in the assessment of skills in the workplace for the NZQA, where they identified a number of emerging issues: holistic assessment (rather than the use of discrete item checklists), consistency and dialogue between assessors and assessed, a developing tension between innovative industry practices and the "norms" of national qualifications. These issues are

here further developed in a summary of the debate which has been elicited through the establishment of workplace assessment.

Atomistic versus Holistic Assessment

Early Australasian research pointed to atomistic workplace assessments. Methods of competency-based training and assessment in Australian industry were reported to rely on exhaustive checklists focussed purely on task performance (Assessment Research Centre:2). Another Australian research project, using two case studies of purportedly innovative Australian firms, found evidence of fragmentation of learning in the interests of assessment (Bloch & Thompson, 1994:8). MacFarlane's (1992) research in Scotland produced similar findings about atomistic checklist type assessments. Lees' (1996) NZ research reported an overuse of checklists in the UK and foresaw a possible problem here. Other problems stemming from atomistic assessment were also found. Mulcahy & James's research (1998), found that skill standards had concentrated on the components of skills and checklists of tasks which reinforce the status-quo. The research also indicated that such checklists of pre-determined tasks discouraged "critically innovative activity" (ibid:94). A recent Australian research project (Eynon & Wall, 2002) also noted the inappropriate use of tick-box checklists in competency-based assessments of professional work. Priestly (1996) referred to the danger that "learning is seen as a finite end", discouraging "double loop learning" in workplaces or "learning organisations" as envisaged by Argyris & Schon in 1974 (ibid). Web Research's 1996 NZ study supported the holistic assessment model when "implemented in such a way as to take account of conditions of work uncertainty" (ibid:8). It also found that the behaviourist nature of competency standards assessed within the workplace led to the stifling of innovation, this occurring because task performance pre-determined by end-point standards, thus discouraging Total Quality Management's goal of questioning and continuous improvement in the workplace.

However, Harris, Guthrie, Hobart and Lundberg (1995) argue that competency-based assessment has become less task-based and more holistic and humanistic in nature and that assessment methods should be multi-faceted with emphasis laid on the complex nature of assessor judgement. The most powerful response to criticisms of atomistic assessment in workplaces (and other competency-based assessments) is that it may "apply only to bad

practice" (Hager, 1995:42). If mere task competency is assessed, then mechanistic checklists are created. However, fragmentation may be avoided by using holistic assessment:

"according to the integrated view, competence is thought of in terms of knowledge, abilities, skills and attitudes displayed in the context of a carefully chosen set of realistic occupational tasks which are at an appropriate level of generality" (Hager, 1995: 49)

According to Hager, actual task performance implies knowledge and theoretical "knowing that," this means that assessments should be made of key tasks, which are carefully selected to enable assessment of many possible permutations and variations. In this way, knowledge is "inferred" from performance (Hager, 1994:11). Holistic assessment should cover multiple elements and/or units (Hager, 1998:56). Evidence is gathered from actual observation of task performance, supplementary evidence of knowledge and historical evidence such as records and certificates (ibid).

Hager advocated further research in good practice" in holistic assessment and some has been forthcoming. An example of integrated competency assessments is described by Hager & Becket (2002) in the vocational assessments of lawyers for specialisation accreditations. These candidates are able to demonstrate evidence on all aspects of their overall effective performance from diverse sources, including practical performance and traditional assessment methods. Holistic assessment, which is based on multiple sources of evidence, is the subject of another Australian research project by Connally, Jorgensen, Gillis & Griffin (2003), which aimed to develop and validate a strategy to synthesize multiple sources of evidence to inform judgments of workplace competence (ibid:1).

Cornford (1997) asserts "the new [holistic] competency training paradigm advocated by Hager (1995); Gonczi (1993); Hager, Athanasou & Gonczi (1994) has assumed quasi-official status" (ibid:54). Criticisms of the holistic approach are that it is difficult to define and it may not be a useful way to assess formative learning (ibid). Nevertheless, holistic assessment may provide a way to counteract the behaviourism that may be implicit in the specification of learning outcomes.

The Volume and Costs of Workplace Assessment

The consultative nature of the design process in the UK gave birth to standards that were overly voluminous (Wolf, 1995), creating problems for educators and workplace assessors. Moreover, a study examining the predictive validity of assessments for accounting technicians (ibid) revealed that the range of competencies in the standards included much that was not a central part of their work. Wolf's research indicated that the level and quantity of assessment tasks and hugely inflated range statements are "simply making it impossible to implement (NVQ) effectively" (ibid:112). She also notes that employers are not in the business of qualifications and they "cannot plan their whole production and employment policy around providing experience in all the elements of competence required. Or not if they want to remain in business at all" (ibid:132). Therefore, it was argued, competency-based assessment would not survive in its current form because it was an expensive and time-consuming system, especially for low-level qualifications. However, competency-based assessment may survive in industries such as aviation and the "old crafts" and professions (ibid:136) where high risks, or high stakes (Capper, 2000), are apparent and outcomes are essential to life and limb and/or profits.

Range (the variety of contexts, tools or methods specified in the standard) is as much a problem in NZ as it is in the UK. The costs, the volume or range of variations in competency standards and the requirement for complete fulfilment of range statements was found to be particularly damaging for the UK competency-based assessment model in the workplace by Coogan (1996). He evaluated the UK competency-based assessment system, advising NZ educators and policy-makers to resist demands for greater detail in standards. Callister (1994), who examined the costs of NQF operation, where costs were incurred and where savings could be made, concluded that some standards were overly voluminous. Detailed specifications of skill have "major implications for the cost of developing and supporting such units, and ... education services" (Callister, 1994:2). Findings from a SCOTVEC (Scottish Vocational Educational Council) project similarly point to time-consuming and artificially fragmenting workplace assessment practices that "were never intended" (McFarlane, 1993:4). Web Research (1996) pointed to tension between validity in assessments and the high costs of assessment in terms of cash and lost production and predicted this may lead to a change in methodologies. In Webb's 1996 study, participants

were found to be "struggling with how to deal with elements of units that did not form part of their own workplace experience" (ibid:24). Reactions ranged from the workplace going to considerable expense to arrange for the full range of experience to signing off without experience. The same study showed that smaller companies were facing time and other resource problems dealing with formal assessment for the NQF. Smithers (1997) found concerns with costs threatened the future of competency-based assessment when government funding was removed (ibid:29). Bernath and Hadfield (NZQA, 2000) noted issues preventing good workplace assessment practice; including unit standard design and focus, the lengthy nature of assessment materials, wordy assessment activities and a lack of employer buy-in (a lack of uptake was also noted in Australia by Cornford (2002)). The costs and volume of NQF assessment in the workplace may prove its undoing in NZ unless standard-setting bodies take note of Hager's comment that:

"Element-by-element assessment is generally more costly ... Fortunately the more holistic forms ... are generally more valid anyway" (Hager, 1995:56).

Workplace-specific versus National Standards

National standards may have intrinsic problems or at least difficulties in implementation. Capper (1997) sees workplaces as unique and antipathetic to national consistency in training or vocational certification systems. He refers to research (Berryman, 1992; Scribner, 1995), on transferability of expertise, indicating that technical competency is context embedded, specific to each workplace and only transferable through the medium of generic skills (e.g. listening, evaluation and judgement) learned in a (technical) context. Hall (1994:12) sees assumptions about the "transferability of learning" as a possible subject for research. Wolf describes a "huge variety" in standards different firms expect (1995:103). Standards in the UK should "embody best practice, not some average of current activity," (ibid:103) and are wide-ranging. Most large firms in the UK, at that time, created their own training schemes to fit their requirements (ibid). In contrast, somewhat later, the Tasman Pulp and Paper Company, in Kawerau, NZ, demonstrated willingness to adjust company training to match national standards ... "because national standards exceeded ... our previous training manuals" (Sheriff, 1996: 1). The tensions between workplace and national standards may stem from what Wolf identifies as a "failure to

distinguish between two purposes: in-house quality purposes for companies and that central part of a training and education system for young people" (Wolf, 1995:121).

Assessor Judgement and Consistency

NZQA, as proponents of competency assessment, say it should be consistent (NZQA, 1994:5). Webb's 1996 research with Open Polytechnic of NZ trained workplace assessors found "actual approaches to the task of assessment exhibited extremely wide variation despite having the same training" (ibid:23). These differences were exhibited in ways of using evidence, perceptions and beliefs about of the NQF and were caused by "contextual differences" (ibid:23). Heather Lees' ITO survey research into workplace assessment in NZ (1995, 1996a, 1996b) concluded that assessors needed to be consistent in their approach and that guidelines needed to be established for competent workplace assessors. Consistency is moreover problematic as research points to harsher judgements for women than men and assessor prejudices against low educational achievers (Web Research, 1996:10)

Hager (1995) sees assessment as a subjective process that is not value-free. Wolf (1995) found that assessors used complex judgement concepts that are internalized and holistic to decide on competency. Her UK research indicated that assessors used compensation when aggregating results of different performance criteria. Other UK research showed that experienced assessors tended to compensate more for sub-standard performance of candidates, more than inexperienced assessors (ibid:75).

Some practitioners in the workplace, for example, Jensen (1996) insist on the importance of objectivity in competency assessment to reduce safety and financial risk. Yet UK research with health workers found that assessors are reluctant to be negative about fellow workers (Wolf, 1995:98). NZ research (Barrow, Hodges, Rainsbury, & Sutherland, 1996:2) showed that employers' grades were significantly higher than academics' grades when marking student projects. However, the explanation offered was not that employer/employee relationships influenced marking but that employers had more diverse evidence to base judgements on.

Some researchers believe that competency assessment can be consistent between different workplaces (Wolf, 1995; Bowen-Clewley, 1997). "Key" methods to achieve standardization are exemplars and assessor networks that "socialize assessors into common understandings" (Wolf 1995:77). Assessor networks are, in effect, moderation systems and these are still at an early stage in many NZ workplaces. Earlier indications in NZ (Lees, 1996a:45) were that moderation systems were undeveloped however published guidelines on the best practice for moderation and assessment (NZPPC & Skill NZ, 2002) point to the benefits of a collaborative and educative approach to moderation.

2.5: So what were the Stated Intentions?

The first research question was to analyse the stated intentions of those who initiated the workplace assessment project in New Zealand since 1990. The following points are a summary of the findings from this literature survey, describing the various intentions for workplace assessment under the NQF.

The least contested intention of the NQF was to increase the skill levels of the NZ population and better position New Zealand in the global marketplace by the provision of a single unified and standards-based framework for qualifications. An embedded part of this policy was workplace assessment, an alternative pathway to vocational qualifications for sections of the population for whom traditional vocational education was not formerly available. Workplace assessment would be more emancipatory than other types of vocational education, as it was based on experiential learning and connected with notions of TQM and continuous learning within workplaces. Moreover, workplace assessment was intended as a contribution to the weakening of the dominance of traditional tertiary education "providers" in the education "market." It was further intended that the pathway to workplace qualifications would be more cost effective for enterprises and business than earlier centralised systems

Assessment as evidence gathering was intended to involve documentation of ongoing learning to more correctly reflect the nature of performance. The practice of workplace assessment was intended to meet prescriptions for assessor judgments to be fair, consistent

and based on a holistic evidence-gathering methodology. This evidence was to be valid, authentic, direct and current.

This multiple (motley, patchy, many-hued!) collection of intentions reveals the contested and differing notions of workplace assessment as part of the NQF. Workers would be able to gain portable credit for what they already do; their performance in the workplace, and this was seen as fair and equitable by many educators, policy-makers and organized labour. Social well-being would be an outcome of these opportunities, or alternative pathways to qualifications, and sections of the population would be protected from the worst excesses of the market. Conversely, it offered employers increased efficiency, workplace harmony and profitability by aligning their needs to the benefits of training. Businesses would utilise integrated training systems which were designed with costs and volume in mind because government and employer/employee resources are limited. Workplace assessment was all things to all people!

The remaining research questions in later chapters further examine, interpret and make conclusions about the intentions for workplace assessment under the NQF. Chapter three develops a theoretical base for a critical analysis of workplace assessment, as envisaged by its initiators. This "lens" is constructed from an examination of the literature of critical theory. Later chapters describe field interviews with ambulance officers participating in workplace assessments. An analysis of this field work is made using the critical theory lens, which is intended to cast light on how workplace assessment has occupied a contested space within the ambulance service, upon the interplay of interests of the participants and on technical assessment practices in particular ambulance workplaces.

CHAPTER THREE: THEORETICAL FRAMEWORK FOR THE ANALYSIS OF NOF WORKPLACE ASSESSMENT.

3.1 Critical Theory as a Theoretical Lens to View Workplace Assessment

The preceding chapter examined the stated intentions of those who initiated the workplace assessment (WPA) project in NZ. How can the intentions of the initiators of workplace assessment in NZ be analysed in terms of critical theory? This is the second research question that constitutes the following chapter. It begins with an outline of broader critical theory issues in 3.1, and moves to an examination of official storylines identified in the literature survey in 3.2. This selection of theoretical issues is justified in terms of critical analysis of the data collected about the initiators of workplace assessment and the official narratives surrounding the NQF and workplace assessment. The third and fourth parts of the theory framework (3.3 and 3.4) take up the debates around the NQF and workplace assessment from a critical theory perspective, which serves to sharpen the issues for investigation in the field work.

A theory framework gives research its meaning; I return here to C Wright Mills (1970), who described in "The Sociological Imagination", in 1956, the then impoverished state of American social research, reliant as it was on reductionist, quasi-scientific methods. Mills described research without theory as superficial, often shallow and never critical of the status-quo. Much later, Giroux (1983), also deploring a lack of theory, declared social research should encompass empirical research but should end in theory.

The theoretical "lens" for this project is critical theory, understood much like that of Giroux, as an analysis of "newly emerging forms of capitalism along with changing forms of domination that accompany them" (ibid:8) and an "attempt to reconstruct the meaning of human emancipation" (ibid:8), Critical theory has been selected because it is partisan, 'taking the side' of progressive education and a tendency towards emancipation. Much of critical theory outlined in this chapter seeks to uncover; to expose or unmask things as they 'really' are, whilst postmodern critical theorists, some of whom are also charted in this chapter, challenge the notion of reality as a self-serving "grand narrative". From this

mapping of critical theory, several key concepts emerge as relevant to workplace assessment under the NQF and these are analysed in detail in the following paragraphs.

The primary critical theory conceptual tool is the impulse towards revealing hegemonic practices and unmasking reality through the application of critical reason. This is, for example, expressed in the theories of counternarratives (Giroux et al, 1996) and official knowledge (Apple, 1993, 1996). Such theories have the capacity to peel away varying portrayals or layers of meaning and to closely examine practices within workplace assessment that may undermine the interests of less powerful groups. Critical theory analysis can pay close attention to the official portrayal of the practices of WPA and contrast this to the experiences of those who are being assessed. To analyse WPA within critical theory would therefore entail the juxtaposition of narratives and counternarratives (ibid). Counternarratives tell the story of the less powerful and serve to contest the version of events told by the more powerful, they are a sceptical view that questions truth and knowledge as finite constructs. The counternarratives or voices of workplace trainees not only facilitate understanding of how workplace learning works but also point to ways in which it may be revised, changed and questioned.

Official Narratives for the NQF and Workplace Assessment

The NQF has been the subject of an official narrative with several 'storylines'. Official narratives are themselves not un-conflicting and unitary but rather yet another space where interpretations and understandings are contested. The first, often repeated, narrative theme is that the upskilling of NZ's workforce creates competitive advantage on the world marketplace (NZQA, 1993; ITF, 2000). Another storyline or strand in the official narrative about workplace assessment is that it gives vocational trainees equitable access to qualifications through its location in the workplace, thus giving the learners a choice in the way they gain vocational training. This in turn promotes economic well-being for the population by widening participation in vocational training.

However, notions of official narratives and counternarratives lead one to suspect that workplace assessment may maintain privilege within workplaces and exclude disadvantaged groups, possibly those who work in casual, temporary ways, through its

location within more powerful groups. To further explore exclusion one could examine the identity of candidates for workplace assessment in terms of their employment status. Furthermore one could question how the candidates for workplace assessment are selected and ask if the access to training and assessment to national qualifications is limited to those who have a secure position within the workforce. Research by Dwyer (2000) indicated that those who have a secure position within the NZ workforce tend to be male and middleclass. Furthermore, recent research concludes that adult education is taken up by whitecollar more highly educated workers (Pont, 2003), and some types of workplace training are dominated by men (ITF, 2003). Therefore a concomitant question is how disadvantaged groups experience workplace assessment, particularly in terms of fairness. Research based on critical theory could reveal that dominant groups are indeed privileged by WPA. The official claim to equity and widening access is therefore open to question, perhaps also unmasking some elements of hegemony or at least an unintended and unforeseen effect of the implementation of workplace assessment. Hegemony is understood as the seemingly natural explanation of events that is in the interest of a dominant group or class. Apple (1993) describes hegemony as the set of common-sense ideas and values that "saturate" society.

Apple's analysis of official knowledge (1996) may reveal how only some (or indeed none) of the elements of the socio-educational policy of workplace assessment may be genuinely progressive, in the interests of disadvantaged groups. Reference has already been made in 2.1 to the capacity of competency-based training to appeal to political groupings on the right and left. Much of the official narrative and practices pertaining to workplace assessment have a progressive, emancipatory character; however, some parts may act in repressive ways, possibly schooling employees in subservient practices. The decade under the Employment Contracts Act in NZ, between 1991 and 2001, schooled employees to question less and work harder. This attitude remains, despite changes in employment laws under the later Employment Relations Act in 2001. Is WPA perceived by employees as part of this general stringency in workplace relations? One possible outcome of the development of NQF-based workplace training and assessment system may be increased surveillance of workers that results in less personal freedom within workplaces, fewer chances for 'slacking off' and more demonstrated commitment to the goals of the

company. I am not advocating slack work attitudes but the zealous nature of employer commitment to the "learning organisation" can mask a disregard for employee welfare in the interests of improved efficiency and profitability (Noble, 1997).

A further official storyline for WPA is its intrinsic nature as a fair, consistent and valid form of assessment, being more direct and relevant than other forms of assessment. The prescriptions for practice, outlined in the literature survey of NZQA and educational theorists in the preceding chapter, advocate the gathering of valid, sufficient, current, authentic, repeatable and direct assessment evidence as a basis for assessment decisions. The counter-narrative here is the story of the candidates for workplace assessment; when their experiences are examined in such terms how do they stack up against these prescriptions for practice? Are workplace assessors fair and objective in their decisions? Are they influenced by halo effects or their proximity to the candidates? Clearly, trainee perceptions of assessment decisions may share some of the characteristics of learners described by Brookfield (1996), in his critique of self-directed learning. Trainees, by their very nature, are not entirely aware of their own shortcomings and may interpret assessor decisions as being biased or unfair, simply because, as in the old adage, they do not know what it is that they do not know! Assessment evidence gathered in workplaces is advocated as sufficient and repeatable (NZQA, 1996). This means in common terms that it is thorough. Accordingly, because the assessor is working in close proximity to the candidate she or he can gather evidence of task performance over a period of time and from various viewpoints -the assessor may observe the candidate working in his or her job, ask them a set of specified questions or require them to complete special projects. This should then mean that the assessor makes a well-founded decision. However, these prescriptions for practice have the quality of a mantra that is as yet largely untested in terms of analysis of actual assessment practices. Undoubtedly, there is a large body of positive conclusions about assessment practice residing in moderation systems created by criteria-setting bodies such as Industry Training Organisations. This must necessarily be the case as virtually no ITO or Criteria-setting Body has had their accreditation removed since the instigation of the WPA project. Critical theory-based research should however examine other, less privileged points of view. This can include analyzing how trainees experience the actual assessment process and draw out some conclusions about the validity, fairness and sufficiency of assessment practices based on other, less advantaged self-interests.

3.2 Constructing the Lens: A Critical Theory Outline

The official narratives or storylines outlined above will now be analysed within the chosen framework for this project: critical theory. Critical theory can be utilized to interpret the NQF and workplace assessments since 1990. The "Frankfurt School", some American (and other) critical theorists, and certain postmodernist theorists undertaking a dialogue with critical theory are reviewed in the next part of this chapter. The review aims to further identify and develop concepts that constitute a critical theory framework for the analysis of workplace assessment under the NQF. These concepts include on the one hand hegemony and domination and on the other hand unmasking reality through the application of critical reason. The dialogue between critical theory and postmodernism in these areas has sharpened a further useful theoretical concept: namely that of narratives and counternarratives.

Theories of Hegemony and Domination

An explanation of workplace assessment as a voluntary activity that regulates workplace behaviour and replicates workplace standards and norms can be drawn from theories of hegemony and domination. These are rooted in the earlier Marxist understanding of ideology being dialectically interconnected to the economic base, frequently regarded as economic determinism. The "Frankfurt School" later developed theories to explain how the power of the ruling class was reproduced through ideological hegemony and consent, rather than mass manipulation. "Taylorism" (practices that fragment and speed up work) was critiqued as a method of organising workplaces, whereby "instrumental rationality was extended to domination of human beings" Giroux, 1983:20). A critical analysis of Freud's depth psychology showed how a dehumanised society can maintain its control over people, who become willing "accomplices in their own subjugation" (Benjamin, 1977,:22, in ibid:25); through the operation of the antagonistic relationship between individual desire for gratification and the dynamics of social repression. Furthermore, Marcuse (1955, in ibid:27) developed the "performance principle" which ties people to values, ideas and social practices which block their possibilities for gratification and happiness and create

"unnecessary 'surplus repression' that perpetuates toil, misery and aggressiveness" (ibid:28). These practices may encompass competency based training and assessment in the workplace because of its instrumentality and normative function.

A further concept relating hegemony to workplace assessment is "the banking concept of education, in which the scope of action allowed to the students, extends only as far as receiving, filing, and storing the deposits" (Freire, 1972:48). The authority of the teacher, who 'fills' the student with knowledge that is external and alienated is emphasised (Finger & Asun, 2000). The established education system seeks to 'domesticate', isolate and dehumanize students and renders them harmless to the oppressors "with the ideological intent of indoctrinating them to adapt to the world of oppression" (Freire, 1972:52). Apple (1993) sees hegemony operating within education through its emphasis on the importance of work and orderliness, obedience, docility and timeliness. He also sees knowledge as political, whether it is in the interest of hegemony or social change. "Official knowledge", constituting the educational curriculum, is constructed in the interests of the dominant class or groups in society and is marketed, consumed and thereby regulated (Apple, 1993:65). High-status knowledge functions as a "device or filter for social stratification" (Apple, 1979:38), and economic and cultural imbalance follows "naturally". Such "Second nature' ... [becomes] ... a form of social amnesia" (Jacoby, 1975, in Giroux, 1983:32), or a denial of how things got to be as they are. Bourdieu (Von Rosenberg, 2002) typified the uneven distribution of cultural capital as a further way in which the dominant class maintains its ascendancy. Cultural capital, as types of education and taste, rather than economic capital, is one basis for success in modern society. It may be inherited within a 'habitus' – a system of schema, which produce practices which are dominant, statistically, in a particular class or it may be inculcated through education.

These theoretical concepts illuminate NQF processes and structures within which competencies are codified and regulated as official knowledge or cultural capital and show how this knowledge maintains privilege or hegemony.

The postmodern analysis of hegemony further extends understanding of its actual operations. For Foucault, knowledge is "inextricably involved in the many battles for

power waged to govern the body through real and suggested surveillance" (Lechte, 1994: 114). People and populations are managed through a detailed knowledge of them ("biopower"), not by violence (Foucault, 1980). This "knowledge power" is exhibited in "disciplinary technologies" that create docile self-governing subjects through supervision, surveillance and order within a "disciplinary grid" that covers multiple settings (ibid). Like medicine, law, social sciences and psychiatry, management is a disciplinary technology, which uses knowledge to objectify workers and create a docile and obedient workforce. Workplace assessment may be another such regulatory and corrective practice. Hegemony operates within 'discourses', which constitute what can be said and thought in certain contexts and who can speak and when and with what authority, they are sites of constraint (Foucault, in Ball, 1990). One discourse on workplace assessment may be the official narrative about its operation; counternarratives about the NQF may be a focus of resistance, as a discourse in itself. Access to the first discourses is controlled through examination technologies within educational institutions that "embody power knowledge" (ibid:3). This dual nature of knowledge power may also be revealed in investigations of workplace assessment. Ironically, the neo-liberal new right draws some theoretical sustenance from Foucault's notion of bio-power, arguing for a diminishment of state power; it was noted in Chapter Two that workplace assessment is implicated in the new right promulgation of alternative ways to gain qualifications, in theories of public choice.

Critical theory in education offers a cogent explanation for the ascendance of dominant classes or groups in its analysis of the operation of hegemony, through which control and domination of subordinate groups is exercised with their own consent. In this way, ideologies of performance and improvement are implicated in the control of workers undertaking workplace learning. Critical theory explanations have been further refined by some "postmodern" explanations of how education and domination are interlinked. The operation of surveillance and self-control as described by Foucault in the preceding parts of this chapter extends the theories of hegemony by providing a theory that shows how powerful discourses within education and workplaces constrain and exclude oppositional voices. One discourse is the "official story" about workplace learning. Another discourse, as a positive exercise of power in Foucault's sense, is constituted by the unwillingness of

some workers to undertake workplace learning that leads to an increased workload and greater pressure on the job.

Thus, the most useful explanatory power of hegemony would be to explore how workplace training and assessment is linked to people's acceptance of assessment as a form of surveillance of their work. How much does workplace assessment further dominant class interests and is there space within workplace assessment for the furthering of interests of learners and workers?

Struggle, Counternarratives and Workplace Assessment

This section will question whether workplace assessment constitutes a legitimate counternarrative. It seems possible that workplace assessment is not simply a hegemonic device; it may have the nature of a contested site. Differing discourses compete within this site, partly because workplaces are pluralistic, not unitary. Workplace assessment therefore means different things for different employees and different employers.

Critical theory rejects ideas of social harmony and functionalism, instead linking itself to the struggles for social change and self-emancipation. Within education there is compromise and trade-off between progressive educators representing diverse interests and educational elites and there are "times when educational policies are genuinely progressive" (Apple, 1993:67). For example the selection of knowledge as curriculum is the outcome of power struggles between dominant groups and others. Another site of struggle is the defence of public education against free-market choice, debates about raising 'standards', and pressure to make the needs of business the goals of education (ibid:55). Notions of struggle are inimical to adult education, as noted by Welton; "adult education' will always be called to serve two masters, system or lifeworld" (1995:131). The lifeworld or the assumptions, knowledge and understandings about the world, is becoming 'colonised' by the 'system' of economic exchanges by processes of commodification of private life. Welton believes that adult education as a discipline has been reduced to a teaching methodology purporting to match the psychological needs of adult learners, as with Knowles (1990) and Tough. (1990). Technologically inspired andragogy has shed the critical awareness of earlier adult education and worker movements to take up the mantra of self-directed learning and this has "reduced the adult

learner to a technically proficient droid" (Grace, 1996:191). Yet, critical adult education is necessarily deeply tied to the preservation of the lifeworld. For adult education "the fundamental task is to preserve the communicative infrastructure of the lifeworld and extend communicative action into state or economic institutions" (Welton, 1995:154). So where is workplace training and assessment located, within the system or the lifeworld? It may be part of a general intrusion of the system into the lifeworld of the worker and adult education may struggle to hold back or restrict this intrusion.

Struggles in adult education may be understood as engendering counternarratives, which contest the 'official narratives'. They are also a post modern critique of the grand narrative, the mythology on which the Western ideal of progress is based (Peters & Lankshear, 1996). "Incredulity towards metanarratives" (Lyotard, in Peters & Lankshear, 1996:3) could inform analysis of workplace assessment. This is a healthy suspicion of grand sweeping narratives, which are "masking a will-to-power and excluding the interests of others" (ibid:3). The idea of counter-narrative arose from a critical dialogue between postmodernism and critical theory. The critical theory backlash, whereby critics of postmodernism from the political left, such as Thompson, (1997) or McLaren (2003), characterized it as a politically conservative theoretical and linguistic movement, could become sterile and destructive. Rather than a parochial critique of postmodernism, Giroux (1996) prefers to promote the mining of postmodernism, in a critical way, as a "terrain to be contested" (ibid:62). Accordingly, the value of postmodernism is to illuminate how power is produced by cultural practices that engender subordination of groups to the norm of the white, middle class male:

"... the issue for critical educators lies in appropriating postmodernism as part of a broader pedagogical project that reasserts the primacy of the political while simultaneously engaging the progressive aspects of modernism." (ibid:64).

Modernist institutions that focus on regulating and ordering of knowledge in a structure of progress, history and certainty may include the NQF as well as schools. These institutions promulgate notions of well-being and social mobility that are not currently sustained by the 'turbo-capitalist' (Finger & Asun, 2000) economy, where there is less full-time, permanent work and historically lower real wages (Dwyer, 2000). The 'predatory' culture of

postmodernism (the condition rather than the theory) is typified by "ideologies of despair" which are also socially predicated by global capitalism; these are the "official knowledges of colonialism – pseudo-scientific, typological, legal-administrative, eugenicist" (Bhabha, 1983:33, in McLaren, 1995a:233).

A hybridised critical postmodernism illuminates how identity is formed by diverse influences such as gender, race, class (amongst others), and how institutions regulate and deny class, racial and gender differences. It also rethinks diverse and global conditions, new forms of literacy and how power works within workplaces (amongst other cultural apparatuses). Critical adult education could open up new institutional spaces where people are engaged in producing new forms of democratic community (Giroux, 1996; McLaren, 1995a). "Post-colonial pedagogy" lets learners interrogate their self-identity frameworks (the "nomadic self") in a way that allows them to re-select these frameworks, creating new democratic possibilities from "spaces of hegemonic rupture" (McLaren, 1995a:232). This can be achieved through the juxtaposition of narratives and counternarratives, translating experience into voice. This practice of counternarrative must avoid both the privileging of white, male discourses and the reducing of difference into single categories of identity, thus possibilities for change are opened up in liminal or free spaces in social institutions (ibid).

The Potential of Critical Theory: Unmasking Reality

A further capacity claimed for critical theory is to unmask reality. Early critical theory is characterized by an impulse to unmask reality, which is related to Marxist notions of superstructure and infrastructure. Later post-modern critical theorists contest notions of reality.

Unmasking reality through the operation of critical reason was offered as the task of critical education for emancipatory knowledge by Habermas (1981), Giroux (1983), Apple (1979), and Freire (1972). Emancipation is achieved by revealing distortions, through a process of reflection on a social life that is made un-free through the operation of experts. These experts claim an impossible objectivity and manipulate populations with their knowledge and language, which legitimates social power. Habermas "reaffirms the possibility of critical reason against '... the colonization of the 'lifeworld' by instrumental

reason" (Finger & Asun, 2000:78). This use of critical reason can only happen in a dialogue between equals, the "ideal speech situation", not possible in unequal and uncritiqued situations such as that between teachers and pupils (Giroux, 1983). Similarly, "conscientization" (Freire, 1972), or the process of moving from 'magical consciousness' to 'critical consciousness' is the pedagogical model for Freire's adult literacy programmes which sought to reveal the world as it truly was. This 'problem-posing' praxis expands the role of student and teacher, so that each takes on characteristics of the other in a process of dialogue. Learners "develop the power to perceive critically the way they exist in the world with which and in which they find themselves; they come to see the world not as a static reality; but as a reality in process, in transformation" (ibid:56).

Giroux (1983) thought education should expose underlying social relationships, and illuminate the distinction between the world as it is portrayed, and the world as it actually exists in "historically contingent relationships of domination and subordination" (ibid:9), which are concealed by objectified appearances. By developing peoples' understanding of the contradictions of society, critical educators focus on the "distinction between what is and what ought to be" (ibid:10). Giroux uses dialectics to identify the link between knowledge, power and domination and to identify things as they really are. In reality, social relations and groups are unfree and "alienated" from power (a concept borrowed from Marx and later, Marcuse), and dominant ideologies are created within schools and workplaces. Critical education instructs the oppressed about their position as a group, illuminating repression and motivating action towards new forms of social relations. It should use history for its possibilities for change. Similarly, Apple's stated aim is to explain the "reflections of material production, ideological values, class relations and structures of social power on consciousness" (Apple, 1979:38). Feminist analysis developed the widespread recognition that dominant and repressive ideas (about women) are socially reproduced, "what counted as knowledge, truth and freedom were built on a mix of ideology and historical selection" (Thompson, 1997:114).

Postmodern Critique

This notion of unmasking reality has, however, been shaken by critique from "postmodernist" theorists. Distinguishing himself from the modernist insistence on

uncovering the real nature of things, Foucault seeks to describe rather than explain "human nature" (if he believes such a thing exists) and to "historicize grand abstractions" (Rabinow, 1984:5) rather than develop a standpoint on them. He does however advocate political struggle to change power relations but without recourse to justifications such as justice or humanity. "Utopian schemes" and "first principles" are then "cast aside" and the actual workings of power in society are investigated. Foucault's goal is "to create a history of the different modes by which, in our culture, human beings are made subjects" (Foucault, in Rabinow, 1984:8). There can be no "true discourse" according to Foucault; critical pedagagoy simply masks the intellectuals' "will to power". Shapiro (1995) describes Baudrillard's (another "postmodernist") concept of hyperreality; nothing is real, merely a series of surface images continually playing to a compliant and manipulated audience. In Baudrillard's postmodernity there is little room for critical pedagogy, it is nothing more than another image. The ability to describe a material world with underlying structures vanishes along with the meta-narratives of liberated consciousness. The only reality we can know is mediated by language, through discourse. Thus, argues Shapiro, postmodernity has become a "self-expression of those who have lost the sense of hope and possibility for transforming our world" (Shapiro, 1995:200) Nevertheless, postmodernity offers a warning about universal theories of liberation, what is defined as universal is often the perceptions of the privileged.

American critical theory has responded to the challenge of postmodernism, notably charges of the general (Lather, 1995) and repressive (Ellsworth, 1989) nature of critical theory. Lather argues that the very empowerment offered by critical pedagogy perpetuates relations of dominance. Here, the 'discourses' of critical pedagogical practices in classrooms effectively silence the voices of less powerful students. Oppositional educationalists, it is argued, collude with the powerful in protecting privileged "ways of knowing and changing" (Lather, 1995:173). She furthermore agues that Ellsworth's contribution is to expand the possibilities opened up by liberatory pedagogy, through a more defined awareness of the multiplicity and difference experienced by the subjects of educative practice. The fear of the relative nature of truth itself is a need for certainty that characterizes Western, white, middle-class male arrogance. Lather advocates a "post-

critical" approach, moving beyond liberating generalized subjects in a generalized way, no longer speaking for the oppressed.

However, the relativistic nature of postmodernism can be equally applied to progressive and reactionary elements (Whitson, 1995). Lather's argument about truth is an inadequate and too passive argument for educationalists. It would be better to offer possibilities for "counter-hegemony", to disrupt the tendency of the hegemonic order to integrate or incorporate oppositional interests. A more useful "post-structuralist" perspective should provide the "deconstructive means to subvert the false and violent dichotomies embedded in the hegemonic structure", such as the "academic and the non-academic" or the "mind versus the body" (Whitson, 1995:135). Thompson (1997) asserts that in declaring the death of big ideas to explain social inequalities and power, postmodernism has gone too far. It is a weak response to the serious material realities of poverty and deconstruction of the welfare state. Local narratives, which are championed by post-modern theorists, may legitimate ideologies of free choice and individualism that are intrinsic to the new right. Foucault's analysis of power, for example, focuses on 'mere' unequal exchanges in everyday interactions rather than underlying economic and social causes of inequality. Thompson puts the dilemma particularly well:

"To invert the telescope and concentrate on local narratives without analyzing collective, material and deep seated structures in the background to declare the end of grand narratives is too politically convenient for those who benefit from power on a big scale" (ibid:121).

She furthermore quotes Audre Lorde: "the master's tools will never dismantle the master's house" (ibid:121).

Post-modern theory recasts reality as a story or an image rather than a thing to be exposed. However, critical theory has the potential to understand a multiplicity of stories or realities as they are lived by different individuals or groups of people. Critical reason has undergone a critique as part of an ethnocentric, male ideology implicated in the preservation of dominance. So, post-modern feminist critique has pointed to paradoxically repressive aspects of critical theory and through this has enabled a further refinement of critical theory. Nevertheless, the place of reason continues as central to a critical theory

framework as its alternative is offered, most probably, in irrationality. Feminist critique is in itself an expression of critical reason and reason without its critical edge becomes irrationality.

In conclusion, critical theory can be applied to competency-based training and assessment practices in workplaces and may then result in a certain unmasking of relations of power and control, which operate in seldom acknowledged ways. The contribution of postmodernism to critical theory is to prompt examination of its own repressive aspects and to use deconstructive and particular ways to examine how these practices are operating. It may be most productive to look beyond a simple notion of unmasking a repressive reality and to turn this analysis to how the official narratives and their counternarratives about training and assessment may differ. The possibilities for emancipation and social action remain at the centre of critical theory; however any implications for practical action for adult educators are complex. Workers may need or want practical, instrumental learning to better their own chances in the workplace; yet adult educators (and other workers) may also seek to include emancipatory learning within the curriculum to encourage political action. Such complexities are described by Corrigan & Faith in Thompson (1997:17):

"State education is a good thing as a source of skills necessary for the working class to resist the brutalising effects of the market...state education is a bad thing ... as an instrument of bourgeois domination"

The adult learner in the workplace may choose instrumental issues over emancipatory ones, in which case adult educators need to listen to their learners and provide them with the curriculum they want. This does not mean however that workers and adult educators should vacate that space in favour of employers and educational management experts.

3.3 Using the lens: Issues for Investigation of Competency-based Education

The third part of this chapter deals with critical theory analyses of competency-based training which encompass workplace assessment. How useful is critical theory in analysing instrumental learning, including vocational learning? Who attaches 'usefulness' to critical theory analyses?

Some critical theory analyses of competency-based training (and by implication the workplace assessment of those competencies) are restricted to "ivory tower' type theory, which is removed from experiences of those who practice competency-based training. The possible danger for critical theorists is that "so long as their ideas seem to be interesting but of no direct relevance... they can be incorporated into the curriculum and discussed in abstraction without seriously challenging...behaviour and practice" (Thompson, 1997:15). Some critical theory analyses of competency-based training are discussed below and counternarratives are established, in order to sharpen the key issues for workplace assessment under the NOF.

Competencies as Behaviourism

Competency-based education has been characterised as a manifestation of behaviourism by some critical theorists (Codd, 1994 & 1995; Hall, 1995) whereby the curriculum is broken down into a series of behaviourist outcomes becoming fragmented and conservative. It is characterised as the product of technocratic rationality (Codd, 1997). Education became a commodity with the introduction of competency-based training, which came about as the result of a "perceived crisis of legitimation" (Codd, 1997:10). This socio-political crisis arose because the state was perceived as not being able to fulfil the expectations of the population to reward effort. Knowledge for its own sake and critical knowledge are contrasted with the 'new vocationalism' (Usher, 1997) of 'accountable' competency-based education. Collins (1998) further develops the behaviourist critique by drawing an analogy with Taylorism, a management theory that reduces work processes into their component parts. Accordingly, competency-based learning involves pre-packaging learning into standardized modules and, as with Taylorism, creating a more efficient workforce, yet also results in greater alienation and deskilling for workers. Competency-based education (CBE) is portrayed as reductionist, not critical knowledge or knowledge for its own sake, a simplistic list of outcomes that cannot really encompass learning and the complexities of practical action.

A counter-narrative may be developed to the critique of reductionism and behaviourism. The critique may emanate from critical theorists who are protecting their own patch, engaging in academic snobbery, advocating knowledge and denigrating practice. Practice-

based learning in the workplace is possibly not served by unquestioning adherence to traditional liberal education (Beckett & Hager, 2002). Furthermore, knowledge for its own sake and even critical knowledge has long been commodified, in much the same way as competencies. The university degree, which is ostensibly the site for learning for its own sake and critical knowledge, is nevertheless a gate-keeping instrument, which operates as a screening device for employers (Eagle & de Bruin, 2000). It is seen as "a certificate of diligence and perseverance for employers" (ibid:27). Critical theorists have already been subject to critique, notably from postmodernist feminist theory (Lather, 1995), which identifies the self-serving nature of their liberatory discourse. Privileged, university-based analyses of the NQF can also be scrutinised through a post-critical theory lens. Specifying outcomes for learning in knowledge-based areas such as the study of Shakespeare is seen as not possible or appropriate by some academics, for example Roberts (1997). This could mean that adult educators are "let of the hook" when engaged in teaching knowledge that has no direct application in vocational practice. They are not required to justify their assessment decisions. Yet knowledge is invariably assessed in terms of doing something with it. Criticisms of behaviourism are met in part by pointing to the fairness intrinsic in outlining assessment objectives before the assessment takes place and the potential for the assessment of prior learning (ibid). A national qualifications system with publicly articulated criteria is more likely to result in justifiable decisions about the correctness of performance being made. Moreover, in response to accusations of behaviourism, competency based training can integrate theory and practice (Hager, 1995).

Vocational education is concerned with what the learner does with the knowledge and skill learned; probably vocational education is less concerned with knowledge for its own sake and is therefore primarily concerned with instrumental or practical knowledge. Adult educators who are engaged in developing this instrumental or practical knowledge may operate within liminal spaces, for example within the space where conflict between workers and management may occur (Seddon, 2001). Critical knowledge may develop and this knowledge may be acted upon, according to the circumstances of the trainee, thus becoming a behavioural outcome. According to Usher (1997) if they simply teach how to be a more efficient worker, without questioning any of the underlying structures, they are engaging in indoctrination. However, critical or emancipatory knowledge may have no behavioural outcome or the behavioural outcome may not be immediately obvious, not

made explicit within the learning outcomes of the qualification and possibly dangerous for the trainee to pursue because of unequal power relationships within the workplace. The learner then makes a choice according to circumstances about what they might do with this knowledge. The socio-political context of workplace training and assessment is not simply technical and value-free; moral and political contradictions may be played out that reflect inequalities of power and access to resources.

Other types of knowledge that are about why we work in a particular way and processes reasoning behind behaviours in the workplace lend themselves less readily to accusations of surface behaviourism, nevertheless vocational learning is concerned with how people impact upon the environment through work. Vocational learning that is assessed through the manifestation of behavioural outcomes is therefore no more or less in quality than learning knowledge for its own sake; it is merely for a different purpose and just as valid.

Vested Power Interests

Some critical theory analyses of competency-based education characterise it as operating in favour of vested power interests, habituating learners to low-skilled, alienating occupations, not allowing them to question control over the division of labour into planning or expertise and "hands-on" performance (Collins, 1998). Another theoretical issue is that of hegemonic replication. In much the same way that Apple (1996) identified schools reproducing social relationships in the upcoming generation, including political, social and economic inequalities, vocational training is now reproducing relationships within workplaces. Critical pedagogy should emphasise the quality of life experienced at work, and develop a "counter-discourse" (ibid:104) to oppose a purely corporate agenda for the connection between education and work. The internationally competitive 'highskill, high-wage economy' creed may be a hegemonic argument designed to win over workers (Usher, 1997; Noble, 1997). Noble (1997) notes that American workers who engage in "thinking for a living" have the incongruous experience of deskilling, layoffs and a scarcity of meaningful, skilled work. To advocate transforming the economy through education policy is, in effect, blaming the victim "as long as multinational corporations could shut down plants, go offshore, bust unions, and deskill or automate jobs without constraint" (ibid: 8). Moreover, labour skills are in abundance in the US economy and the 'human resource development' and "Total Quality Management" solutions for the economy are simply denial (ibid). They are a strategy to win workers over and undermine the trade union movement (Gortz, 1989, in Noble, 1997). The 'learning organisation' theories advocated by Marsick & Watkins (1993, in Spencer, 2001) and Senge (1990, in ibid) disguise a corporate disregard for the human rights of employees and the greedy nature of corporations' response to the globalised economy. The bottom line of corporations is productivity and profit and the learning organisation ideology promotes increased worker flexibility, the capacity for change and or innovation to that end. The net effect for workers is that they develop a keenness to contribute their creativity and critical thinking to the firm, yet this is not recognised or rewarded in any way, the corporate move to find cheap labour is not reversed and processes of company down-sizing and casualisation continue unabated.

Spencer (2001) points to research on new forms of organisational learning which report a lack of successful international examples of good practice. Further criticisms of the influential learning organisation model are that it is does not value learning that is not made tacit or does not fit the needs of the organisation. It sees workers as "learners-in-deficit" who should question their deepest personal beliefs and change in order to survive (Fenwick, 1998). There are "sites of constraint" (Foucault, 1980:131) that operate within company training and assessment. Innovations in products or processes may be permissible, but not questions about the degree of company control over profit, for example. There is no questioning of the needs of the organisation or the managerial viewpoint; the notion of "empowerment" is illusory.

In NZ, the claims of the organisational learning movement have not been borne out in terms of real wages, which have declined over the last ten years (Dwyer, 2000). The more recent upswing in the NZ economy (NZ Govt, 2003) points to a lower rate of unemployment, yet it is clear from this same report that NZ's economy is now deeply enmeshed in the global economy, and therefore highly volatile, and unpredictable for workers. The NQF, and thus workplace assessment, is undoubtedly implicated in the corporate agenda for work in NZ. However the curriculum and agenda for the NQF is probably more complex and contested than simple business interest. The NQF was initially

instigated as a social-democratic reform process, stemming from notions of life-long education and tripartite (government, labour and employer) social progress (Law, 1998). The counter-narrative for this critique of workplace assessment is told in the support given to it by organised labour; they see it as beneficial to their interests.

Worker Support for Workplace Learning

The "high wage, high skill, high trust, quality export economy" (CTU, 2002) continues as a worldwide and local manifestation of the union movement's response to globalised capital, despite the argument that competency-based training operates in the interests of employers. One difficulty is this element of vocational educational policy in a number of nations is based on a similar argument for developing competitiveness, yet they cannot all win this competition at the same time! Another problem is that competency-based training is a "seductive text" (Usher, 1997) that creates its own world, its own internal justifications and therefore rhetorical appeal. The competency-based argument is effective because it combines behaviouralism with a "humanistic face". References to learner autonomy and control, effectiveness and self-direction mask its underlying power relations. Usher observed that "CBET"s (Competency-based education and training) seductive appeal is heightened by being removed from any implication with power" (ibid:7). Spencer (2001) points to a danger implicit in this capturing of worker subjectivity, which has been overlooked:

"the equally brave new world of pedagogics in relation to 'work and learning' will become part of the new forms of oppression and control in the workplace" (Forrester, 1999, in Spencer, 2001:38).

Workplace learning operates to capture worker "subjectivity" (Spencer, 2001; Solomon, 2001) and turn it into a resource to serve the corporation. Experiential learning as an educational model is also implicated insofar that it captures the reflective nature of worker experience and matches this with the company's purposes (Usher & Solomon, 1999). The notion of the "enterprising self" is particularly relevant: "Workers are expected to be ambitious, self-reliant, self-reflexive constructors of their own work capacities, biographies and success" (Fenwick, 2001:12). Workers are disciplined through the self-regulating nature of workplace learning.

A counter-narrative explanation for the popularity of competency-based training with trade unions is that it is perceived as a way for workers to improve their working conditions and life chances. A NZ trade unionist noted: "I've never met a worker who doesn't want to learn" (Conway, 2002). Workers do want to learn but they are also concerned about where and when, in whose time and how much this learning would impinge upon their private lives. Some learning directly benefits workers, for example learning how to represent colleagues or how to work in a way that is less exhausting or stressful (Spencer, 2001). Unions resist training that is restricted to narrow, company-based learning and advocate training that leads to opportunities for enhanced worker participation and re-skilling (Spencer, 1998; CTU, 2003). Workers are frequently dissatisfied with the boring, repetitive nature of work for which they are overqualified (Lowe, 2000) and workplace learning may offer workers a way to make their work more interesting and fulfilling. The notion that workers are merely driven into learning as oppressed subjects is too simplistic; they do exercise "agency" (Fenwick, 2001) and have the capacity to resist or alter the corporate agenda in individual and organised ways; for example, workers may resist the increase in workload represented by workplace learning.

In conclusion, workplace learning, manifested by competency-based training, has always offered resistance to the brutalising effects of the market (Thompson, 1997) yet it holds within itself possibilities for repression. Useful research into workplace learning and assessment therefore explores how far this learning benefits workers in increased levels of job satisfaction and material advantage and in how it may contribute to repression and increased surveillance within workplaces.

3.4: Focussing the Lens: Issues for Field work on Workplace Assessment

Some key issues for field work on workplace assessment are presented in this fourth part of the theoretical chapter. The first research question for this project was to review the stated intentions for the workplace assessment project under the NQF in NZ since 1990. The second research question, which has been the subject of this chapter, was to explore how the intentions of the initiators of workplace assessment can be analysed in terms of critical theory. The third overall research question, which will be addressed in subsequent

chapters, was to describe how the assessors and candidates in a particular ambulance service perceive their experiences of workplace assessment and to draw conclusions in the light of critical theory.

Field work allows the telling of counternarratives by those who experience industry training, possibly as not the 'good life' but as additional repression, another burden added to the sphere of work, intruding into their life-world. The field work will investigate in what ways workplace assessment impinges on the private sphere of employees. Where does the learning take place, is it at home or in the workplace where costs are borne by employers? Who pays for workplace training, is the cost offloaded onto employees or are they subsidised and able to 'earn while they learn'? The field work will investigate how much benefit is recouped by the learners themselves, in terms of skill-based pay for example. It will also inquire how learners may realise an interest in the portability of learning and certification. How far do the business enterprises gain trained and competent staff, and how much do the individual learners gain enhanced work satisfaction and labour market power, a traditional social-democratic model for education? A relevant question for this research therefore is: how far do candidates for workplace assessment experience learning and qualifications gained as increasing their well-being?

The field work will investigate the motivations or pressures to become involved in gaining qualifications through workplace assessment. Is a promise held out for increasing worker involvement and control? Is this, like the learning organisation, a way of harnessing worker enthusiasm, without reward tied to pay or better conditions? Or, is workplace learning developing towards communicative action and thus emancipatory in its effects? Is it operating in liminal spaces within workplaces where opportunities for emancipatory critique are captured by learners and adult educators? What of employee "buy-in" to the notions of the 'learning organization': flexibility, innovation and preparedness for change?

"Workers who...will throw themselves heart and soul into the work of the company {...] workers must be 'eager to stay', but also 'ready to leave [...] the new capitalism is now quite open about the need to socialise people into 'communities of practice' that position people to be certain kinds of people" (Gee et al, 1996:19-21 in Schied, Howell, Carter & Preston, 1998:286.)

How far does success in workplace assessment (and training) relate to "learning organisation" attitudes being openly articulated by learners in the ambulance workplace?

A third connected issue is the role of critical reason in workplace assessments. How far do workplace assessors act as "jugs" who are engaged in "pouring" knowledge into the minds of trainees and then merely checking how well this knowledge has been retained? Do practices of workplace assessment constitute a dialogue between equals engaged in the praxis of critical reason? How far are workplace assessors willing to accept departures from accepted workplace standards (also a pre-requisite for the learning organisation to succeed)? When do assessors and candidates believe they tap into knowledge and engage in critical reason? Prescriptions for practice in workplace assessment are deeply influenced by positivist theory; assessment judgments are supposedly objective, unbiased and based on observations and evidence, much like scientific conclusions. Critical theory has contributed a thorough scepticism towards this often self-serving notion of neutrality. This is not to advocate bias, rather to point out that the notion of the value-free neutrality of the workplace assessor as an unbiased expert may be subjected to a critical gaze.

In summary, the theoretical issues identified for investigation have been outlined in the preceding chapter. The following field work, which examines some lived practices of workplace assessment, may then be questioned within this critical theory framework. Listening to the voices of those directly involved in workplace assessment is intended to contribute towards an understanding of vested power interests, counternarratives, hegemonic replication and the application of critical reason or behaviourist methodologies. Tensions between the intended practice of competency based training and the "enacted or lived practices" (Mulcahy, 2000) may expose inconsistencies and differences in ways that the system in used. The theoretical lens is used again in later chapters which describe data analysis and conclusions for the data. The next chapter explores the methods and methodology engaged in the field work.

CHAPTER FOUR: METHODOLOGY AND METHODS

4.1 Methodology and Epistemology

Methodology is intimately connected to epistemology, which is the philosophy of knowledge, or even the underlying assumptions, of the researcher (Davidson & Tolich, 1999). The following paragraphs argue for a broadly constructionist epistemology upon which to base the methodology this research project. Rather than seeking to discover a social reality in the manner of positivist social science, the research project seeks to interpret and understand the workplace assessment of NQF qualifications as social interactions. Positivistic theory is limited when analysing human behaviour "people respond to specific situations as they see them and make values-led choices" (Schratz & Walker, 1999:3). A number of writers, including Lincoln & Guba (2000) and Denzin & Lincoln (2000), have noted that constructionism currently appears to be superseding positivism as the dominant paradigm (this term understood as in Kuhn (1970)). Crotty usefully defines constructionism as

"the view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practice being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context" (Crotty, 1998:42)

This constructionism, according to Crotty (ibid), is embodied in many theoretical perspectives, and it is argued that this includes the critical theory perspective utilised in this thesis. Within the constructionist perspective, meaning is not discovered but is constructed, in a process of questioning, examination and reflection, by the researcher embedded within their discipline. However, the constructionism underpinning this research does not encompass arguments of absolute relativism. The approaches offered by Popkewitz (1990), Kincheloe & McLaren (2000) and Gallagher (1992) have proved useful in connecting the critical theory 'lens' of this project with an appropriate qualitative research methodology. Popkewitz (1990) links critical theory and critical ethnography, which both strive to unmask hegemony and oppressive forces:

"Critical science" connects the ways in which social, cultural, and economic conditions produce a certain selectivity in the processes of teaching and the organisation of curriculum. Social practices contain contradictions, issues of power domination" (Popkewitz, 1990:9)

He argues that perceptions, attitudes and beliefs should be placed "in social and cultural horizons" (ibid:37). Moreover, along with critical hermeneutical researchers, Popkewitz locates methodology in intellectual traditions, seeing the boundaries and purposes of educational research as contingent upon historical traditions; in much the same way as Foucault (1979) sees permissible "discourses" as operating within certain intellectual traditions. Habermas (1981, in Gallagher, 1992) offers the intellectual tradition of critical theory as a basis for his critical hermeneutics. Schwandt (2000) examines the writing of Gadamer (1975), Gallagher (1992), Bernstein (1983) and others, in order to explain 'philosophical hermeneutics', which is not so much as a interpretative technique of understanding, but rather a recognition that 'understanding' is part of being human and that researchers can no more rid themselves of their "traditions" and standpoints than "step outside of (their) own skins" (Gallagher, 1992, in Schwandt, 2000:195). Understanding in research requires "the engagement of our biases" (ibid:195), which must nonetheless be self-critically examined.

Furthermore, the process of understanding is a dialogue between interpreter and human action rather than a simple discovery or interpretation of human action. Kincheloe & McLaren (2000) refer to the "hermeneutical circle" (a "circle" because no interpretation is ever absolutely final), which is employed by critical theory-grounded researchers as a "process of analysis in which interpreters seek the historical and social dynamics that shape textual interpretation" (ibid:286). It follows that the critical theory research process is one of relating the abstract to the concrete, relating the larger social forces that are at play to the lives of individuals and to "contextualise the particular" (ibid:287). This theoretical impetus to contextualise is one reason that the social interactions described and presented in this research project may be best understood when placed into the context of the social whole. Workplace assessment, as an educational policy and practice, makes best 'sense' when interpreted in the context of power disparities and hegemonic ideas.

Another reason for basing this research on a broadly constructionist and critical hermeneutical epistemology is that the positivist enthusiasm for scientific disinterest is frequently characterised by a drive to legitimation, which sanitises critical or social protest aspects of social science (Habermas, 1981). The juxtaposition of constructionism and positivism is however subjected to 'deconstruction' by Lather (1990). The refusal to reduce argument to binary oppositions and instead mobilise the power of "both/and" (ibid:328) explanations is an epistemological tool for research project analysis. This type of "resistance post-modernism" is useful for the critical theory researcher, as it avoids a values-bereft "ludic" postmodernist approach (Kincheloe & McLaren, 2000:292), particularly when the binaries critiqued are those that repress the less powerful, as in the juxtaposition of white/black, male/female, subjective/objective, mind/body and academic/vocational.

Methodology and Methods

Methodology refers to the general which is distinct from the research methods selected for a project. Davidson and Tolich (1999) describe research as employing either, or a combination of, deductive and inductive methods. Accordingly, this project blends both inductive and deductive data gathering and analysis methods. The use of an extensive literature survey and of a critical theory lens reveals elements of a deductive approach, although it is not as strictly developed as a series of hypotheses, which would unduly restrict the identification of questions and conclusions that the researcher had not previously considered. Qualitative interviews were selected, as an inductive research method that would allow examination of the experiences of those involved in the research subject area. This process began with intimations, questions, feelings and (almost) suspicions about the workings of workplace assessment and developed into the open-ended interviews outlined in section 4.2.

The critical hermeneutical perspective on methodology is useful when considering two other approaches which are further explored in the following paragraphs. Firstly, an objective/subjective dichotomy, which sets up quantitative or qualitative research methods in opposition to each other, was discarded as an inadequate basis for methodology. Secondly, "grounded theory" (Glaser & Strauss, 1967; Strauss, 1987) methodology was considered for this project. This was also discarded as it assumes that the perceptions, attitudes of people and their interpretations of events are reality.

Contrasting Qualitative and Quantitative Research Methods

The term "paradigm", describing a way of "looking at the world" (Davidson & Tolich, 2000:26), is useful in beginning a brief discussion of the selection of qualitative research methods in this project. Davidson and Tolich (ibid) argue that the two research methods, quantitative and qualitative, stem from differing paradigms, qualitative methods suiting the interpretative paradigm and quantitative methods fitting the scientific or positivistic approach. Quantitative research methods, including questionnaires, surveys and experiments, are concerned with consistency of results and seek to explain and generalise about the subject of the research. Qualitative research methods such as interviews, focus groups, participant observation or ethnographical field work seek to interpret and understand the research subject/s. Reinharz (1990) argues that quantitative research, because its methods require large samples, is frequently organised in hierarchically structured research teams, which are funded by government grants and corporations. It "requires capital" (Reinharz, 1990:298) and attracts therefore vested interests, resources and prestige. Qualitative research, on the other hand, requires the relatively cheap skills of listening, relationship forming and writing, "the skills of women and those without power" (ibid:299). However, a less contested and possibly more useful distinction between the two research approaches it that...

"...the quantitative approach provides the researcher with breadth while the qualitative provides them with depth" (Davidson & Tolich, 1999:115)

The notion of qualitative or quantitative research inquiry is best understood as a "methods-level term" (Guba, 1990:18) and is not a paradigm, as is perhaps the case with critical theory. Crotty (1998) also suggests that the divide in social research is not between qualitative and quantitative research but between objectivist research and constructionist and subjectivist epistemology. The term "paradigm wars" (Arksey & Knight, 1999:3; Gage, 1981, in Gorman, 2002) has been used to describe the ongoing debate within social science about the relative value of quantitative and qualitative research methodologies. This debate as been described as wasteful (Gorman, 2002); impoverishing and limiting social science research methods. It is more appropriate, Gorman (ibid) argues, for the researcher to select methodologies that appear to be most fitting for the research purpose. It is further argued that a pragmatic approach to selection may be more rewarding for researchers:

"qualitative and quantitative research methods simply provide the researcher with different tool-boxes' (Davidson & Tolich, 1999:115).

The researcher selects the best research methods according to the questions they wish to ask about the research subject, who they might wish to ask such questions and practical considerations of available resources. Pragmatics determines therefore, that qualitative research methods have been employed in this project, which is necessarily small-scale and to a large extent self-funded. In addition, curiosity about the perspective of the workplace assessors and candidates themselves lends itself to the selection of qualitative research methods.

Considering Symbolic Interactionism and Grounded Theory

Although pragmatism, as outlined above, appears to be a sound basis for the selection of research methods it is not an adequate basis for methodology or indeed social theory. The work of early pragmatists, like Dewey (1916), influenced later theories of symbolic interactionism (Blumer, 1969) and were the antecedents of grounded theory (Glaser, 1992). However, such theoretical bases for methodology were not adopted for this project. There appears to be a gap between critical theory and symbolic interactionism. Symbolic interactionism ends generally in an uncritical acceptance of culture, contrasting with the critical theory suspicion of culture. Critical research is concerned with "illuminating the relationship between power and culture" (Popkewitz, 1990:37). Crotty (1998) argues that knowledge is social in nature and that culture is an expression of this social constructionism. Critical theory is, however, suspicious of the interpretations and meaning "bequeathed" or imposed by culture, the accepted and unquestioned meaning being those that are hegemonic. Grounded theory involves the systematic generation of theory from data, this theory is then used to explain or interpret an issue or phenomenon. Grounded theory, like critical theory, is constructionist, insofar that the researcher constructs a theory to explain questions that arise in the research process.

The qualitative research methods of respondent interviews and subsequent coding and inductive data analysis selected for this project have much in common with grounded theory tools for analysis. Grounded theory offers useful methods-level constructs, such as methods to create research questions and to identify and code data. Yet it lacks the explanatory power of critical theory and the simple honesty of the researcher who

acknowledges their own theory and position, in this case a critical theory lens. Grounded theory was considered for this project but was ultimately discarded as the project itself was clearly based upon critical theory, and recognition was made of the "traditions" and "biases" (Gallagher, 1992, in Schwandt, 2000; Popkewitz, 1990; Kincheloe & McLaren, 2000) within which this research project is located.

The Selection of Qualitative Interviews

Interviews have become an all pervasive and uncritically accepted social practice: "an interview society" (Fontana & Frey, 2000:646). The intrusion of interviews into daily life takes many forms: market research phone calls that come when you are trying to cook dinner, Paul Holmes knocking on the doors of unfortunate 'news' media interview subjects and even the proliferation of oral interviews employed in qualitative research. It is salutary to be aware of the ways in which interviews themselves can be repressive and objectifying for their subjects and how the interview has become a taken-for-granted research tool (Mischler, 1986, in ibid:647). Concern about the manipulative and objectifying potential of interviews is further articulated by feminist writers, including Oakley (1981) and Reinharz (1992). Earlier technical advice which exhorted interviewers to be neutral and disinterested and to stringently expunge their own personal opinions from the process is subjected to critique (Schumnan, 1974, in Fontana & Frey, 2000). Interviews should be seen as a negotiated discourse and the interview responses as "actively constructed narratives", rather than a way to gain access to 'real' experience (Silvermann, 2000:825)

Notwithstanding the above strong critique of qualitative interviews, open-ended, semi-structured interviewing was chosen for two reasons, both closely associated to the nature of critical theory analysis. Firstly, critical theory explores the relations and interplays of power in social behaviour and sometimes hidden hegemonic aspects of the way things appear to be. Secondly critical theory, as a clearly partisan way of thinking, allies itself to those who have less power in social interactions and pursues questions about how their interests may be best promoted. These two considerations meant that qualitative interviews were attractive as a research method because the respondents were those involved in workplace assessment, rather than social policy-makers, workplace managers and education experts who had shaped and advocated workplace assessment.

Some further methodological considerations for research design are outlined in the following discussion of the ethical implications of this research project and of reliability and validity in the research.

Ethical Considerations

In his insightful analysis of "value neutrality", as immanent in the Enlightenment traditions of the autonomy of the self, Christians (2000) outlines four guidelines for inductive science that have been adopted by the major scholarly associations. These are informed consent, prohibition of deception, privacy and confidentiality and accuracy. This ethics section will firstly outline steps taken to protect the interests of participants, or their autonomy of self, in the design and development of the project. However, since ethics in social research is only partly about issues such as informed consent and confidentiality for participants, the second part of this discussion will link ethics in social research with the epistemology of the researcher.

According to the above 'traditional' ethical codes, informed consent was sought from the interviewees in order to protect their interests and to honestly inform them of what the research would entail. Interviewees were at first approached by a letter requesting their participation in an interview (Appendix One). This letter was accompanied by an information brochure that covered the aims and main questions for the research (Appendix Two). The information brochure described, as clearly as possible, the nature of the research interviews, the implications of the research and where and how the findings would be published. This information was also accompanied by the Consent Form (Appendix Three), which participants were invited to complete and return. All those who subsequently participated in the research signed and completed the consent form.

Damage to interviewees' interests could arise if they were negatively connected, perhaps in the workplace, to statements construed as critical towards employers or colleagues. This would then betray the trust they had placed in the interviewer. To avoid negative repercussions when the data was published, stringent efforts have been made to prevent personal identification of the participants in the presentation of the research findings. Confidentiality for the interview subjects was ensured by several methods. Firstly, the taped interviews were accessible only to the professional transcriber and the researcher/interviewer. In addition, references to names and particular circumstances were removed from the presentation of the findings so that respondents could not be individually identified. Lastly, individual names were replaced by coded references.

The ethics of social research are very much influenced by the nature of the relationship between the researcher and the "researched" in the roles, for example between doctors and patients or teachers and students. (Jahnke & Taipia, 1999; Snook, 1999). The potential for abuse is increased by power imbalances that may exist in this relationship. In the case of this project, the respondents had no particular work relationship, such as that of adult student, to the researcher and there was therefore no need to approach the Human Ethics Committee of the University for Approval. Moreover, the respondents were in a position of relative and equal power to that of the researcher, being employed as ambulance officers on a permanent or voluntary basis

The second set of ethical considerations, as outlined above, may be considered under the rubrics of social responsibility (Fine, Weiss, Weseen, & Wong, 2000), "interpretive sufficiency" (Christians, 2000:145) and exploration of the place of the researcher. When an academic researches the "other", (Fine et al, 2000; Lather,1995) the relationships between them may be hidden by the institution of social research. Neither the traditional tendency to value neutrality nor the ethnographic predilection to personalised references to the researcher's self can spare academics from these criticisms. For example, even the institutionalisation of "informed consent" may be critiqued as a strategy ...

"... that effectively releases the institution or funding agency from any liability and gives control of the research process to the researcher" (Fine et al, 2000:113).

Moreover the purposes of academic research depend on both the intended audience, and the political and media-mediated arguments in which the data becomes entangled. There is always the possibility that data which tells an exciting, voyeuristic "bad story" may damage the interests of the storytellers. Fine et al relate their worries that the deeply intimate and personal stories from their research with poor and disadvantaged women on welfare in the United States "might... feed our collective misunderstandings and

renderings of the poor" (ibid:117) and contribute to further repression. They advocate placing the stories of the individuals who are participants in research into social and historical context. Christians (2000) goes a little further and argues for methodologically "thick" interpretive sufficiency, which "... fulfils three conditions: it represents multiple voices, enhances moral discernment, and promotes social transformation" (ibid:145). The third problematic area in ethical discussions is the place of the researcher. Crotty (1999) invokes the notion of "intentionality" or interaction between object and subject, consciousness and the environment, rejecting both the Enlightenment rationality of objectivism and thorough subjectivism. He borrows Levi-Strauss's term "bricoleur" or a kind of artisan handy-person, who is closely associated and fascinated with the objects of the research. Critical hermeneutics, as a methodological base for this project entreats researchers to include their own standpoint in analysis of research. The notion of "bricoleur" provides a practical way to do this.

Research has inherent ethical risks in treating human beings as objects. This tendency should be limited by integrating the interests and needs of respondents engaged in the research project. For any research to be ethically justifiable it must improve the situation of human beings (Snook, 1999), so the ends of the research project should be put under ethical scrutiny as well as its means or methods. The literature survey of the establishment of the NQF revealed claims to increased economic and social well-being, and this research project aims to critically interpret the complex nature of those claims. The project certainly aims to understand how far workplace assessment contributes to the well-being of workers or perhaps to their increased surveillance within workplaces. More particularly, the considerations of the link between ethics and epistemology are met in the open employment of a critical theory 'lens' within this research project and this also performs an ethical function.

Reliability

Qualitative research such as that outlined in this project does not claim a high degree of reliability for all workplace assessments in New Zealand and its conclusions cannot be generalised for all workplace assessors in New Zealand. However, it is argued that the project has internal reliability, or consistency between different occasions when data is assigned to different categories. The process of coding the transcriptions of tapes, as

described in 4.2, allows access to the subjects' words, rather than only the interpretations of the researcher. This increases the reliability that patterns actually exist throughout data, as opposed to interpretations that the researcher may wish to make in order to support a hypothesis. Silverman (2000) further points to the importance of transcribing all the utterances in taped material, including "ums and ahs" and pauses so that all the nuances of meaning may be available for data analysis. Another method of increasing the internal reliability of the data analysis was to assign each respondent a coded identity. Each assessor was designated as A1, A2 and so on and each candidate was identified consistently as C1, C2 and so on. In this way patterns in the different respondents' views and comments were readily identifiable and verifiable.

Validity

Silverman's (2000) discussion of validity offers useful advice for a research project such as this one. He notes the potential for poor validity of qualitative research, describing the complaint of anecdotalism made by Mehan (1979, in Silverman, 2000). Qualitative research may be reduced to a mere collection of fragmented stories, which do not relate and represent data in any significant way. Validity may be said, however, to be gained by employing several methods, such as by triangulating research data gathered from differing sources (Denzin, 1978). The use of between-method triangulation (Denzin, 1978, in Arksey & Knight, 1999) strives towards completeness, a full picture. Research has been likened to describing an elephant just from the feel of its constituent parts (the tusk the trunk, the tail!) The metaphor is said to illustrate that: "we each perceive objects and events differently ... and are likely to disagree about which about which direction we should go" (Schratz & Walker, 1999:16). For this reason there is some use of quantitative data where appropriate.

Figures supplied by the New Zealand Ambulance Education Council (NZAEC) constitute a small part of the data presented and interpreted in this research project, along with data which tabulates attributes of assessors and candidates. Using tabulations or simple counting techniques, possibly borrowed from quantitative research, where appropriate, increases the likelihood of validity. Moreover, the field work data was gathered from two distinctive groups – workplace assessors and candidates, and the literature and theory

discussion further triangulates this data. Silvermann (2000), however, foresees potential flaws in employing triangulation, particularly in the volume of data analysis and multiplicity of techniques required. For this reason this project employs only limited triangulation of data, as described above. Another technique employed to ensure validity is respondent validation, which involved going back to the interview subjects with transcripts of the findings and the tentative results. This may also be flawed (Silverman, 2000), as it unjustifiably privileges interviewees' interpretations of the data. Nevertheless, for ethical reasons the respondents were offered an opportunity to comment on the transcripts of the interviews.

Alternatives to respondent validation offered by Silvermann include the "refutability principle" using Popper's critical method of exposing assumptions to avoid "spurious connections" (ibid:178). Silvermann advocates the constant comparison of data and comprehensive data treatment. In this way categories of generalisations may be generated through the analysis of data and the whole body of data is systematically sifted through in the attempt to refine and expand such categories. Silverman also offers "deviant-case analysis", or constantly searching for what is different and does not appear to fit into the pattern, as a way to strengthen the validity of research. This project uses, therefore, qualitative computer software methods to generate categories and to sift through the data.

4.2 A Description of Methods in the Research Process

A personal research journal kept by the researcher has provided the basis for the following descriptions of the research process as it unfolded over the research period between 2000 and 2003. These diary notes usefully recorded the major events as they happened, making observations on the process of organising the research project and recording the various frustrations and satisfactions along the way.

Selecting and refining the research problem

According to a critical hermeneutical approach, the type of research questions asked are determined by the researcher's theoretical assumptions and the nature of these questions may influence the selection of the research methods. This research began with identifying a research problem and refining it in a research proposal, which was developed in the early

stages of the project. Bouma (1996) suggests that a process of identifying major concepts and issues is a useful way to select and refine the research problem. He also advocates the identification of research objectives as a broad focus for qualitative research that seeks to describe and interpret, rather than to explain, social interactions. This contrasts to the identification of a research hypothesis, which risks overly influencing the data gathered by the research process and pre-determining its findings. Accordingly, in this project, the overall research objective is to describe what is happening in workplace assessment and to contrast this with its original "design" intentions; put very simply "Is Workplace Assessment Working?" This was operationalised by constructing four key research questions. Firstly, what were the stated intentions of those who initiated the workplace assessment project in New Zealand since 1990? Second, how can the intentions of the initiators of workplace assessment be analysed in terms of critical theory? Thirdly, how do assessors and candidates in a nominated context, the Ambulance Industry, perceive their experiences of workplace assessment and how may these perceptions be interpreted in the light of a critical theory lens? And lastly, to what extent have the intentions of the initiators of the workplace assessment model been realised?

The first and second research questions were explored in depth in preceding chapters of this thesis. However, the third research question is yet to be addressed, and chapters four and five will explore the experiences and perceptions of assessors and candidates in a nominated case study, the Ambulance Service. The intention is to better understand some of the issues of workplace assessment by conducting an in-depth exploration of the motivations, feelings and thinking of workplace assessors and candidates. The fourth research question constitutes the analysis of data arising from the interviews. The task here is to relate what assessors and candidates are saying back to the literature survey using the critical theory lens. This forms the basis for later chapters which analyse the field work data and draw conclusions for the project.

Sampling

The "theoretical" (Davidson & Tolich, 1999) or "purposive" (Bouma, 1996) sampling process involves the deliberate selection of sample groups according to judgements made by the researcher about how indicative the data would be. Purposive sampling was used in

this project; the selection of sample groups stemmed in part from the literature survey and critical theory chapter, which indicated that research into the experiences and perceptions of those actually involved in workplace assessment may constitute "essential and typical units" (Davidson & Tolich,1999).

Data provided by NZAEC in September 2000 on all NZ ambulance officers involved in workplace assessment shows that the interview sample was representative of the wider group of workplace assessors and candidates in the NZ ambulance industry. The total number of candidates assessed in the period analysed between July-September 2000 was sixty-three. The total number of assessors registered with NZAEC in 2000 was sixty. Both groups were all of the candidates and assessors active in New Zealand at that time. The interview group was drawn only from Wellington Free Ambulance.

In the total group of candidates and assessors in NZ, there were significant differences in the gender ratio between assessors and candidates. Half the candidates for all NZ assessments were women (thirty-two out of sixty-three); this is at variance with the gender balance of assessors who were mostly men (forty-eight out of sixty). Most candidates for the National Certificate were volunteer (unpaid) ambulance officers, which may explain the large numbers of women candidates in total. The interview group and the total group showed similar proportions of gender and volunteer/permanent balance. The interview sample of six assessors comprised five men and one woman, all being permanent officers. The interview sample of eight candidates comprised five men and three woman, one man and two women being volunteers.

Data was also provided about the ethnicity of assessors and candidates, showing little difference between the groups of assessors and candidates, although the data may speak powerfully about earlier emancipatory hopes for workplace assessments. There was one Maori assessor, two Maori candidates, and one Pacific Nations candidate in the groups of all NZ assessors and candidates. The statistics provided showed that the remaining assessors and candidates were European. This was typical of the interview samples, who were all European. Data was also available on candidates' ages, which peaked in the early thirties and sloped away down to the late fifties. There was no comparable data available

on assessor age, so that any comparisons or points of clear sameness or difference could not be identified.

Interviewing both assessors and candidates establishes internal validity within the project. These mutually exclusive categories of respondents constitute a data variable, allowing comparative analysis of data. Therefore an important comparative set of categories in the data is the differing perceptions of assessors and candidates. Three of the eight candidates later revealed that they had completed workplace assessments with individual assessors who were in the interview group; others either did not reveal their assessors' identity or had worked with different assessors, who were not interviewed.

In 2000, I, as the researcher, approached the NZAEC for assistance in gaining access to assessor research respondents. The NZAEC then approached ambulance officers who lived around the Wellington area, for practical access reasons, focusing on those assessors who had been recently active in completing workplace assessments. Again in 2001 and 2002, I approached NZAEC and Wellington Free Ambulance directly, for assistance in gaining access for the second round of interviews with the candidates. My network of contacts had expanded by 2002.

Invitations for participation in the research project were issued to all those candidates who had completed NQF workplace assessments at Wellington Free Ambulance between January and July 2002. Invitations, or more correctly requests for participation in an interview, were issued in the form of an introductory letter (Appendix One) and a descriptive leaflet, which explained the purpose of the workplace assessment research project (see Appendix Two). The invitation pack, which was issued either as a letter or email, also contained the consent form. The same process was followed in 2000 for interviews of six ambulance workplace assessors.

The Interviews

The eight candidate interviews were conducted over a period of approximately six months, between July 2002 and February 2003. The six assessors were interviewed between July and September 2000. The two sets of data were later integrated into a larger pool of data.

Two differences between the groups are readily identifiable; they were interviewed two years apart and the interviews were of differing length. The assessor interviews were also part of an earlier project (Hoy-Mack, 2000). The interviews with the assessors took half an hour but the candidate interviews were increased to one hour to allow greater depth. The half-hour interviews had been offered to encourage the assessors to become involved, bearing in mind the multiple demands on ambulance officers' time.

Although the respondents expressed willingness to be involved in the project, the demanding nature of ambulance work made it seldom practical to attempt interviews while on duty, because of the potential for interruptions. Interviews were therefore done between, after or before shifts. Seven of the fourteen interviews were conducted at the ambulance officer's place of work, namely ambulance stations around the Wellington area. The remaining interviews were conducted in the homes of ambulance officers, between shifts. The atmosphere of the interviews in ambulance officer's homes was relaxed and I, as the researcher, felt welcomed in every case. The interviews in the ambulance stations were conducted in small offices, fortunately away from the busy areas, although in two cases the officers' pager was on, so that they were available for call-out. The atmosphere of the ambulance station interviews was also informal. The culture of the ambulance world permeated all the interviews and this contextual nature of the interviews was interesting in itself. The attitudes, emotions, opinions, sense of humour (often "black"!) and wisdom of all the ambulance officers allowed me to place the intentions for workplace assessment into a particular context; in short these interviews made the theory real. Moreover it was their articulation of a genuine and modest belief in the value of community service that made the interviews satisfying for me, as a participant in the research interviews.

Ann Opie points out that:

"A research interview has one primary objective. The researcher's objective is to facilitate respondents' descriptions and reflections on their experiences." (Opie, 1999:225)

To aid this process of facilitation, a loose set of interview questions was devised (see Appendix Four), covering the positive and negatives of workplace assessment for the respondents and any changes they would make. The open-ended question schedule allowed the interviewees to develop the points they felt were significant without too much prompting from the interviewer. However, there was an additional, second layer of interview questions (see Appendix Five), devised as possible follow-ups and used at times to explore various themes that emerged. The interviews were audio-taped at the time of interview in order to capture auditory nuances and to provide an evidence-based record of what was said rather than relying directly on interpretation by the interviewer at the time, as with on-the-spot note taking.

The assessor interviews were transcribed directly by me, the interviewer, and the candidate interviews were professionally transcribed by a typist. The transcriptions included soft utterances. Pauses were indicated by commas for short pauses and triple dots for longer pauses. The transcriptions were then checked by the interviewer, who listened to the tapes several times while reading the transcription on the computer screen making any necessary corrections and filling in spaces representing utterances that had been unintelligible for the transcriber. The transcribed interviews were then emailed to each of the participants, and their feedback was sought. Email message responses were received from the respondents which indicated they felt the transcriptions were accurate and they were happy to share the information.

Coding

The coding of the data from interview transcripts for categorisation and sorting provides a useful first step in the process of data analysis (Davidson & Tolich, 1999). Such coding is employed in descriptions of grounded theory (Glaser & Strauss, 1967) and analytical induction, whereby themes arise from the data coding process.

Codes or loosely descriptive analytical categories were initially identified though the reading and rereading of interview transcripts in a process of "positive and negative coding" or "open coding" by Davidson & Tolich (1999). They recommend that the positive codes, which are categories that arise and may be of interest for data analysis, are annotated in the right-hand column of a page. The negative codes, suggested as the left-hand column, are observations by the researcher which are a critical reflection on the data collection method itself, covering perhaps questioning techniques, the use of prompts by the interviewer and relevancy of the respondents' answers. I used these marking up techniques with the aid of a personal computer. Codes arose from at least three different

sources: the literature review, the critical theory lens, and the inductive process of reading the interview transcripts. The process of reading the interview transcripts developed new shades of meaning and changed the emphasis for the themes emerging from the literature review and critical theory lens.

The Use of Computer-aided Coding and Collation of data

This research project employed computer-aided coding as an inductive method to identify a number of codes or loose categories of meaning and then to collate data under these categories or codes for a number of reasons. My earlier project on workplace assessors (Hoy-Mack, 2000) using coloured highlighters and physical cut and paste methods, revealed weaknesses in the capabilities of manual coding of data. There is the potential for data to be 'lost' and 'stranded' in this manual process. Moreover, the on-screen abilities of a computer-based package for the analysis of qualitative data (QDA) enables more rapid and sophisticated coding through the construction of data nodes or categories, which are arranged under node trees. A computer-based package can also employ word search capabilities to quickly "scoop up" clusters of synonyms and related themes (email conversation with Jensen, 2003) and quickly sorts these into codes which are identified through close reading and re-reading of the transcripts. Lastly, the use of computer-based coding packages may enable simultaneous memo writing, or bridging analysis, while the data is being read and coded (Richards, 2000).

Weitzman (2000) suggests such practical considerations are often a basis for making intelligent choices when facing the selection of QDA programmes. Three different computer software packages for qualitative data coding and analysis were considered for this project: Ethnograph, NUD*ist and NVivo, the updated version of NUD*ist. NVivo was eventually selected as the most appropriate tool as it had several useful features. Firstly any document can be imported into NVivo. There is no requirement for a particular format as with the other two software programmes. Secondly as any rich text data can be used it is more convenient and rapid. Thirdly, it became apparent that NVivo is more intuitive and therefore more user-friendly and easier to learn, with good tutorial support available on the World Wide Web.

It should be noted that the computer does not do any thinking for the researcher; rather it behaves as a facilitative tool, enabling the researcher to focus more easily on overall patterns of meaning and the process of data analysis. Weitzman (2000) outlines some "false fears" and "real fears" ensuing from the use of computers in qualitative research. False fears include supposing that computers will do the research and researchers will no longer have to analyse data themselves. Real fears have more to do with the misuse of auto-coding and key search features which serve to de-contextualise what people are saying, to elide it without any real consideration of the who said it, why, and what they could have meant by it. If QDA software is misused it can become "quick and dirty" qualitative research (Lee & Fielding, 1991:8, in Weitzman, 2000) tempting researchers into premature theorising. Weitzman (ibid) does point, however, to real benefits of QDA software programmes: closeness to data (through the use of linked codes, documents and text bites), consistency (through searching for all the data connected to a category, not just what the researcher chooses) and speed (being able to quickly search and re-search texts, assign and re-assign codes and pull together large amounts of text relatively quickly).

Bridging Analysis: NVivo Node Coding Reports, Coding Stripes and Attributes

The discussion moves now to a specific detail about how NVivo, a qualitative software research tool, was used in this research project. From the literature review, a number of loose categories had emerged as a form of bridging analysis (Richards, 2000); these included: the contested nature of the ideological and social underpinnings of workplace assessment and the NQF, debates over competency-based assessment (was it atomistic and behaviourist and/or holistic and knowledge-based, did it discourage excellence and consistency in standards?) the practical implications of workplace assessment such as its cost and volume and debates around the role of the workplace assessor, assessor judgements and the methodology of assessments. The critical theory review also revealed categories for investigation: the extent to which competency based assessment in the workplace is implicated in replication of power of dominant groups, as a hegemonic practice, the promotion of reason and objectivity as a prescription for practice in competency-based assessments, the interpretation of counternarratives in this social context. Initial analysis of the interview transcripts blended and reformed these earlier categories in a fluid way. Further categories identified through transcript analysis included:

motivations for involvement with workplace assessment and relationships between assessors and candidates

The 'node tree' in NVivo became the platform to construct the categories that emerged from the interview data. In all, 69 nodes (see Appendix Six) were constructed from the interview transcripts. These nodes later tended to coalesce and were combined into larger groups or categories. The Node Coding Report function in NVivo gathered together coded data from the interviews and retrieved it in the form of manageable reports. These reports were then used as one of the tools for the analysis of data, which later resulted in the presentation of the research findings (Chapter Five) and the discussion of these findings (Chapter Six).

In addition to the Node Coding Reports, the interview transcripts were analysed using another NVivo capability - 'coding stripes', which are a visual representation, in the right hand column, of multiple codes identified within a text. The process of reviewing the coding stripes allowed further reviewing of the transcripts to see how different codes overlapped and alerted me, as the researcher, to parts of the text which had been previously ignored.

The third capability of NVivo that was used in this project was identifying 'attributes' of interview subjects or texts. This function could, for example, identify all those candidates who were volunteers, female and who found the assessment process daunting. This proved less useful as this was a relatively small project, with approximately 200 transcribed interview pages in total and many of these intersections could be identified intuitively and rapidly by the interviewer/researcher. Nevertheless attribute functions were used and tended to back up the intuitions of the researcher.

4.3 Presentation, Interpretation and Implications of the Research Data

Chapter Five of the thesis will present the findings from the field work, making intensive use of computer-aided data analysis as described above. The data is organised into codes or categories and presented to reflect a direct voice for the interviewees. The notion of "polyphonic" voice ensures that the interviewees are not "collapsed together and reported

as one" (Fontana & Frey, 2000:657), in order to minimise interviewer influence. The grounded theorist Glaser advises researchers to guard against "forcing" the data and to "trust in patterning" in order to "pick up categories" within the data (Glaser & Strauss, 1967, in Arksey & Knight, 1999:5). There is extensive use of direct quotations of the interviewees to support interpretations and observations about categories of data; often two or more quotes are presented in the findings in order to support such interpretations. Interviewees were assigned coded identities in the presentation of this quoted data, in order to protect their privacy and to encourage internal reliability.

Chapter Six will analyse the data in terms of the literature review and critical theory, drawing out the meanings of the findings. As argued earlier in this chapter, hermeneutical methodology has the capacity to tease out connections between social and historical theories and the lives of individuals participating in the research, to interpret their experiences. The interpretative chapter will therefore constitute a further point of entry into a hermeneutic circle (Kincheloe & McLaren, 2000) on the subject of workplace assessment.

Lastly, Chapter Seven will cover the implications of the research project for practice in the assessment of vocational education and for policy-setters who may influence that practice. Some research attempts to answer the policy questions 'where are we going?" and "why are we going in this direction at all?" Other research questions attempt to answer the questions "how are we getting there?" and "what is the best way to get there?" In a discussion of the relation of research to policy formulation, Rist (2000) outlines three stages in the policy cycle at which qualitative research may have a bearing on decision making processes. Rist's emphasis is on processes rather than 'an event' because policy decisions are often unplanned, and coincidental in nature. These three stages are policy formulation, policy implementation and policy accountability. At the formulation stage, it has been noted that the introduction of competency-based education was not sufficiently based on research (Codd, 1999). Research on the ground level applications of policy can inform policy makers at the implementation stage, filling an information need and answering the question "are we going where we think we're going?" When a policy or

programme is "sufficiently mature" (Rist, 2000:1009) the impact of the policy is a suitable subject for qualitative research:

"Qualitative research allows for the study of both anticipated and unanticipated outcomes, changes in understandings and perceptions as a result of the efforts of the programmes or policy, the direction and intensity of any social changes that results from the program, and the strengths and weaknesses of the administrative /organizational structure that was used to operationalize the program" (ibid:1009).

It is at the second and third stages that this project is located. Yet, there can be no automatic assumptions made about the usefulness, relevance or noteworthiness of any such small-scale Masters-level research project as this one. The research project has (only and simply) the potential to be part of the information base for an ongoing discussion between academic research and policy formulation. Possibly however, the project may differ from some other academic research as it emanates not only from the viewpoint of the academy and is therefore somewhat differently placed when attempting to breach the academic/vocational divide.

CHAPTER FIVE: PRESENTATION OF FINDINGS OF THE INTERVIEWS

This chapter outlines the findings from the interview data. These findings stem from the thoughts and viewpoints about workplace assessment from some of those personally involved, in this case the ambulance service in Wellington between 2000 and 2002. The chapter relates and presents what they said during these interviews, organising the data using categorisation methods. The 'nodes' are grouped into several broad categories and each category is outlined in an inductive process of interrogation. Questions were asked of the data: 'What do the respondents say about this category of ideas?', 'How can the research summarize their viewpoints?', "What differing views are there, and is there any unanimity between the two groups?', 'How do these differences reflect identity?' and 'What the indications are for further interpretation?' The conclusions for this chapter (5.7) bridge the data to its meaning; presaging the next discussion chapter, which relates the research findings back to the literature and to critical theory ideas, another link in the 'hermeneutic circle'.

5.1 The value of NQF qualifications and motivations for involvement

Interviewees were asked for their opinions of the positive and negative features of workplace assessment; this provided a significant body of data for the first category which presents the candidate's motivations for taking up NQF qualifications, as well as the assessors' motivations for taking on the role. The critical theory chapter discussed hegemonic explanations for the appeal of workplace assessment and the NQF. Therefore I was interested to hear why assessors and candidates had taken it up.

Value and Motivations for Candidates

The motivations of the candidates for completing the qualifications were varied, some candidates had multiple motivations. These covered: community engagement, better salary and career prospects, pressure from the service, the prospect of a permanent job with the ambulance service and wanting to improve their own work as an ambulance officer.

Community engagement - or the wish to help people was a clear motivation for some candidates and ambulance work was their concrete expression of this desire. One manager described the volunteers who did the National Certificate as people who:

"...always had a hankering for ambulance work or doing something out in the community" (D1).

Volunteer officers frequently described their own motivations in terms of caritative community involvement. However, community involvement and improvement of these helping skills came at a price for the volunteer candidates. The volunteer candidates I spoke to were all either currently getting qualified or had recently completed the qualifications. None were merely contemplating their training. They were the survivors, a minority who had not dropped out of the training programme, and they articulated a certain amount of tenacity and drive.

"It is tough, but there again, if you want to strive and achieve something you've got to make sacrifices to do it, [...] you know you've got a goal to get to" (J1)

The drop-out rate for volunteers was confirmed by one experienced officer, who noted that five times as many started the basic training courses as completed them. Combining the volunteer role with their paid day job as well as doing ambulance training was difficult for the volunteer candidates.

"It can be hard some weeks, you do 40/50 hours of work then you do another 14 in the weekends or at night." (S2)

Another motivation for candidates was that they wanted to improve their personal work as an ambulance officer. For example, a permanent officer related that one of his motivations was autonomy, as well as a higher level of expertise.

"More knowledge. Having an idea of [...] what's going on with the patient, not having to call for assistance as much, so giving you a bit more independence." (D2)

The status attached to the higher qualification had a definite appeal for some officers.

"People look up to me now, especially, [...] perhaps people with less qualifications look towards you for maybe a bit of guidance." (D3)

In all cases, the candidates who were interviewed defined themselves as self-starters who were proactive and organised their own assessment, as in this example:

"I just seized the opportunity and I went to [Y] and said well look I'm rostered with [Z] for the next two weeks [...] I learnt very fast to get off my backside and organise it myself." (D3)

Further motivations were the advancement of one's own salary and career prospects. With these candidates, both volunteer and permanent officers, the qualifications are a kind of personal business investment in the form of time and energy invested into the service. The permanent staff did not articulate the desire to do community service as a motivation for workplace assessment of NQF qualifications, although it may be true that they did have such motivations. It could be that their very occupation satisfies their desire to help the community. The permanent staff did the qualifications because they had to, if they were to advance their own salary and career, as this permanent male officer noted:

"I needed to do it yeah! [...] part of the progression is to be able to use more skills in your job" (D2)

The memory of past company down-sizing in the ambulance service was referred to in the interviews and this is also a possible influence on motivation for training. The salary rewards attached to professional development were seen as not great but nevertheless valued.

"... it's not a heck of a lot, but it's better than nothing." (D2)

Such motivations of the volunteers were defined less in terms of dollars and more in terms of looking good on one's CV.

"...then hopefully the fact I'm showing the tertiary qualification and the experience together leads me to a better financial situation" (K2)

One assessor described the contractual, 'good deal for all' nature of the training, which is offered free to volunteers.

"...they get a national qualification that's recognised in Australia and elsewhere. And we've got use of a keen, want- to-impress person for three years or more." (D1)

Some volunteer candidates did the WPA qualifications in order to better equip themselves for a future application for a position as a permanent ambulance officer, or a "volunteer apprenticeship" within the ambulance service. In the words of one permanent officer:

"You have to have a National Certificate before they give you a job."
(D2)

Assessors also recognised and accepted they could lose their volunteers, who desired permanent employment, to a different regional ambulance service, as this comment from one assessor illustrates:

"...well if you think about 5,000 volunteers to 800 permanents, every time a permanent falls off the horse there's 20 volunteers that want their job." (S1)

Another motivation for getting qualified was pressure from management. Volunteers and permanents mentioned feeling pressure to qualify. The pressure to do the qualifications linked strongly to findings about upward-credentialing within the ambulance service, which are discussed in 5.3. Persuasive pressure was also exerted by the service on some of the officers completing the university-based course to concurrently complete Recognition of Prior Learning-style workplace assessments for the NQF Diploma.

"Well, it was no extra work and Wellington Free actually put the application in. [...] I wouldn't have myself, I think it's a load of bollocks, - sorry!" (S1)

In this example, there was no intrinsic motivation to gain the NQF qualification, although the university qualification was prized. The pressure for qualifications from management was, in some cases, from regulatory requirements rather than individual decisions, for example:

"With the implementation of the NZQA system's actually forced it onto the industry." (G1)

The value of the NQF role for Assessors

Assessors reported two motivations for taking on their role; these were personal satisfaction and learning as well as a sense of responsibility to the profession. These

selfless motivations were somewhat eroded by the complexities of the assessor role and by the role being unpaid, also discussed in 5.6.

One assessor explained that he felt an increased sense of participation in the ambulance service by being a workplace assessor.

"I kind of feel that I'm having an influence...and I find that quite exciting that we are controlling our own standards" (A1)

Another reason that assessors took on the role was that it provided them with personal satisfaction.

"It's in your personality rather than your profession. And it just kind of comes out. [...]. What the profession provides is a pathway for the skill you've got, this desire you've got to teach." (G1)

Another assessor said that the task was enjoyable and that they learned from their candidates, who often were inquiring and enthusiastic, with access to the latest research.

However, the complexities of the role were often a challenge, partly because there were many demands on the time of the assessors, who were also ambulance team leaders, as one candidate remarked:

"They're taking on another role - and another role - and there's a limit to the amount of time that they can devote if they're doing a full shift that they're paid" (J1)

This was confirmed by assessors; workplace assessment was an additional job and that meant it frequently sapped the energies of the assessor. Moreover, the assessor role was unpaid.

"It doesn't get translated into dollars, for the time and effort you're doing outside the working hours." (D4)

There were somewhat conflicting demands from other aspects of their job, as in this example, where there was a confusion of the teaching and assessing sides of the job:

"If you're actually a tutor and an assessor you actually have to take one hat off and put the other hat on. And it's not easy to do." (G1)

However, as another assessor explained, the assessing role was "an extension of the mentoring role" and the two roles did complement each other. For example there was a positive match between upcoming assessment and teaching and learning

"'cause I know what I expect as an assessor, so I try and make sure that they're learning that when I'm mentoring them." (K1)

In addition, the assessments included feedback and opportunities for further learning.

Despite the positive attitudes of many of those involved, the professional goodwill of ambulance assessors is possibly being sorely tried because this role is 'on top of everything else'. This is also covered in section 5.6, in a discussion of how costs of workplace assessment are absorbed by the assessors and candidates themselves. How much all this constitutes an intrusion into their 'lifeworld' is further discussed in Chapter Six. With the candidates, motivations for further training should not be conflated to a single summarising category. They include feelings of community responsibility and a desire to enter the permanent ambulance service.

5.2 The assessment of knowledge and critical reasoning: how it is best done

The debate around the nature of the NQF and competency-based training and assessment, reviewed in Chapter Two, featured concerns that knowledge learning tended to be subsumed by a focus on skill and behaviouristic learning outcomes (Priestly, 1996; Codd, 1994). This meant that, as the researcher, my antennae were keenly attuned to discussions of knowledge and skill and how these are covered in workplace assessments. The assessors signalled their own participation in this ongoing debate on many occasions, making frequent and widely differing comments about how the knowledge of an ambulance officer was and should be assessed. Some respondents echoed the 'excellence debate' and the "behaviourism debate" outlined in the literature review in Chapter Two and clearly felt that the NQF units were 'dumbing down' ambulance work. Others felt that the level of knowledge required was well covered by workplace assessments and that this methodology successfully integrated knowledge and skill. Other findings were that different qualification systems competed for resources within the ambulance service and that the

NZQA was, in some respects, a Cinderella, or a poor cousin to the university qualifications offered in ambulance work.

How knowledge was assessed

The interviewees often referred to the part which knowledge and reasoning had played in their assessments. Knowledge assessment generally happened when the candidate articulated their reasoning for action after a particular case; sometimes done as a kind of running commentary, whilst the patient was being treated or at other times demonstrated by verbal questioning by the assessor. Where the assessor picked up on verbal explanations given to the patient by the candidate, these explanations simultaneously functioned as assessment evidence and real work. The evidence was captured in a natural way and showed the candidate's understanding of why a particular technique was being used, for example the insertion of an intravenous tube to administer pain relief. In one example, the reasoning that underpinned treatment was exhibited when the candidate explained the treatment to the patient in a real life call-out.

"You're actually talking as you're doing things" (J1).

Typically, another candidate remembered that his mentor/assessor had questioned him about the thinking which had underpinned the recent treatment of an actual patient:

"When we got to the hospital we just discussed the lot, [...] why we did it, [...] and then he'd want to know my opinions" (R1)

Assessors also questioned candidates about hypothetical cases, while they were working together, as with this candidate, who recalled that:

"... he'd {the assessor} question me, on certain procedures [...] if I had a certain patient, what would I do? How much fluid would I give? Why would I be cannulating a patient? Why would I be trying to put an IV into a patient? What's the rationale behind doing that?" (D3)

The assessors themselves felt that the knowledge side of their assessments was vital and they often used oral questioning to gain an impression of their candidate's understanding of their actions. The oral questioning was often done in an incidental, discursive way, usually while driving along back to the station in the ambulance, after the patient had been delivered to hospital.

These questions and explanations were an opportunity for candidates to demonstrate their learning about ambulance practice, including such areas as physiology, the administration of drugs and certain para-medical procedures. There were indications that some candidates were overwhelmed and frustrated with the significant depth of knowledge expected in ambulance training.

"I've struggled to see the sense in why we have all these academic papers and qualifications and I still do sometimes, when it's a practical job" (D3)

Many saw the university qualifications for ambulance practice, which are at a level above the National Certificate and possibly the National Diploma, as the preserve of the more academically gifted and hard-working of their colleagues. One candidate remarked that another was "a machine" (M1) and that he himself could not do that amount and level of academic work. There was a tendency to regard the NQF qualifications as better suited to practical, less academic learners.

"I think the system of assessing is good because it creates a standard that allows people that have got the practical skills, but not the knowledge base, to reach a level that they should be at. They probably won't be able to attain the tertiary type qualifications with all the writing and all the carry-on; we have a huge problem with that" (G1)

One candidate (D3) mentioned a preference for the simple competent/not yet competent grades that were awarded in the NQF qualifications, as they would not have had the 'top marks' anyway.

Notwithstanding the frustrations felt by some candidates and assessors, a tendency to upward-credentialing of ambulance officers was very apparent. According to some respondents, the newer NQF qualifications were more in-depth and rigorous than the 'old' qualifications, as with this candidate who remarked that...

"I've heard guys saying in the Service, if they were doing the particular courses that people are doing now that they just wouldn't pass, they wouldn't do them, which to me says we've lifted the bar, hugely." (D3)

One candidate thought, however, that the National Diploma level of training was not sufficiently academically rigorous, in light of the demands placed by current para-medical practice.

"We like to think of ourselves as healthcare professionals but with the qualification levels the way they're set up, we're actually tradesmen and we're taught that this is Skill A, ...and you will do this skill when ABC is met." (S1)

Another assessor felt that it was not possible to assess the higher knowledge-based levels of ambulance work on the job and felt that the observations which were conducted in on-job assessment did not sufficiently reveal the candidates' deeper knowledge. This is in contrast to the assessors quoted earlier, who saw observation combined with questioning as having the capacity to integrate knowledge with practical performance.

Competing with other Qualifications

The differing views on how to best teach and assess deeper levels of knowledge of ambulance work were further developed when respondents talked about alternative ambulance qualifications which were supported by Wellington Free Ambulance. The research revealed that there are at least two major qualifications available for ambulance officers working with Wellington Free Ambulance: the NQF qualifications, these being the National Certificate and National (Paramedic) Diploma and secondly the more recently instituted Diploma in Para-medicine from Victoria University of Melbourne. The combination of workplace mentoring, internet-based and contact class learning of the university course placed competing and similar demands to that of the NQF workplace assessment on the resources of Wellington Free Ambulance Service. One outcome of the competition for resources has been that NQF candidates struggle to find assessors, as the same officers are mentors for the university programme and are too busy for the NQF workplace assessments.

"...we've got a limited number of assessors. Most of the assessors seem to be crewed with the new paramedic students that are going through the course in Australia so it can be pretty difficult to get to work with an assessor." ((D2)

Candidates for the lower level National Certificate and Diploma assessments found that they were frequently not being sent out on the "interesting jobs", as these were being "taken" by the university-diploma students and their workplace mentors.

"Anything that seems interesting they send these guys to... they're being favoured [...] we're competing for work." (D3)

The abundance of choice in qualification type has also led to a lessening in numbers enrolling in the NQF qualifications (Henwood, personal conversation, 2002). Candidates for the NQF workplace qualifications rather resented that the university students could come in off the street, take a course and come out with the highest level of qualification with the ambulance service, the para-medic qualification, ostensibly equivalent to the National Diploma. They contrasted this with their own extensive practical and autonomous "apprenticeship" experience on the road:

"The way we do it currently, it's sort of like an apprenticeship really, I suspect, but whereas they're just going away and doing a university course and coming out and having a bit of - they've got some road time but they won't have worked on their own, or anything like that." (D2)

The perception of some officers, who are confident about academic work, is that the service has to "drag up" the level of paramedic practice and the NZQA Diploma is too low. The NQF is sometimes seen as shorthand for low-level and university qualifications hold the promise of higher rewards and status for ambulance officers:

"If we want to be recognised as healthcare professionals, and we want to act like healthcare professionals, then we have to do the training of healthcare professionals. And that's education based, not skills based. ... I believe that the nature of our job is that it needs to be university based rather than NZQA." (S1)

The distinction between training and education, between body and mind, manual and physical (Barker, 1995), is then reified here in this localised and highly contested context. Chapter Six extends the theoretical implications of this division between knowledge and practical application.

5.3 Assessor Judgments: Objectivity and the Nature of Evidence

The literature review has indicated that how assessors make decisions or judge candidate performance is a contested notion. I wanted to know how objective these decisions were, in the opinion of the respondents, and how aware assessors and candidates were of the contested nature of objectivity. What understanding of the factors that influence their decisions do assessors have, and what did candidates say about the correctness of those decisions?

Objectivity and Fairness

The nature of ambulance work itself was seen as complex by both assessors and candidates. This is a typical remark...:

"Some people would say there's a black and white area but as far as
I'm concerned it's all grey and for one person you might do something
and for the next person isn't exactly the same and you have to do
something slightly different, cause the first thing won't work." (D3)

Yet, despite this complexity assessors were able to make their decisions. This candidate continued by saying:

"It's really simple. You can either do the skill or you can't" (D3)

The skill being assessed was nuanced and variable but could nevertheless be measured. There was however, with some assessors, evidence of an almost cynical, more sophisticated understanding of the possibilities for arbitrary decisions in any kind of assessment, as in this statement from an experienced trainer and assessor:

"It's easy to say 'look, you didn't tilt the head back' and the guy will say 'yes I did' and I'll say 'no you didn't'. So, if you wish to, it's easy to fail somebody. Conversely, some people will never fail anybody." (S1)

The naming of an act as objective and fair frequently imbues this act with power, thus an assessor's interpretation of events is markedly more powerful than those of a candidate. Concerns about objectivity were marked by discussions of relative fairness and the candidates frequently defined their assessors as fair. One candidate summed up...: "All in all he does it very fairly." Candidates felt that both parties had clear guidelines for

performance and assessors required themselves to be fair. Monitoring and disciplining their own practice, they strove to avoid a positive or negative halo effect.

"You have to be really critical of yourself to the point of saying, 'hey look, this isn't fair on this guy." (S1)

However, fairness and objectivity are the ideology of value neutrality that can disguise and confuse issues of power, as is further discussed in the next chapter.

The Nature of Evidence

Making well-founded decisions about performance was, in the unit standard 4098 training for workplace assessors, dependent on getting the right evidence and that evidence necessarily being direct, sufficient, repeatable, valid and authentic. Because the ambulance assessors had undergone one or other variety of this training, they had possibly been cued to justify their own interpretations of events in these objectifying terms. It is also possible that they had simply sought objectivity, or decisions being based on evidence, because it is such a powerful societal notion. The data was therefore reviewed for indications that assessors were consciously looking for these qualities of evidence-validity, directness, authenticity, sufficiency and repeatability.

One such way of seeking objectivity was to consider direct evidence, or evidence as close as possible to real performance. This is advocated in the training material for workplace assessors and was clearly a consideration for these ambulance officers. They often compared workplace assessment evidence with the artificial nature of scenario-based assessments, as did this assessor.

"You're always doing it in a room where its not raining and you haven't got the wind blowing and you haven't got all the fire trucks and everybody else that's at the scene as well." (A1)

Candidates repeatedly confirmed that they found workplace assessment preferable to exams or scenarios because they were focussed on the real task in hand; that it was direct and relevant to real work. Another second candidate talked about how difficult it was to "fake it" (D2) in a scenario assessment working with a mannequin or with peers who were playing the patient. It was easier for candidates to perform well in a real (direct) situation; firstly because their patients gave them real feedback on the treatment and secondly

because it was less stressful. In a real situation the assessor was present, not just to assess, but as part of the work team. Scenarios were contrived, unrealistic and did not test the candidates' reactions to real cases.

"Whereas with scenarios you tend to set up perfect situation a textbook situation that you never get out on the road." (A1)

Rather differently, another candidate said workplace, or 'on-the-road', assessments were "negative" because "we don't know what we're going to be assessed on until the day" (J1). The assessment was nevertheless real (direct) precisely because they never knew which patients that day would bring.

Furthering the discussion of real and direct evidence being used to make decisions, some ambulance workplace assessors, who were off-job trainers, felt that scenario-based assessment of classroom training was necessary or unavoidable.

"Ambulance training is hugely scenario based because [...] you just can't guarantee that you're going to get the job to do the training" (S1)

This was most true for foundation level training courses in ambulance work but contrasted to workplace assessment, which was seen as the final seal of approval, most suited to an overall assessment of competency as an ambulance officer. One assessor commented that:

'It's the threshold, it's the entry into the profession." (K1)

On-job real direct assessment was therefore seen by some of the respondents as most suited to the final judgment of competency of overall performance, whereas off-job assessment was best suited to particular components of that overall performance. The balance between on and off-job assessment is further discussed in Chapter Six.

Sufficiency - having enough evidence to make a well-founded assessment decision - is another quality of evidence that is advocated in the training of workplace assessors. On examination of the interviews, it appeared that the assessors and candidates consciously noted just how much evidence of performance was collected. Ambulance assessors considered a number of sources of evidence to make an overall decision on unit standards, or bundles of units: a log of reflection on twenty specific cases (call-outs for particular patients), the workplace assessment itself and the successful completion of the necessary

off-job training courses and off-job skill assessments. The case-log is described as formative assessment, yet it influences the final decision, as this assessor describes:

"The stuff that does go in that case-logbook, it's not an actual assessment as such, it's to see how they're going [...] But on completion that's actually used as part of the assessment as well" (S3).

Not only do assessors have access to the reflective log-books to see how performance has developed over time, they have the capacity to extend the length of the actual workplace assessment, so they get the opportunity to observe the specific competencies in the units.

"And if we have a couple of minor jobs and a routine transfer, I can't go out and pass that as saying this person is competent. I'll [...] say to them we'll wait and see what happens on the rest of the day and if they don't do any more jobs I make them come back the next day and do another two." (K1)

At times, the sense that assessors needed to observe all the competencies 'on the day' was an inhibiting factor. Candidates were frequently frustrated that suitable jobs did not come up on the big day. Some assessors reported that they counteracted this organisational problem by gathering together the evidence of the twenty case logbooks along with the workplace assessment observations. Some candidates were concerned that they could not actually correctly demonstrate the skill on the day of the workplace assessment, as with the case of difficult IV insertions with hard-to-locate veins. Nevertheless they were judged competent as they had demonstrated the correct procedure at the appropriate level of competency. One assessor dealt with the uncertainty of having insufficient evidence on the day by leaving the final decision to a training manager; and the candidate heard the final result at a later date.

Assessors are encouraged in their initial training to judge whether evidence is authentic; whether the work was the candidate's own. The interview data was therefore reviewed for references to cheating or inappropriate collaboration. With the on-job observations authenticity did not emerge as a theme that interested the interviewees. However, the logbook of twenty cases, which was also considered by the workplace assessor, provoked some assessors to muse on their authenticity. They asked 'did this really happen?' and how

closely was the candidate's work really monitored by the colleague who signed off those cases?

Validity is another prescription for practice advanced by the NZQA (NZQA, 1996), which may be defined as the 'match' between the specified standard and the evidence - assessing what you think you are assessing. Data findings concerning the validity of assessment evidence emerged in two ways. Firstly, assessors thought carefully about whether evidence of performance matched (often intuitive) standards for ambulance work, as one assessor reflected:

"I think the pluses are that we are assessing what we say we are (D1)".

Secondly, in some cases, particularly where several competencies or unit standards were being concurrently assessed, assessors and candidates rarely openly articulated the actual unit standards they were assessing. So the validity match may be faulty, possibly leading to certain criteria being overlooked or other criteria being unconsciously inserted. The link between validity and intuition appears to be bounded by the extent to which the NQF standards match the measurements which ambulance officers use anyway when judging the performance of colleagues learning the job. One way in which assessors dealt with the failure of the standards to exactly specify required performance was that they appeared to employ, at times, intuitive judgement. The yardstick for measuring whether someone was competent was, for one candidate:

"I don't know really how you know if somebody's competent. I guess if they do what you would have done." (D3)

A similarly intuitive method for judging competency, employed by an assessor was:

"...if they treat the patient like you would want your mum treated." (K1)

An ideal type of ambulance driver was another assessor's holistic or intuitive descriptor for competency. The assessors attempted in this way to almost summarise for their own reference what a competency really meant.

The validity of assessments was, at times, questionable because some of the assessors' reported standards for performance bore little resemblance to the NZQA standards. This situation was demonstrated when an assessor explained that the NZQA units were an inadequate summary of the necessary skills for ambulance driving:

"... we teach very specific things about driving, it's advanced driving we teach. And it's not actually reflected in the NZQA standards." (G1)

So the assessor persisted in teaching and assessing what they felt to be the true standards for a good ambulance driver, despite what they saw as an incorrect NZQA standard.

Judgement: Holistic and Atomistic

As well as intuitive judgement, the interviewees frequently made references to what may be interpreted as holistic judgement. The whole picture was assessed rather than a collection of ticks on a checklist. The workplace assessment was for them: "an opportunity to look at all facets of ambulance work." (D3) Assessors never employed physical checklists in these ambulance workplace assessments, indeed their active role in the call-out made it impossible to stand back and check the performance against the criteria, although they indicates checklists were filled in later. However, judgments were not simply holistic. The interviewees referred to both the holistic and atomistic facets of assessment. During the assessments, assessors described how they had an analytical awareness of the separate points being assessed. One assessor described this process as:

"You're sort of ticking it off in the back of your mind." (A1)

In contrast, although the candidates were aware of being assessed on a set of unit standards from the initial briefing documents, the integrated nature of the assessment meant that individual lists of performance criteria were not referred to during the natural flow of work:

"...he had an idea of what was on the unit standards so he just went through it in his mind. But I don't know whether I passed every single outcome that there is, or whether he ... just the overall view was that I could do it." (D2)

Moreover, assessors were able to justify a "not yet competent" outcome in terms of the individual unit standards being assessed, usually because the particular competencies could not be observed during the actual assessment. It is interesting to note how feedback, often called debriefing by ambulance officers, allows the assessors and candidates to review the actual work tasks just performed - a holistic situation. They then pull them together and

check them off against the competencies. This reflective act informs future practice and the workplace assessment event is part of this ongoing reflection.

Candidates reported that they preferred learning to be broken down into chunks.

"I sort of like the idea of targeting one skill and getting that skill right ...and then you can move on to the next one...it's an easier learning curve." (D3)

Yet an over-emphasis on atomistic skills disadvantaged some candidates during a workplace assessment, as with another candidate who remembered:

"You sort of focus on that during the whole assessment, and sometimes you might forget about the other things that you're doing." (D3)

Possibly the internal mental interplay between holistic and atomistic is more beneficial for assessor judgment than candidate performance. Candidates are simply inhibited by atomistic plodding, yet assessors must be aware of the constituent parts to make their overall judgments. Perhaps significantly, it was not until feedback on performance was being given that some candidates became aware that there was a list of criteria and the focus moved away from the whole job to each of the competencies in the standard.

"In fact it wasn't till we sat down after the cases and we went through and he was actually going through his checklist and 'had I done this'?" (K2)

Candidates who operated at higher levels (the National Diploma rather than the Certificate) in the Ambulance Service were more aware of the competencies and better able to perceive their job in a more atomised way. They could mentally "tick off" the critical elements themselves. Nevertheless, there were some apparent weaknesses in the breaking down of performance into separate parts. One experienced assessor pointed out that initially unsuccessful candidates were re-assessed on a skill-by-skill basis, rather than on the whole job. The danger was that an overall weak performer could gradually accumulate, through a process of ongoing assessment and re-assessments of small parts of the whole, sufficient credits to be deemed competent in the whole job. The assessors' reluctance to break down the job into little bits was very apparent

"That's our job, you can't break it down into individual clinical skills, I don't think." (A1)

However, the analytical process of assessment of learning outcomes necessitated a certain amount of atomisation.

The interplay between holistic and atomistic learning outcomes is further theorised and discussed in Chapter Six, with particular reference to the debate around the behaviourist origins of unit standards and competency-based training and assessment.

5.4 The Relationships between Assessors and Candidates

The assessor/candidate relationship was an issue that engaged the attention of both assessors and candidates. The closeness or distance of their relationship influenced candidates' feelings of confidence and their willingness to accept feedback on performance. Closeness to candidates was however sometimes seen to be problematic for assessors, complicating their judgments and role. Possibly, these close relationships facilitated more direct and valid evidence, as required by the NZQA.

Candidates for assessment repeatedly said that they felt more confident and relaxed about workplace assessments because they had worked with their workplace assessors on a regular basis, some for years others for shorter periods. Typically, a male candidate related:

"Oh, it was probably not as nerve wracking [...]. Cause I'd spent two weeks with [...] prior to the assessment." (K2)

The rapport and synergy that existed between assessor and candidate, as two ambulance crew members who had worked together over time, was seen as beneficial and natural. Although candidates saw familiarity as positive, closeness did provide challenges for the assessors; one assessor felt keenly the vulnerability of his position as a friend of a candidate. Other assessors related how it was difficult to put aside prior assumptions about the performance of candidates, and only pay attention to the specific competencies being assessed, as in this example:

"I know that it's really difficult to step out of that role and say ... What you did yesterday is beautiful, great, but today you've made this mistake." (K1)

Assessors were wary of their own preconceptions and attempted to put aside personal feelings.

Distance as Difference, Closeness as Sameness

The assessors' awareness of the dangers of their own prejudices is heartening as critical theory sees the unperceived bias of the powerful (Giroux, 1983; Apple, 1996) as more likely to benefit those who feel they belong in the particular social and cultural context. There was, nevertheless, a warning, or intimation, that undercurrents of privilege may be present, as when a female volunteer candidate demonstrated ambivalence about the assessment environment, precisely because she knew the assessor so well.

"And I don't know whether it's better or worse when you know the person very well...whilst you had your down times and you can laugh and joke and you're thinking all the time is he watching just what part is he observing." (J1)

Closeness or a feeling of ease working with the assessor appeared to be important for the candidates. Closeness may simply be the result of having much in common; similar identity in terms of social background, gender, age, work status and ethnicity, or feelings of distance may simply be connected to differences in identity. The obvious difference in terms of identity was the gender of the candidates, all of whom were assessed by male assessors, indicated as candidates consistently referred to the assessors as "he" in the interviews. There were three women candidates and one woman assessor (who assessed other candidates), all the rest of the interviewees were men. A simple count of the identity matching factors revealed, through the process of attribute matching using NVivo data analysis, the following data which is presented in the form of a table. Figure 1 shows the distribution of four attributes induced from examination of interview transcripts. These were: a relationship of closeness and respect to their assessor, being male or female and expressing feelings of confidence about the assessment.

Figure One: Table showing Relationships between Candidate Attributes

Attributes	C1	C2	C3	C4	C5	C6	C7	C8
Closeness	*	-	*	*	*	*	*	-
Female	*	-	7 4	*	*	-	-	-
Male	-	*	*		(-	*	*	*
Confidence	-	*	*	*	100	-	*	*
Nervousness	*	-	-	-	*	*	-	-

This table shows various "attributes" of the candidates and indicates several possible relationships between their attributes. The letter "C" at the top of the table stands for "candidate." Three of the candidates were female and five were male. From the three female candidates, two expressed nervousness about the workplace assessments they had experienced and one was very confident. From the five male candidates, four expressed at varying degrees of confidence and some nervousness about their experience and one expressed no feelings of confidence and some nervousness. It appears that the candidates who were closer to the assessor in terms of gender identity felt more confident about their experience in workplace assessment. This was simply the experience of one group of candidates and cannot be generalized to candidates as a group, although it does provide data for interpretation.

Perceptions of Closeness

Although closeness, or familiarity, was important for the candidates; it was a specific type closeness that appeared to be even more important. One possible reason that candidates felt secure about the assessments was because their assessors were mentors and they respected them for their superior knowledge and experience of ambulance work, as

indicated in the following excerpts from very different candidates. Firstly, a permanent male officer said of his assessor:

"I really respect and look up to [him] 'cause he's a lot more qualified than me, he's been around a lot more than me, he knows more than me. And I've got a lot to learn from him." (R1)

A female volunteer officer said: "He's a great mentor anyway. I mean he's a fountain of knowledge." (J1) This credibility of the assessor, in the eyes of the candidate, promoted the perception that workplace assessment decisions were valid. Respect for the knowledge and skill of the assessors was not the only factor that made candidates feel secure about the assessment environment. Some candidates told me that they felt the Wellington Free Ambulance had selected workplace assessors for their positive interpersonal qualities, one officer said:

"...they don't pick these people because they're nasty [...] most of the people that are assessors are the popular senior officers that we'd like to work with anyway." (D3)

The data was reviewed for negative comments about the assessors' personal and professional qualities, but none was found. This could be due to a reticence to risk criticizing senior officers or more simply because candidates genuinely felt the assessors had their interests at heart. The NZ Ambulance Education Council workplace assessor selection criteria are based on interpersonal qualities and professional standing and the value of this practice appears to be confirmed by the interview data.

A collaborative attitude toward preparing candidates for assessment was valued by all the interviewees. Candidates reported that they had been prepared thoroughly and that they felt ready for their assessments, as in this description of the process:

"...we just sat down together and I said what are you looking for and what do you want from me and vice versa and he just said that he was quietly going to watch my technique and see how I went with IV {intravenous} placements..." (R1)

Assessors were similarly conscious of the necessity to prepare their candidates and to check that sufficient training and practice had taken place. However, it was apparent that

those candidates who were going for the higher level National Diploma, rather then the Certificate, felt more confident about the process, one such candidate saying:

"Assessment doesn't worry me in the slightest, [...] you just worked with each other [...] it's just like having a cup of tea." (S1)

The workplace assessment for this candidate was conducted concurrently with the long term workplace mentoring system established for the university-based distance learning course from Victoria University in Melbourne. The assessor and candidates had worked together for a length of time and their mutual ease of interaction appeared to positively influence the candidate's feelings of preparedness. The perceived accuracy of the assessors' judgements was also influenced by the assessor's familiarity with the candidate's work, as in this example:

"If I have worked with somebody you know I know a lot about them. I know a lot about their work practices already before we've gone into the assessment. It's inevitable that that sort of knowledge is going to be help." (A1)

Feedback on performance from such assessors was valued by candidates and made it easier to accept the rough with the smooth:

"...you know that if somebody doesn't make it through...and has to re-sit, you know there's a good reason why. [...] They won't muck around with your feelings [...] but if there's something wrong then obviously they're going to let you know." (R1)

Negative Closeness or Distance

Positive closeness is distinguished in the interviews from negative closeness or overt and claustrophobic indications of intrusive power. The assessor's body language was significant to candidates and there were frequent positive references to assessors who stayed in the background, as for example:

"...he doesn't make it obvious to the patient anyway, he would just step back whilst I would do the IV [...] there's no 'you can start now 'cause I'm looking over your shoulder and if you do anything wrong' [...] it's just a matter of we're a team as normal" (R1)

Assessors were conscious of the influence that their body language may have and made references to deliberately standing back. A contrasting anecdote which indicates distance, or a lack of empathy, was related by a candidate, stemming from his earlier experiences with a workplace assessor in the meat industry:

"Well, he was a stranger. He never said a word. He stood beside you and had a clipboard with a staring look on his face...and you're just about having a seizure you're so nervous...And even if you passed or failed, he didn't smile." (R1)

Distance, or a lack of empathy with candidates, was also indicated by an attempt by one assessor to control of the flow of events during the assessment. Making the assessment part of close daily working routines was valued by candidates, and the timing of the assessment was frequently seemingly unplanned and incidental to the job. However, the somewhat unsettling nature of unexpected knowledge questions is shown in this vivid example from a female candidate:

"You'd be washing the vehicle and all of a sudden, he'll slip in something completely out of the blue and he'll draw you out because that's how your knowledge has got to come." (J1)

The effect of controlling the interaction in an unexpected way was that the candidate found it difficult to answer questions fluently - it was:

" - like getting hen's teeth, he was pulling them" (J1)

In summary, there are indications that the degree of familiarity and closeness between the candidate and the assessor is significant in terms of how the assessment process is perceived by the candidate. The further significance of these relationships in terms of the literature outlined earlier is explored in more detail in the next chapter.

5.5 Consistency: Assessors and Assessments

The notion of consistency in assessment practice and consistency in assessors' judgements was frequently addressed throughout the interviews and covered the following three areas:

the practice of double and triple crewing of ambulances, national versus local standards and the differing styles and practices of different assessors within the group interviewed.

Double and Triple Crewing of Ambulance Vehicles

Firstly, a link between different ways of absorbing cost and inconsistencies in assessment organisational practice became apparent. Although, as was seen in the last section, costs were to a certain extent absorbed by the assessors and candidates themselves, there was significant variation in the way that further assessment costs were absorbed by the different services throughout NZ. Accordingly, ambulance vehicles were crewed with different numbers in the different assessments spoken about in the interviews. Ideally, according to the Ambulance Education Council (Henwood, personal conversation, 2001), assessment observations should be carried out by an ambulance officer who is not unduly fettered by a role in the actual patient care. The recommendation is that vehicles are triple-crewed during assessments. In practice, the interviews revealed that triple crewing was very rare and that fiscal cost was an inhibiting factor. Some assessors were keen to see triple crewing instituted, and some even practiced triple crewing, as they felt that it enabled them to make a more considered judgment.

"When I'm doing the assessment at the end, I'm triple crewed....they say you're head down, you're not seeing what he's doing, but there's other forms of evidence, what got done. You can say to the third person, 'what did he do'? And they can say well he just stood there and I said go and get a stretcher...." (D1)

Some assessors wanted to institute the practice of triple crewing assessments mainly because they were then not directly involved in treatment. This would enable the assessor to observe the complete patient call-out and treatment, thus being a better match to the units they were assessing.

"You can't do the consistency as such because you see the initial part, you see what they do at the scene till you're in the back of the ambulance and you don't see that 'in the ambulance' piece." (S3)

Others assessors felt triple crewing to be unrealistic; it would detract from a current strength of the assessment context, which was to gather direct evidence with realistic limitations. "No paramedic going to stand there with a clipboard in his hand watching someone die while two people struggle" (D4)

However, it was reported that triple crewing was instituted at times and that other regional services practiced triple crewing more readily.

"Oh I used to work in Dunedin and they triple crewed nearly every assessment.... They have a policy of double crewing everything in the first place, so if you're being assessed, you're triple crewed."(S1)

One candidate noted that it was possible to organise triple crewing themselves, but that was possibly incidental to their intentions. The rural environment, staffed with a higher percentage of volunteers, tended to be triple-crewed. In addition, some past assessments had used triple crews. So there were inconsistencies or changes over time, as well as inconsistencies between regional contexts. Both candidates and assessors agreed that it was currently too costly to provide triple crewing and that single crewing was often the norm for paramedics (the higher qualified officers). One assessor admitted:

"... the ideal would be triple crewed but that's impossible. We can't even double crew our trucks. You know we run single crews all over the place"

another said:

"We don't have the fat in the system to triple crew" (S3)

These cost restrictions were general throughout the ambulance service and affected all work, not only workplace assessments, as one assessor rather grimly noted. Triple crewing is seen as an unattainable ideal that would even be resented by other officers:

"I think triple crewing is a good thing, it's a good thing when you're learning. But it's money, yeah, and it's a bit hard to stomach when somebody else is single crewed and there's three people in one other ambulance." (M1)

Overall, some inconsistencies in practice have been shown particularly in how ambulance vehicles are crewed and this was related to how the service was meeting the costs of workplace assessment.

A National Standard?

The second area where opinions about consistency were offered was in discussions about the national standard of the NZQA qualifications, covering both the unifying national nature of these qualifications and the variations in the type of work encountered in different regions. The unifying nature of the NZQA qualifications was frequently referred to by candidates and assessors, for example:

"Oh, I think it's just setting a New Zealand national standard... you know everybody is working to the same set of guidelines." (D3)

The unit standards were the same for all assessors, this having a normative effect.

"People have their own style of doing things but at the end of the day they still have to meet those unit standards." (G1)

The notion of portability, and thus unity, of national qualifications, which emerged in the literature review, was frequently alluded to and was seen as beneficial for candidates, who could use the qualification in a career move from one service to another. When permanent jobs came up in a metropolitan service, qualified volunteer candidates from rural areas were keen to apply and the NZQA qualifications were their labour market "currency". The unifying nature of the assessor role was also pointed out by one assessor.

"... if anything the assessors are more important because they show a national consistency (D1)

Moreover, the assessors were conscious that they were working to a national standard and it was sometimes hard to reconcile the demands of their employer and the national standard....

"I'm actually assessing on behalf of Council [...]. I'm not actually assessing on behalf of Wellington Free Ambulance and there's always a bit of a dilemma." (D4)

Assessors strove to maintain national standards and some were confident that the candidates they assessed could be employed by another service and that the standard of skill would be the same. There were however, regional variations, officers who had qualified in different areas could have differing levels of ability: The nature of the work in different ambulance service areas differed widely, with the urban work being possibly more difficult. One assessor thought:

"They [rural candidates] would be intimidated coming over here, because the skill level in a metropolitan area to a rural area is poles apart." (K1)

There were other differences, not just the rural/metropolitan divide. Moreover, there were a number of different 'providers' of ambulance education, one assessor complained:

"We don't have that national standard. See we used to have one provider [...] the National Ambulance Officers Training School.... Now we've got about seven providers of National Certificate and two providers of National Diploma." (D1)

The abundance of choice of providers, and the new university qualifications, had added to the potential for inconsistency.

Variations in Assessment Practice

The third type of variation was in actual assessment practice. Not only were there regional differences in the type of work and variations between double or triple crewing, there were further differences in how individual assessors went about the job. Different areas of the country had different interpretations of what was sufficient evidence; for example:

"In Auckland they do the first three jobs and that is all it is." (K1)

In a different, rural area, the assessment took eight hours and the three jobs which were documented "[those] were the three jobs we had" (K2). In contrast, the interviews of assessors from Wellington indicated that they took more time before they considered they had enough evidence, namely a full shift of two days and two nights was assessed. As in Auckland and Wairarapa, only three cases were fully documented in the assessment report, these being examples drawn from that complete shift.

It was not only the quantity of the evidence that was viewed a potential source of inconsistency, there was also the nature of the evidence to be considered and how it was collected. For example, there were differences in style between individual assessors. One candidate, who had had two assessors, talked about their different personalities but found these differences to be insignificant:

"From my point of view [...], their assessments were almost equal. X probably, verbally more hands on than Y" (R1).

Candidates possibly did not want to pry too deeply, but they did want to have some indication that their own assessments were comparable with their colleagues'.

"I discuss it with certainly to a degree with [my colleague] but only in as far as you know, 'how's your workplace assessment go?" (J1)

Candidates who compared notes about their workplace assessors appeared to be uncritical about inconsistencies, perhaps in accordance with earlier observations that candidates were not keen to criticise their assessors. The following remark indicates that assessments were consistent: "From what I've heard they're all at an equal level, pretty much" (R1). The next reflective comment from this candidate points to variations in assessors' judgement but these were also interpreted as insignificant:

"We do have our workplace assessors that may be a little bit sterner than others but I can honestly say I wouldn't have issues with dealing with this programme and if I did I wouldn't be honest in saying so." (R1)

When assessors vary from the specified standard in their judgements, there is greater potential for inconsistency. For example, in order to decide whether the candidate was competent in a specific skill, assessors needed to observe that skill being performed. Reflecting on two different situations, two candidates recalled that they were not able to perform the required skill; even their assessors could not do it at the time, as with this example:

"We tried to get IVs in and the lady had really, really hard veins to cannulate. The veins weren't all that great but I'll have to give it a go and see what I can get. In the end I tried about three times and missed the veins completely then I asked the workplace assessor who's assessed me, 'cause obviously we're there for the patient, well would you like to have a go?" (M1)

The two candidates guessed they had been judged competent because of their logbook evidence. These two similar anecdotes, with different assessors, pointed to the practical problems associated with organising real evidence. Patients don't lie there and provide convenient textbook veins or typical heartbeat patterns so that candidates can be assessed on them!

The commonplace use of third party evidence was more significant as a source for potential variation from the specified standard. Third parties, or other senior ambulance officers, had commented on and signed off the requisite twenty cases in the logbooks, which were in turn considered by the assessors. One candidate for the National Certificate felt that some senior colleagues allowed less independent work to be done by trainees than others did, as this quotation illustrates:

"... if you're happy to just carry the bag and help lift the trolley they'll do it and that's that" (S2)

Moreover, the third parties were not trained assessors and were less aware of the actual standards being used, employing instead their own more intuitive standards for performance.

To sum up, the major sources of inconsistency were organisational and regional differences and issues associated with real life evidence in workplace assessments. This question is taken up again in Chapter Six and viewed again through the critical theory lens, where the value-laden nature of objectivity and truth is examined.

5.6 Organisational Factors, the Costs and Volume of Workplace Assessment

The last category of 'nodes' (5.6) explored here are the costs and volume of workplace assessment. This was also a concern alluded to in the literature review (Wolf, 1995; Irwin, 1997). Actual costs as well as the time taken to assess in the workplace were investigated in the interview data and it was found that costs were perceived as both being absorbed and hidden from view. The volume of the workplace assessments was not seen as inhibitive.

The cost-effectiveness of workplace assessment was commented on by those who were permanent Ambulance Service employees. Assessors were "working anyway" and, as a manager/assessor noted:

"The assessments are done on the job during your normal shift so it's not like you've got to displace a whole lot of people to do it. That's the beauty of the system." (R1)

This was contrasted with expense of the old system whereby employees were sent to a central ambulance training school in Auckland. However, assessors frequently mentioned that the assessor role was yet one more responsibility for them as an ambulance team leader, leading to extra hours of work, often done at home. This was seen by assessors as an expression of their professional good will.

"There is a huge goodwill component that doesn't even get ... its just part of their system. And they would do it whether they were paid or not, up to a point." (G1)

However, they felt there should be some financial reward attached to their assessment work, especially as the service was getting value for money.

"The other angle to that is at the moment we don't have to pay for us and what they're getting back from us would have to be worth it, I mean we are raising the standards." (K1)

Volunteer officers who were candidates in workplace assessments were more acutely aware than the assessors that costs were borne by themselves. One female rural candidate remarked:

"There is a cost to family and to your social life or whatever you may be doing but at the same time I mean for me the motivation is I love what I do." (K2)

Frequently, volunteers joined the assessor's shift for their assessments, rather than being able to coordinate their own regular shift with that of an assessor, meaning that they had to work an additional period of time. The volunteers themselves often absorbed workplace assessment costs by taking leave from their own full-time employment. In one case this cost was passed on to another employer, who was prepared to allow a week's special leave for the ambulance workplace assessment, as this interviewee explained:

"They deem that qualification of having a National Certificate officer as a real plus [...] they've got their tertiary standing as far as being an accredited employer" (K2)

Several respondents commented that some volunteer candidates often found it difficult to arrange workplace assessments and gave up trying, not completing their qualification. There is a high attrition rate reported for volunteers who start training. One purported reason is the organisational difficulty associated with arranging their ongoing off-job training and on-job assessments. They lacked support from the administrative staff in the arrangement of the own workplace assessments. Most candidates reported that they had approached assessors themselves and arranged appointments for their workplace assessments. In contrast to the volunteer candidates, who went to a good deal of trouble to arrange their assessments, some permanent officers who were being assessed at the Diploma stage appeared to find it easier to arrange their assessments in an informal way.

"I mean it's not that difficult. Couple of phone calls and you've got your assessment organised..." (R1)

Whereas one volunteer related that:

"It was a month off work and you know if you look at it in the cost of salary it was a huge cost...you had to fit it in because effectively it was your entire year's leave." (K2)

However, other permanent candidates also found it difficult to arrange their workplace assessments. Most of the candidates wanted more assistance from the ambulance service's administrative system to organise their assessments. They wanted assistance with being rostered on a shift with an assessor, rather than having to 'chase' the assessors.

Earlier indications in the literature review were that the volume of competency-based assessment in the workplace could lead to employers rejecting the system (Wolf, 1995; Web Research, 1996). There was clearly some variation in the time taken for workplace assessments. The usual timeframe for a workplace assessment was one full shift of two days and two nights, this being deemed sufficient to gather evidence. In addition there was a requirement that at least three relevant cases must be documented during the assessment. There was a flexible approach and if more time was needed for evidence gathering, the assessors and candidates agreed to take it. There was little evidence that assessors felt that

the assessments themselves were overly voluminous in nature, although the paperwork did increase.

"It's phenomenal. Ah, yeah, the amount of paperwork that I used to do compared to what I have to do now." (G1)

A high volume of workplace assessments in one area also meant that the assessor could lose motivation.

"It gets boring because the system is just so repetitive and it's a danger you've actually got to watch out for, you lose track of what you're actually doing." (G1)

This assessor saw himself as being in danger of becoming blinded, when making judgments because the assessments were limited to a very specific unit standard. However this limitation meant that the assessor role was manageable, in terms of workload.

The time taken for the assessment process is closely related the volume of evidence required. Keeping the twenty case logbooks and fitting the assessment shift into the roster was demanding work and became an organisational feat! This certainly took its toll on the participants; as one assessor remarked:

"Certainly, by the end of it they're getting sick of it, they're getting sick of filling in the logbook ...they [the ambulance service communications centre] will send you to as many interesting jobs as you can to get the jobs. And people just get worn out, by the end of it, you're both tired." (S3)

Candidates confirmed the feeling that the assessment process was drawn out. Nevertheless, the candidates did feel some pride that they had achieved the qualification at the end, as this candidate reminisced:

"Yes you look back and think: How on earth did I get through all that work? You've got a whole bookcase of work that's related to it...and you think 'I read all those. I did all that.'" (K2)

It was as if the tangible volume of their achievements and their thorough learning engendered the feeling that they had truly arrived; they deserved their ambulance officer qualification.

5.7, Conclusion: bridging the project and its meaning

The next chapter will pinpoint a number of areas that invite further interpretation and discussion. This chapter has described findings of the research; the next task is put this all into perspective. The perspectives will be those of both the literature review and the critical theory framework, as a set of overlapping lenses through which to examine the data. The areas warranting further examination and interpretation are briefly reiterated.

Firstly, the interview data analysis will be linked to the stated intentions of the workplace assessment project, a powerful appeal to both educational left and the new right legacy of consumer choice. The 'seductive appeal' of workplace assessment is significant. How does the workplace assessment of ambulance NQF qualifications coincide with these official narratives and where does it depart from those intentions?

Secondly, the workplace assessment of NQF qualifications was shown to be contentious in several sections in this chapter, especially when it was compared to university-based qualifications mentioned in 5.2. The differing views of the value of workplace assessment are interpreted in the discussion chapter How can critical theory further interpret this contentiousness and how does this further the debates described in the literature review, namely the 'excellence debate', the 'behaviourist theoretical basis' and the atomistic nature of the unit standards?

Thirdly, it will examine how critical theory may shed light on both the intentions and practices of assessors when they make assessment decisions; how can we then interpret the NZQA assessors' claims to objectivity, consistency and truth? What further conclusions can be drawn in regard to the prescriptions for practice envisaged for standards-based assessment within the NQF, in the light of findings presented from the ambulance interviews?

The next section of the discussion chapter will examine the significance of interpersonal closeness and distance in the relationships between assessors and candidates.

Finally the findings of the research interviews will be related directly to the stated intentions for workplace assessment of NQF qualifications, as they were summarised in section 2.5. There are policy and practice implications for this process and these will be presented in Chapter Seven.

CHAPTER SIX: CRITICAL INTERPRETION OF THE RESEARCH FINDINGS

This part of the thesis will re-examine the research findings outlined in Chapter Five, further interrogating these findings for meaning. The discussion will be conducted from two overlapping perspectives; it interprets the data findings within a critical theory view (as outlined in Chapter Three) and references this discussion to the stated intentions for workplace assessment. The first three sections of this chapter (6.1, 6.2, and 6.3) will cover some social aspects and implications of workplace assessment. The latter three sections will present a discussion of more technical aspects of assessment, concluding that these are a type of hermeneutic knowledge employed by assessors and to a certain extent candidates, during the assessment process.

Section 6.1 will interpret the findings presented in the preceding chapter in 5.1, which cover the relative value attached to workplace assessments and qualifications under the NQF. Interview data analysis will be linked to the stated intentions of the workplace assessment project, which constituted a powerful appeal to diverse interests and groupings, namely organised labour, the new right legacy of consumer choice and hopes for emancipatory practices in education. This diverse appeal of the NQF was described in the literature review in Chapter Two and received renewed attention in Chapter Three, where links to critical theories were further elaborated. The 'seductive appeal' of the competency movement has been noted (Usher, 1997) and some observations are made about the extent to which the workplace assessment of NQF qualifications coincides with the emancipatory hopes of the labour movement and education reformers, in terms of the interview data findings. This section also discusses the extent to which the interview data indicates any realisation of two other design imperatives for the NQF, namely increased consumer choice and a subsequent weakening of provider capture.

The second discussion topic in this chapter addresses the notion of counternarratives, described by McLaren as a theoretical construct (1996). There are at least two counternarratives that are identified from the data findings. The first outlines inconsistencies in how the financial and personal costs of assessment are absorbed. The

second counter-narrative strand relates how such workplace training and assessment may have an intrusive effect into the lives of the participants.

Thirdly, the workplace assessment of NQF qualifications were shown in the previous chapter to be contentious in several sections, notably when it was compared to university-based qualifications in 5.2. The NQF was originally intended to provide a single unifying framework for all learning (NZQA, 1993) but these research findings indicate that the NQF competes with higher status qualifications. In section 6.3, critical theory is utilised to further interpret this contentiousness, in the light of the debate concerning the academic/vocational divide.

The fourth area to be discussed provides a link between some social aspects of NQF workplace assessment and other technical, as well as philosophical, issues of assessment practice. This section furthers discussions in the literature review, namely the 'excellence debate', criticisms of the 'behaviourist theoretical basis' of the NQF and the debate over the best ways to teach and assess workplace higher knowledge.

Next, some technical issues of assessment practice are discussed. The 'prescriptions for practice' for assessment that were issued by the NZQA and other regulatory bodies over the period of the 1990's were reviewed in the literature chapter. This section will provide a further discursive link which indicates how far these prescriptions are followed in this particular case study and how that may be understood in terms of the wider vocational education context. Furthermore, a critical theory framework borrowed particularly from Habermas (as outlined in Chapter Three) is used to examine both the intentions and the practices of assessors when they make assessment decisions; interpreting the assessors' claims to objectivity and truth. A related discussion of the assessors' use of assessment evidence draws some conclusions as to how hermeneutic or interpretative knowledge may be a departure from a positivist understanding of assessor judgement, serving to counter the purportedly atomistic nature of NQF unit standards.

Another distinctive element of the hermeneutical knowledge that has emerged from the data, further examined in 6.6, is the significance of interpersonal closeness or distance in the relationships between the assessors and candidates.

Lastly in 6.7, the discussions of the research findings will be drawn together as general conclusions about workplace assessment under the NQF. These conclusions are highly differentiated and cannot be seen as a simple yes or no to the question "Is Workplace Assessment Working?" The answer offered in this thesis is "Yes and No" and "It depends who's asking." I will argue that the assessors' interpretative knowledge employed in guiding the assessment process and making decisions in assessments constitutes a worthwhile and defensible application within vocational education. It meets the intentions of many educationalists (outlined in 2.5) who had argued for change in [vocational] education, in order for it to become more fair, just and equitable. I will also argue that further intentions of NQF design (outlined in 2.5) have been met in a patchy, contested way; some intentions have been met, others remain unrealised. The 'meeting' of policy intentions in practice in this particular, 'messy' and contested site is clarified and given an additional dimension of meaning when viewed as a playing out of power relations and hegemonic ideologies. It is argued that the high value placed on workplace assessment by this particular group of workers, who view it as a vehicle for meeting their personal aspirations, is located within wider pressures on workers in workplaces that operate under the globalised conditions of post-modern capitalism. It is also argued that this particular practice of workplace assessment increases workplace pressures on ambulance employees; assessors and candidates alike.

6.1: The seductive appeal of the NQF

Section 6.1 provides links within a hermeneutic circle, connecting theory and data by interpreting the value attached to the workplace assessments of ambulance NQF qualifications, as reported by the interview respondents. The literature survey (Chapter Two) suggests that the NQF vision, instituted as a peculiar blend of new right and progressive educational ideology (Wolf, 1995; Hager, 1994; Hornblow, 1996), appeals to both right and left. The National Qualifications Framework in New Zealand was, from its inception, an arena of contention, comparable to the contested 'site' of educational curriculum in the United States (Apple, 1996). The findings of this research project appear to indicate that this contest is ongoing and plays itself out in this very local context - ambulance vocational education. The next two sections deal with how three such appeals

have been met. These are appeals for equitable learning, for benefit to workers and for consumer choice (which was most alluring to new right thinking.)

Consumer Choice and Provider Capture

As the NQF was being conceived and designed, the new right concurrently promulgated the notion that governments needed to actively combat 'provider capture' (Eagle, 2001). This notion, discussed in Chapter Two, became a significant driver for educational reforms throughout the 1990's and led to the creation of consumer, or learner, choice between different 'providers' of education. Views about consumer choice between providers were found in two areas in the research data: the establishment of multiple providers for ambulance training and the institution of workplace assessment itself.

Firstly, the respondents' views reported in 5.5 ("A National Standard" and "Variations in Assessment Practice") were mixed. They may be summarised as both a recognition that the centralised power of the former national Ambulance Training School had been weakened and as a general questioning of the efficacy of the multiple provider model - the respondents questioned whether multiple providers facilitated consistency in national standards. In the views of the respondents, (also detailed in 5.5) this was off set by the consistency intrinsic in the national standard of the NQF qualifications. The interview data findings show that in the particular case of the ambulance service there is no longer single 'provider capture' or a centralised, national training school and the interviewees have accepted this change, evincing little desire to return to the old National Ambulance Training School system. This flexibility of provision means, in critical hermeneutic terms, that the implementation of the NQF is deeply implicated in a shifting of social and economic resources away from a particular polytechnic towards the management regimes of the ambulance services, which now access the training funding, through their own training providers.

Despite the establishment of flexibility of provision in ambulance training, true choice for trainees was initially limited, as the old centralised system was replaced by a number of regional education providers. These providers offer consumer choice only insofar as they operate in geographically distinct areas and are based on classroom contact. To really 'choose', a learner/consumer would have to travel to another centre; not a pure choice.

There are indications, however, that provision of choice has become an ever-fragmenting process, with the Internet providing extended possibilities for the provision of ambulance education and the choices increasing in their complexity. This research project indicates that there are at least two different and competing systems or providers concurrently operating in ambulance training in the region examined in the project. One negative effect of this fragmentation was that individual trainee officers found themselves competing for resources within Wellington Free Ambulance, in order to complete the work-related requirements of their studies which were either workplace assessments for the NQF or the workplace mentoring required by the university programme. In this way provider capture is considerably weakened and this intention of new right thinking is realised. There clearly is increased choice available to trainees, although the more academic nature of the university qualifications reserves this choice for those ambulance officers whose background and experience lead them to feel they prefer the academic world. Further implications of this particular provision of choice are explored in 6.3, which outlines a perpetuation of the academic versus vocational divide.

Secondly, workplace assessment itself is another consumer choice. Employees can qualify while working, or learn as they earn. The consumers, or vocational learners, are not limited to attending polytechnics or universities. So the practice of workplace assessment itself, as well as the establishment of multiple providers, was intended (see 2.5) to provide another choice for learners in qualification pathways and to further weaken provider capture. Yet the research data shows that workplace assessment was valued by respondents for the validity and directness of evidence gained in assessment, rather than the ideology of consumer choice. It also shows that NQF training and assessment for ambulance officers if in New Zealand follows Hager's (2000) recommendations for seeking balance between onjob and off-job training. In Wellington Free Ambulance training, scenario and examination assessments are reserved for the earlier stages of learning and workplace assessments are employed at the end, when the trainee is to be awarded the complete National Certificate or Diploma and allowed more autonomy in their practice. The research findings in 5.3 present the workplace assessment as the final benchmark or test to be applied when the candidates is granted the 'licence' to operate as an ambulance officer. The overall assessment of holistic job competency can only be properly carried out when consideration is given to the entire job as it is conducted in a real workplace, not to a list of tasks in a training situation.

At the time of the interviews it appears that there remains a peculiar blend of emancipatory and new right ideology underpinning the NQF. In this example of the practice the NQF is 'fleshed out' as a popularist government policy and becomes an integral part of the historical compromise between capital and labour. The many and continual compromises, conflicts and changes in the power balances that constitute the relations between capital, labour, education and work come here to concrete expression.

Benefits to workers and more equitable learning

The interview findings in 5.1 point to reported feelings of benefit to workers from workplace assessment, namely meeting personal motivations to learn and to help others, increased earnings, and providing either protection for their tenure of employment or adding to their potential attractiveness in the labour market. The benefits were reported by both assessors and candidates, although assessors were not paid extra for assessment work. In section 2.1, I described the proponents of the NQF as being located in 'camps'. I would argue that the opinions and feelings of the assessors and candidates themselves about workplace assessments presented in 5.1 should be located within the camp of intended benefits to workers and more equitable learning. This seductive appeal of competencybased learning in the workplace has been critically interpreted in Chapters 2 and 3 (Usher, 1997; Fenwick, 2001; Noble, 1997) as a way for workers to better themselves; an often motivating, yet notoriously individualistic solution to the boring or exploitative nature of their work and the "brutalising effects of the market" (Taylor, 1983). Organised labour in NZ was attracted to the NQF as it was to be a part of their high skill, high wage economy vision for the future of NZ's workforce (CTU, 1992, 2001). In the case of the ambulance training programme, the qualifications offered by the NQF are certainly valued by the candidates as they are tied to (small!) increases in salary, as was revealed in 5.1. These concrete benefits of NQF qualifications are important for the ambulance candidates and provide some motivation for them to undertake their workplace learning. This motivation is sometimes denigrated by employers and some educational commentators as being extrinsic and some employers have attempted to disengage workplace qualifications and training from material benefits for workers (CTU, 2001). Clearly, this has not been the

case with ambulance training as qualifications are linked to salaries. However, further discussions of counternarratives in the next section analyse some employees' concerns about the burden placed upon them by workplace learning and assessment. The intended economic benefits of the NQF, making NZ's workforce more flexible and responsive, are not particularly demonstrated by the data, which may be a more appropriate subject for economic research. Critical analysis of the 'learning organisation' describes how employees undertaking training in the learning organisation become most successful when they develop personal qualities that are demonstrably self-motivating and self-reflective. They become mini-businesses in themselves. This tendency to self-management is also discussed in the next counter-narrative section, 6.2.

The NOF, as a social and educational policy tool, was weighted with an emancipatory intent; it was part of a larger strategy to widen participation in vocational education (NZQA, 1993; Bowen-Clewley, 1997). Certainly the NQF has provided a potential pathway for volunteers to enter and qualify within the ambulance service from the surrounding community and so could enable women to return to the workforce or possibly enable educationally disadvantaged minority groups to enter the ambulance service through its combination of practical learning and workplace training. supported by the nationwide statistics provided by the NZ Ambulance Education Council (2000) shown in Chapter 4, in which the candidate group was revealed to be much more gender diverse than the more established assessor group. The data on ethnicity however clearly shows that neither ambulance candidates nor assessors were ethnically diverse. Workplace assessment has not encouraged Maori and Pacific peoples to enter into the Ambulance service in numbers proportional to their representation in the overall population. Some writers, for example Bowen-Clewley & Strachan (1996), had felt the competency-based movement held the potential to challenge the elitist educational system of the past. It must be concluded that data on ethnicity of candidates in this study points to a possible continuation or even increase in the under-representation of Maori and Pacific peoples in Ambulance Service qualifications. Possibly the ethnicity of candidates reflects the dominant European/Pakeha group in the ambulance service.

The assumption that the widening of participation in further education is equivalent to emancipation is arguable. The intent of the NQF could also be interpreted as serving the needs of the economy and business for more skilled and flexible workers by offering increased access to education. Possibly some of this intended widening in participation has been facilitated and demonstrated in the widened pool from which candidates are drawn, contrasted with the more established assessor group. However, because volunteer ambulance officers appear to be disadvantaged by organisational factors, which often combine to make their assessments difficult to realize, it would be difficult to claim an absolute widening of participation. Many volunteers drop out of the introductory programs (see section 5.1) and only a small group continues to complete the threshold for ambulance service employment, the National Certificate. Those who remain may be those who adopt the self-reflective thinking of the learning organisation.

Furthermore, some progressive educational reformers (see Chapter Two) intended to remove the negative effects of norm-based examinations by implementing a fairer system of standards-based assessment. Specified standards would be drawn up by industry experts, according to their collated suggestions of what constituted the various competencies at various levels of ambulance work. The performance of learners would be measured against these planned learning outcomes and not against the norms created by relative performance of a cohort. The norms, according to this argument, are what the more powerful groups deem to be real, true and natural, the attributes and qualities of the less powerful being deemed to be inferior. Detractors of the NZQA, for example Irwin (1997), have argued that the specification of standards in essence involves identification of norms in workplace performance. The ambulance interviews indicate that the NQF standards did offer the assessors a benchmark for their measures of performance, and they could ensure that standards did not change markedly over time and that 'goalpost shift' according to the relative performance and nature of the candidates was less likely. Furthermore, the standards offered implicit transparency and fairness, which was valued by all the respondents. It would be difficult to dismiss these reported practices of fairness and transparency, which may constitute the strongest argument from the research data for workplace assessment of publicly available standards. However, at least two obstacles to equitable learning were identified; practices were often inconsistent (see 5.5) and educational elites appear to remain (see 5.2). The first obstacle is discussed in 6.2 as part of the counter-narrative. The second is that university qualifications for ambulance officers continue as academic sorting devices and the NQF qualifications are relegated to the lower levels of knowledge and expertise in ambulance training. This tendency is discussed further in 6.3.

6.2 Counternarratives from the research

The narratives told about education and society by less powerful people can be very different from the narratives espoused by powerful elites; they can become counternarratives (Giroux et al, 1996) which contest the official narratives. These counternarratives may have a liberatory, critically interpretive effect, as they allow a less powerful and previously disregarded voice to be heard. Accordingly, the official story of the inception of the NQF was a "grand vision" (Viskovic, 2000) which was supported by successive governments (McGookin, 1999) and widely popularised (FITEC, 1996). It also engendered a sizeable educational infrastructure in the form of the NZQA and the (now!) 45 Industry Training Organisations. This grand vision has the distinctive character of a modernist "grand narrative" (Lyotard, in Giroux, Lankshear, McLaren & Peters, 1996), describing a monolithic understanding of vocational education. The views about workplace assessment presented in the interview data may be seen as counternarratives, which allow the workers involved to articulate and explain how they have experienced the grand vision in their own local context, as assessors or candidates. While there are many positive views about workplace assessment expressed in the interviews, the data further complicates and challenges the NZQA-supported discourse of approval (McGookin, 1999). There are unforeseen problems, difficulties in implementation and unexpected ways in which the grand vision is implicated in power relationships in these workplaces.

Costs Absorption

One such counter-narrative sub-plot is the way in which the costs of workplace learning and assessment are absorbed by the candidates and assessors themselves. In 5.6, assessors related how they frequently worked after hours in order to manage their increased workloads.

Some volunteer candidates even used annual leave from their day jobs to complete ambulance workplace assessments. The deal between the workplace and the volunteer is that the ambulance service pays for the on-job qualifications, but that the officer works on a voluntary basis. Some volunteers aim to become employed by the Ambulance Service, indeed this 'volunteer apprenticeship' has been the favoured method of recruitment until very recently. This may be why some candidates are prepared to absorb the cost of assessment, as a kind of investment in their future career. The service acknowledges and exploits this desire for employment as a way to hold down the general costs of training and assessment. It should be noted that 75% of all ambulance workers in NZ are volunteers (NZAEC, 1999). Clearly the organisational wheels do not turn readily for the volunteers, who have little standing and power in the ambulance workplace. Interestingly, the majority of volunteer ambulance officers are women and most permanent officers are men, in the interview sample at least. In Chapter Four it was noted that half the candidates for the National Certificate assessments were women, although 80% of the assessors were men. This may indicate that present rather informal arrangements perpetuate the gender imbalance within the service and make it more difficult for women to break into the desirable permanent jobs.

Furthermore, the conundrum of whether to 'double or triple crew' the ambulance vehicle during workplace assessment (described in 5.5 in the findings on consistency between assessments) showed clearly that the assessors had to use resource allocation procedures to absorb the costs of workplace assessment into usual work practices. Areas of inconsistency were revealed in section 5.5. These were regional variations, multiple providers (see 6.1), double and triple crewing of ambulance vehicles during assessments and differences in assessment practices. These are partly the outcomes of differing levels of organisational capability and willingness to meet the costs of workplace assessment. Some regions for example were possibly better able to provide triple crewing and other regions, such as the busy, metropolitan ambulance stations, were unable to absorb this cost.

There are indications that there were no extra resources made available for workplace assessments; and it appears that workplace learning under the NQF is more cost-effective than the centralised training described in 6.1, which required officers to be sent to

Auckland for block courses. The separation between the services and the training providers is arguably in name only and workplace assessments are conducted locally, rather than at a distant institution. This is, however, still more expensive than the Victoria University of Melbourne qualification for paramedics, who work at the highest level of ambulance work. In contrast to the NQF qualifications, the fees for the university qualification are met, in part, by the student and the use of the Internet is cost-effective for the service. One manager/assessor noted "it's an Internet based course, so you don't have to shift people around." The university course also places demands on the time and resources of senior ambulance officers as it depends of the provision of workplace mentors.

While cost-effectiveness is a worthy goal in government-funded organisations such as the ambulance service, it is argued that the costs of workplace assessment are in fact met by the 'user pays' model, which is described as an element of public choice policy and new right ideology in 2.2. The candidate/user pays time (rather than fees) and the ambulance service-as-user pays for time and resources. The assessors, clearly not 'users', reported (in 5.1) that they were unpaid and they were actually using their own time and energy, to make the system work. The user-pays attitude has become so hegemonic and unquestioned that it is not openly contested by either candidates or assessors, who grumble about paying but continue to do so. However, the user pays model for education has undergone extensive critique and there is a significant body of research which points to ways in which it privileges those who are better able to pay (Dwyer, 2002; Kelsey, 2001; Eagle & de Bruin, 2000). Higher and vocational learning that is significantly self-funded may be an unappealing prospect for those who cannot pay as much; this includes working class people, unemployed workers, many Maori and Pacific peoples and many women. It must also be considered that workplace assessment offers a lesser degree of direct user pays, in terms of tuition fees, than the university study model. Workplace assessment is cheaper for employers and it enables less-advantaged employees to gain qualifications without significant financial cost. Nevertheless, the counter-narrative told by the respondents has significant explanatory power, as it links the practice of cost absorption in workplace assessments with a type of user pays education and this 'hooks' into wider critical analysis of new right policies in vocational education. The NQF was initially characterised as a blending of appeal to right and left (Hornblow, 1996), and this counter-narrative sub-plot provides an unexpected and pertinent example of this blend.

Intrusion into the Lifeworld

The second strand of the counter-narrative concerns the intrusion of workplace assessment into the 'lifeworld' (Habermas, 1981; Welton, 1995) of workers. Two sets of data are relevant here: the findings in 5.1 and 5.6 regarding the extensive time needed by assessors to complete their assessment tasks and the findings in 5.1 about in time and energy candidates put into preparing for assessments. Despite the permanently employed candidates not having to use their own time for the actual workplace assessments, they certainly studied extensively in their own time. The NQF qualifications would not be unique in this regard (Ciulla, 2000). I would argue that the workers' private and civil life, their activities within the lifeworld then diminishes, as more and more of their time and energy is spent within the system (Welton, 1995) specifically on their work-related activities, including training and assessment. Less time is available for recreation and leisure, or the re-creation of the workers' spirit, which draws on the home and community and renews workers' energies, potentially immersing the self in wider activities, struggles or concerns. In the data in 5.1, candidates saw this focus on workplace learning to be a level of commitment and hard work necessary to advance in their own career; they were proactive, self-directing and open to change. Ciulla (2000) explains how the logic of work has increasingly become the logic of our lives and there is frequently little space for much else. The personal qualities required by this local example of workplace learning are reminiscent of critical theory analyses (Usher, 1997; Spencer, 2001; Fenwick, 2001) of how worker subjectivity is captured by the learning organisation as envisaged by Senge (1990), and Watkins & Marsick (1993). These critical theory analyses describe how selfreflective learning and increasing employee flexibility is used for corporate profit, without any abatement of the processes of corporate down-sizing, worker casualisation and maximisation of corporate profits. Therefore the learning organisation operates in a hegemonic manner, masking the increasing exploitation of workers through a capturing of their subjectivities. In the case of the government funded ambulance service, corporate profit is not the aim of the organisation, although many government-funded bodies have been clearly directed by governments to make a profit at various times over the last decade

and a half (Kelsey, 1997; TEC, 2003). Moreover, the critique of the new right's influence on New Zealand's economic and social environment outlined in Chapter Two reveals how imperatives to cost reduction and avoidance of provider capture place pressures on workers in the government sector that are similar to those experienced in the private economy (Dwyer, 2000). The motivations of the candidates were not only those of the captured-subjectivity, keen, 'learning organisation' type, they were also the result of pressure exerted by the service management who needed to meet quality assurance requirements. This pressure on employees to get qualified, as described in 5.1, is a further possible indication of the way in which the system intrudes on the lifeworld of workers. These ambulance workers accepted workplace learning and becoming better qualified as a way to protect their job security, safeguarding them from the more brutal effects of the job market and cost cutting. They did not however accept all of the accompanying processes of workplace learning. They knew from their own experience that flexibility came at a price and this was the counter-narrative they were keen to relate.

The two strands of the counter-narrative are, in summary, the absorption of costs by workers and the intrusion of vocational learning into the workers' lifeworld. The value of the counter-narrative concept is that it allows these experiences from workplace assessments to be linked to wider critical theory analyses of user pays and the learning organisation. The argument of this thesis is that some of the official narratives of the NQF took no account of these counternarratives because of their particular blend of new right ideology and optimistic reforming zeal.

6.3 The Unifying Framework versus a Contested Site?

A significant stated intention for the NQF was that it was to be a single unifying framework for vocational qualifications. The vision was that the NQF qualifications would be promoted by ITOs and taken up by the workforce in order to increase New Zealanders' vocational skill levels and thus New Zealand's competitiveness in the global marketplace (NZQA, 1999c; Hood, 1992). This notion of the unitary framework was certainly contested in the ensuing debates around the NQF, particularly those between university academics and proponents of the NZQA. These debates, which are outlined in Chapter Two, centre on

contested understandings of the epistemology and philosophy of the NQF. On the one hand the NQF is seen as a mere set of behaviourist learning outcomes which are not conducive to either deeper cognitive learning (Elley, 1993; Irwin, 1997), workplace change (Web Research, 1996) or holistic work performance (Codd McAlpine & Poskitt, 1995; Irwin, 1997). On the other hand, the NQF is represented as an opportunity to teach and assess deep cognitive learning (Broadfoot, 1992), an integrated way to assess learning at work based on holistic practice (Hager, 1995) and a bridge between the academic and vocational divide (Jessup, 1992). The research findings are examined to further these debates and provide some conclusions.

It is clear from the interview data findings presented in 5.2 (the section on the 'best' way to assess knowledge), that there is an emerging contest between university and NQF qualifications for the ambulance 'industry'. This interviewee data showed that both qualification systems competed for assessor time and other organisational resources. There were indications that the NQF qualifications were reserved for the less academic, less senior ambulance officers, particularly the volunteers who were often engaged in a longterm attempt to 'break into' employment in the ambulance service. In contrast, the more academic learners were those who felt more confident about their ability to handle the demands of university study and were either permanent senior officers or pre-employment trainees. (The university course has not been long instituted and so it is difficult to ascertain if the more academic staff are promoted faster.) Thus a dual system is being instituted in ambulance training. The NQF National Certificate and National Diploma, primarily taken up by the volunteers and the less academic permanent ambulance officers, and the more academic university qualification for permanent officers, either newly qualifying or established, seeking professional development and career advancement. This dual system is then possibly a reification of the vocational /academic divide, referred to in the literature review (Barker, 1995).

The debate around the NQF highlights the notion of privilege and this label is applied in differing ways. Firstly the NQF itself is in a privileged position (McGookin, 1999) as the training system promulgated and supported by government. Conversely, it has been observed that privilege is maintained or accrued through the acquisition of certain ways of

knowing that are associated with university study (Lather, 1995; Ellsworthy, 1989 in Lather). Proponents of the NQF (Bowen-Clewley, 1997; Hood, 1992) felt that traditional university qualifications were elitist and operated to preserve privilege. There are indications of this kind of privilege in the research data findings in section 5.2, where interviewees complained that the ambulance officers who were enrolled in the university-based diploma in para-medicine were frequently favoured in the allocation of workplace mentor/assessors by the organisation. In contrast, some National Certificate and Diploma candidates have organisational difficulties when they attempt to arrange their assessments and may therefore be said to be less privileged.

The interview data shows therefore that one kind of privilege is maintained. Traditional university study, being associated with deeper knowledge is favoured by organisational action within the ambulance service. Another kind of privilege, being part of the NQF, does not seem to count for much and is relegated to the lower levels of ambulance training. Thus the divide between the academic and the less academic is furthered within this ambulance service. When attention is further focused through the critical theory lens, some possible implications emerge; the academic/vocational divide may be implicated in hegemonic replication (Adorno, 1975). Hegemony exerts its influence when workers accept repression, or at the very least relegation to disadvantage, when the current state of things appears to be natural, thereby concealing the ways in which power and privilege are maintained. Thus, when the competency-based NQF system is seen as naturally suited to those workers who are less academic and to the volunteers, whom the statistics have revealed to be predominantly women, it can be said that this divide operates in a hegemonic way, replicating the power that already exists within the traditional structure of the ambulance service. The data also reveals (in 5.2) assumptions that the vocational qualification system suits manual workers, the 'doers'. This operates in a hegemonic way insofar as it restricts some levels of ambulance work to the realm of trades-type work. However, certain groups and individuals within the ambulance service possibly seek to reposition themselves in terms of their relative power by undertaking university qualifications as the true mark of the most able ambulance officer. Accordingly, such ambulance officers are not convinced that the deep-knowledge component of their profession can be inculcated outside of the university system. They wish to be 'thinkers',

not 'doers' and seek qualifications with the academic universities, rather than with the NQF.

The stated intention of a single qualification system that bridges the academic and vocational divide has certainly not 'worked' in this case, rather two systems are operating and vying for customers, and the traditional conceptions of workplace learning that the NZQA hoped to change continue to flourish in the Ambulance Service. However, there is much to commend in the practice of workplace assessment and in the following parts of this chapter, 6.4, 6.5, and 6.6; I argue that whilst the practice of workplace assessment within the ambulance service is not operating (or intended) as critical knowledge in the Habermasian sense, it constitutes hermeneutic or practical knowledge for assessors. This communicative, interpretive or hermeneutic knowledge derives from ways in which the assessors work with their candidates and how they approach their decision-making processes.

6.4 Holistic and atomistic: interpretive assessment knowledge

A significant criticism of the NQF was the behaviourism said to be implicit in the prescription of learning outcomes which are measured in a purely technical process. Details of this debate were covered in Chapters 2 and 4. Criticisms of behaviourism will be addressed by a discussion of the research findings already presented in section 5.3, which explores how assessors and candidates find solutions for integrating atomistic lists of competencies with overall workplace performance. The assessment of workplace performance necessitates a fluid switch from analytic to holistic and back again, so that the assessor intensively understands the candidate's performance.

Although it is impossible to look inside the mind of the assessors or candidates to see what is going on during the assessments, interview data presented in 5.5 indicated that interplay is constantly present during the assessments, running throughout as a thread that draws it together. The candidates were often so focused on the job in hand they were not aware that they were being assessed against a set of outcomes. The assessor, however, in analysing the performance of the candidate, was making internal reference to the competencies without making it openly apparent. Possibly if an assessor did openly refer to each of the

atomistic competencies this would slow down real performance, unacceptable in ambulance work, as much depends on rapid response and the ready integration of knowledge and skill. This notion of interplay does serve to some degree to counter the argument that competency standards atomise and reduce work, 'dumbing it down' and losing its complexity.

Furthermore, post-modern arguments (Lather, 2000) convincingly point to a distrust of simple dualistic explanations, seeking theories with more complex and multiple explanatory power. Bearing in mind Giroux's recommendation to 'mine' post-modernist theories, the holistic nature of assessment could be theorised as follows. The dualistic description of the NQF, given by McGookin (1999) and Elley et al (1998) portrays lists of competencies that break work down into atomistic descriptions or behaviourist outcomes. It contrasts competency with other holistic understandings of work. More useful is to discard either/or characterisations of competency and to focus on the interplay and continuum between atomistic, which is a necessary part of looking closely at work, and holistic thought, which pulls those fragments together into the coherent whole, which is work itself. This can be seen as the interplay between the big picture - being a good ambulance officer - and the requisite skills that constitute this big picture. The assessors needed to review the criteria described in the unit standards, in order to be able to make well-founded judgements about the performance of the colleague working alongside them. Most significantly, the assessor is looking for competencies and competency. The presentation of this argument is furthered by the construction of a model of the process of interplay between atomistic criteria and holistic tasks.

In this model of a workplace assessment, a work process may be depicted; showing the interplay between the instrumental, atomised competencies of ambulance work and interpretation of the whole work performance. As the candidate/ambulance officer works at the scene of an accident, several tasks are undertaken. However there is concurrent consideration given to the holistic 'big picture' by both the assessor and the candidate. An example related by several candidates was assessment of the insertion of an intravenous (IV) tube into a patient's airway or vein. A holistic awareness of the total accident scene interplays with technical criteria such as running fluids into a tube or taking the patient's

pulse, flicking back and forth between whole picture and competencies. It is this interplay that the assessor makes a judgement about, integrating the atomised parts into the whole. In this case, the whole is more than a sum of the parts. In a Habermasian sense, I would argue therefore that the ambulance assessments described in these interviews are not instrumental, but are rather interpretive. The technical actions of the candidates are not to be seen as a simple list to be 'ticked off'; rather the actions are interpreted by the assessor in a holistic way. To simply move through a list of performance criteria could be justifiably dismissed as a positivistic, instrumentalist view of assessment of performance. The interplay model is not necessarily merely binary, performance assessment being neither simply atomistic nor holistic. This assessment is a combination of many different criteria which are simultaneously taken into consideration when the assessors check the work of their colleagues.

6.5 How the Assessors Make their Decisions: The Intended Prescriptions for Practice and the Research Findings

The standards-based approach to vocational education as encapsulated by the NQF is partly born from a desire for accountability, which again is a blend of new right and emancipatory (transparent) thinking. In short, as was discussed in Chapters Two and Three, the new right accountability imperative intends to weaken the power or 'capture' by professional educators and increase the power of consumers and managers in education. In contrast, the emancipatory imperative strengthens the power of the learner, the emphasis being on the learner not on the consumer of services provided by the technician-educator. Learners are entitled to know why and how decisions are made on their performance and these decisions should be moved into the open and subject to scrutiny. The result is that professionals are required to present evidence, to justify and be accountable for their decisions. Thus 'accountability' has markedly influenced prescriptions for assessment practice. Assessment evidence was in turn intended to possess a particular set of qualities, including validity, sufficiency and directness. The following section discusses the research findings on assessment evidence in relation to specific publications from NZQA and other regulatory bodies.

Direct Evidence

The assessment evidence described in the ambulance workplace assessments was completely direct, which I earlier defined as being 'as close as possible to real performance'. However, this real and direct evidence was confined to the workplace assessments and there were other parts of the qualifications that were undertaken in scenarios and examinations. In the view of the respondents, presented in 5.3, there is no contest on the question of direct evidence; it appears that ambulance assessors and candidates alike set great store on the value of real workplace evidence. This neatly coincides with the prescriptions for practice put forward by the regulatory bodies (NZQA, 1996, 2001) and educationalists promulgating the NQF (Broadfoot, 1992; McCool, 1992; Jessup, 1992).

Valid Evidence

More controversial were the findings on the validity of evidence used in workplace assessments. The findings in Chapter Five pointed, at times, to a mismatch between the ambulance officers' notions of validity and the NZQA standards. Some standards were described as not correctly reflecting the skills and knowledge needed by a competent ambulance officer. In the document "Best Practice in the Assessment of Unit Standards" (ITF & APNZ, 2000) the writers admit that there are difficulties in designing standards and that some of the standards registered on the NOF are imperfect. When putting the hypothetical question "What if I have to use a poorly designed standard?" (ITF & APNZ, 2000:4) the document advises assessors "You should apply the principles as best you can to the situation", clearly an exercise in dealing with ambiguity! Assessors in the ambulance industry may struggle with the internal validity of the standard and the advice given is to go back to their own standard setting body and seek to change the standards "You should send you [sic]concern/suggestions to the ITO or National Standards Body concerned or NZQA" (ITF & APNZ, 2000:4). The ambulance assessors in the interviews took the former advice and dealt with imperfections as they thought fit. The Best Practice document and the actual practices of ambulance assessors encourage the view that performance standards are difficult to capture in absolute detail and that value should be placed on the interpretive knowledge of the assessors involved.

Sufficient Evidence

In contrast to some other assessment practices, which are implicitly criticised in the Best Practice document, ambulance assessments did appear to meet the sufficiency prescription. The earlier NZQA (1996) advice to use "sufficient" evidence has clearly led to the practice, described in the interviews, of gathering evidence from a number of sources: questioning knowledge, observing performance and gathering together a logbook of cases. However, the generalised educational backlash against unit standards, as described in the literature review in this project, led the NZQA to later respond with advice that ameliorated and somewhat contradicted the earlier instructions to gather sufficient evidence. This was intended to avoid over-assessment. The National Certificate and Diploma in Ambulance Care are assessed in a blend of different systems; examinations, scenarios and workplace assessments (which in turn include observations, logbooks and oral questions). This eclectic 'hedging your bets' approach may well prove to be onerous and not particularly well suited to the principle of 'least evidence', which is aimed at avoiding over-assessment. It was notable that none of the interview respondents referred to over-assessing, although they frequently referred to the workload resulting from workplace assessments.

In 1995, Alison Wolf predicted that sufficiency would be the rock on which competency-based assessment in the workplace would founder. She postulated that high costs, excessive volume or time needed would be the undoing of workplace assessment and employers would seek to avoid these high costs in most professions and occupations. The reason offered by Wolf for this avoidance was that businesses do not regard education as their primary function. She also conjectured however, that high-risk jobs would develop or retain the more costly method of workplace assessment. High-risk occupations include those where human life would be endangered if workers had been awarded licensing-type qualifications and later found to be not performing adequately. It is highly likely that ambulance work is such an occupation. The research findings indicated that the ambulance assessments were certainly thorough and sufficient evidence was gathered in order to make assessment decisions. The ambulance service has so far neatly avoided the costs associated with sufficiency of evidence by transferring the load onto employees, both assessors and

candidates, (as discussed in 6.3). However, the long-term viability of transferring costs is thrown into question.

It would appear that the three factors discussed above, validity, sufficiency and directness, are interconnected and influence each other a good deal. It could be posited that the qualities of evidence are very much a relativistic juggling act, the trick is to keep all three balls spinning through the air, if one is held for too long then the other two are sacrificed. For example the most valid and direct forms of assessment evidence may in fact be overly 'sufficient', tending towards over-assessment. If the assessment standards are not regarded as valid and direct by practitioners, any amount of sufficiency of evidence would not influence their perceptions of the value and workability of the assessment. This interconnectedness of validity, sufficiency and directness is also a kind of practical, hermeneutic knowledge employed by assessors.

How the Assessors Make their Decisions: Claims of Objectivity and Truth

The notions that reason and rational decision-making are open to critique and that objectivity is partisan are not new. The 'stated intentions' for the assessment of competency standards appear to assume that the significant debates about objectivity and truth and the place of reason had perhaps never taken place and that scientific rationality is the undisputed arbiter of assessments. The intention of the NZQA (NZQA, 1993) was that assessor judgements should be well-founded and based on valid, authentic, direct and sufficient evidence. Through adopting these linguistic justifications of scientific rationalism, these 'intentions' are draped with the mantle of rational science, which assumes its objectivity to be a truth. However, the tradition of critical theory, being rooted in the Marxist notion of 'unmasking reality', has challenged this assumption by drawing connections between science and education and underlying relations of social and economic power. Critical educational theory indicates that instrumental reason may be in itself repressive when used in an uncritical way (Giroux, 1983). Furthermore, feminist theory (Lather, 1995; Ellsworthy, 1989) reveals that once-accepted assumptions about family, work and gender were simply dependent on world view, not unshakeable facts. Therefore, when investigating the workplace assessment of NQF standards, it is useful to consider the power-imbued nature of positivist, scientific rationality. Seeing workplace assessment through this lens leads me to view claims of objectivity somewhat sceptically.

This is more than scientific scepticism; if scientific method is applied with no acknowledgement of its context, it may operate in hegemonic ways. Judgements made by assessors may be influenced by factors such as closeness or distance between the two parties and preconceptions that assessors may have about their candidate's work (Wolf, 1995). It is however, also worth considering what the alternatives to rationality in workplace assessments might be. It is possible that if prescribed standards and standardised ways to judge these standards were absent, workers may be even more susceptible to random, power-imbued judgements about their performance. The interview data does indicate that the assessors and candidates have high expectations of their rationalist credo; they frequently asserted that assessments should be valid, fair, and consistent, and they are supposed to consider only authentic, direct evidence. Assessors certainly strove to meet these demands, yet there indications they were also aware that objectivity can shift, and may be mobilised to function in repressive ways. Habermas (1981) posited that the application of critical reason is only really possible in situations where there is genuine equity between those involved, the Ideal Speech Act. The relationships between assessors and candidates were unequal insofar that assessors were more senior in the ambulance service hierarchy and both parties were very conscious of the imbalance in their relative expertise and knowledge. It is however quite clear from the interview data that it is possible to create an equitable context for a workplace assessment, much like Billet's (2002) reciprocal participation, when the interpersonal environment is marked by positive closeness and a sense of mutual fairness. The notions of closeness and distance are further explored in the next section.

6.6 Relationships between Assessors and Candidates: Distance and Closeness

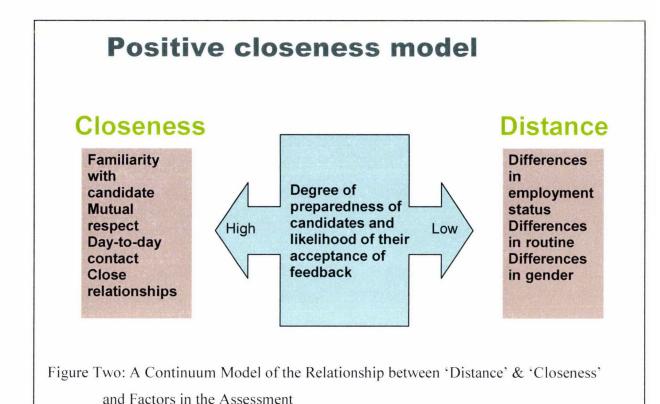
The interview findings in 5.4 showed that there was a link between the way that candidates felt about their relationship with the assessor and how they felt about the assessment. To recap the findings in chapter five, candidates' feelings of positive closeness to the assessor meant that they were well prepared for the assessment and more likely to accept the

assessors' feedback on their performance, as in Figure One below. Positive closeness was also shown to possibly include sameness in terms of at least gender identity, although other factors such as age and ethnicity were not explored.

Positive Closeness

The model below theorises about the relationship between the degree of closeness or distance between the assessors and the candidate and the candidates' degree of preparedness for the workplace assessment, as well as the likelihood of their acceptance of feedback from the assessor. The model is not intended to be a simply binary either/or model. Any assessor or candidate relationship may find itself at any place along this continuum. When candidates appear to have a closer relationship with their assessor, they appear to be better prepared for assessment events, from their own accounts and those of the assessors. They also find it easier to accept feedback on their performance when they feel both closeness and respect for the assessor's high level of knowledge and experience in ambulance work. This closeness is influenced by multiple identities of the assessors and the candidates, women candidates and men assessors may feel some distance, which in some instances may be dispelled by conscious efforts on the part of the assessors.

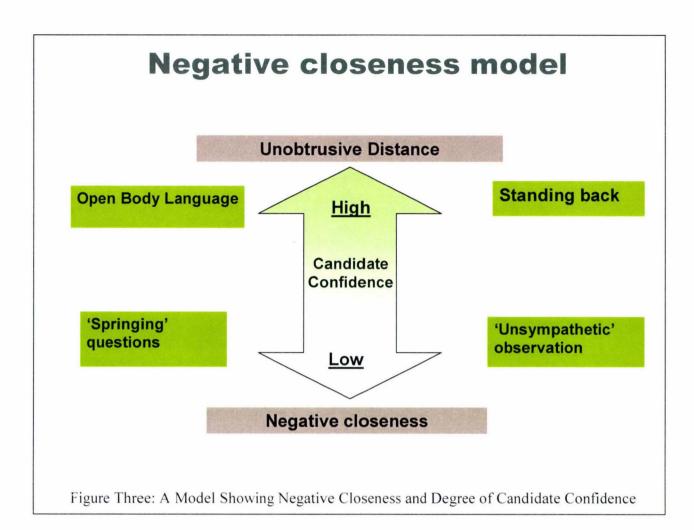
On the lower end of the continuum, differences in gender appear to impact negatively on distance possibly because assessors do not consider the effect that this may have on the relationship. On the higher end of the continuum, where candidates feel well prepared and comfortable with feedback, there may be fewer differences. In these cases, either both assessor and candidate are male, or possibly assessors have approached women candidates differently. Volunteer candidates may feel less close to assessors than permanently employed candidates, who feel part of the system. However at the higher end of the continuum, assessors have possibly attempted to organise the assessment events to meet the needs of volunteers. Another factor that may influence the degree of closeness or distance between assessors or candidates is individual personality; some people may be intrinsically more confident than others. However, in general, such psychological factors were not explored in the data.



Negative Closeness

In contrast to positive closeness there is negative closeness or not giving the candidates space to get on with the job. Negative closeness is a kind of claustrophobic suffocation felt when performance is closely and unsympathetically monitored.

Figure Three theorises how intrusive practices by assessors may result in candidates feeling less confident about assessments. For example, the interviews in 5.4 indicated that there were ways in which assessors prepared their candidates for the assessment. If candidates felt that a question was 'sprung' on them their confidence tended to drop. If however they were well prepared for the process and the assessor had taken the time to go through things with them, their confidence level was higher. The diagram also depicts the relationship between "negative closeness" or attempts to unduly control the assessment, and how relaxed and confident a candidate may feel about the assessment. The assessors who behave in a more unobtrusive way are more likely to have confident candidates.



The two models of closeness and distance, when seen singly, may be said to be existing in binary opposition, however, here is rather a continuum of degrees of engagement experienced by candidates and the influence exerted by the interpersonal behaviour of the assessors, differences in gender and employment status. This hierarchy is not necessarily bounded at either end. It is more of a continuum with complex possible permutations and no endpoint where an absolute level of closeness or distance is reached between assessors and candidates. Other factors that may influence how the work of a candidate is perceived by an assessor may include cultural or ethnic background and relative ages and backgrounds of assessors and candidates and these have not been considered in this model. However, some conclusions may be drawn from the applications of the models, as they indicate the importance of creating an environment where there is an opportunity for an equitable exchange, something approaching Habermas's 'ideal speech act' (1981). When feelings of mutuality, fairness and ease with the assessment environment are created

through conscious efforts on the part of the assessor, this may create opportunities for the application of critical reason in the assessment process. The assessor judgements become part of a mutual interchange between themselves and the candidate, and less an expression of their own 'will to power'. The two models may be examples of reciprocal participatory practice envisaged by Billet (2002).

6.7 Conclusions: Stated Intentions and Ambulance Workplace Assessments

This research project began with a survey of the stated intentions of the initiators of workplace assessment of NQF qualifications. This chapter has provided an interpretive account of the practice of workplace assessments developed from a series of qualitative research interviews. The concluding part of this critical interpretation of workplace assessments offers an opportunity to relate the official narrative with a lived story. The stated intentions, as they are summarised in section 2.5, are compared with the research findings.

Developing the Skill Level of the Workforce

The first intention was to increase the skill levels of the NZ population and better position New Zealand in the global marketplace; the 'grand vision' for the NQF and the practice of workplace assessment. This localised research project cannot claim to provide conclusive information about how this intention has been realised to date. However, the practices of workplace assessment were seen by some as providing better methodologies than others for making decisions about qualifications. Workplace assessments were more accurate and therefore more likely to increase skill levels. Yet this was a contested view, as the NQF was seen by some respondents as not stringent or advanced enough for para-medicine practice. These responses may be interpreted as part of ambulance trainees' desire to position themselves along the academic/vocational divide. A unified framework has not been provided by the NQF. Two systems vie for learners and resources.

An Equitable Alternative Pathway

The second intention, which was to provide a fair and equitable alternative pathway for qualifications, has also only partially been realised. Counternarratives presented and interpreted in the research reveal difficulties in implementation of an equitable pathway in

ambulance training. Most serious are the barriers to continue with their qualification encountered in workplace assessment by the volunteer candidates. These barriers are financial and organisational. Other significant barriers were those encountered by candidates competing for resources with other officers who were undertaking more academic qualifications. However, the practice of workplace assessors was seen as fair by candidates and it is here that the original intentions were realised. Two models of "participatory practice" were developed from interpretation of the research data, indicating that the 'felt' level of distance or closeness strongly influences candidates' confidence and therefore fairness in these workplace assessments.

Weakening Provider Capture

There appears to be little doubt that workplace assessment in the ambulance industry has realised a third stated intention; it has weakened the dominance of traditional tertiary education providers in the ambulance education market, or lessened provider capture. Reported inconsistencies have resulted from this multiplicity of provision, as well as a further division of academic and vocational training. However the experiential nature of the NQF workplace assessments is highly valued by the research respondents.

Assessment Practice

A further intention was to provide prescriptions for assessor judgments that were fair, consistent and based on holistic evidence-gathering methodology, using valid, authentic, direct and current evidence. As noted above, the ambulance workplace assessments in this research were valued for their 'realness.' The evidence was seen to be direct and valid, superior to tests, examinations and scenarios. The hermeneutic knowledge that assessors and candidates employed in making fluid transitions between technical and interpretive or holistic judgments is a powerful response to criticisms of reductionism levelled at the NQF.

Gaining qualifications through workplace assessment was intended to be cost-effective for enterprises and business and evidence gathering should involve documentation of ongoing learning to reduce the load on assessment events. This intention has been partly realised, yet the costs for qualifications have not vanished. They have been re-located and are partly

borne by the assessors and candidates in their increased workloads. The counter-narrative about the intrusive effects of workplace learning on the lifeworld of the ambulance workers is well documented in this project. The discussion therefore moves from ways to meet fiscal costs, to a consideration of costs to the 'lifeworld' of workers.

Emancipation for Workers

Chapter Two outlined the stated intention of workplace assessment to be more emancipatory than other types of vocational education, as it was connected with notions of Total Quality Management (TQM) and continuous learning within workplaces. Critical theory discussions of TQM interpret this less as emancipatory, than as a method of capturing workers' subjectivities for the organisation. Yet, the candidates were firmly committed to their own workplace learning in the hope of meeting their aspirations and to a certain extent the rewards attached to workplace learning in the ambulance service coincide with the aspirations of organised labour. Workers are dependant on fluctuations in the labour market, and these qualifications offer protection and some reward for the work they have invested. Hopes for emancipation of workers are neither simply met nor repressed by the practice of workplace assessment; it is more a place where the ongoing contest for emancipation is played out.

CHAPTER SEVEN RECOMMENDATIONS AND IMPLICATIONS

When addressing the question "Is Workplace Assessment working?" I have answered "yes and no" and "it depends who's asking!" The conclusions in 6.7 point to aspects of workplace assessments that 'work', particularly the practical knowledge assessors use to make decisions. The conclusions presented also indicate that WPA attempts to string together rather disparate intentions and thus is contested in its workings. The recommendations for policy and practice offered here are very much from a critical theory standpoint and point to ways to benefit the workers who are caught up in the process.

7.1 Limits of the Research

There are several limitations to the potential to generalise the results of this research. The first is the very specific context of the ambulance service. The strong social service motivations of assessors and candidate/learners revealed in the research may not be present in other workplaces. The special combination of knowledge and skill in ambulance work may be less prevalent in other more practical jobs that use NQF workplace assessment.

Although semi-structured interviews were selected to provide a framework to develop the interviews around, the loosely structured nature of the ambulance interviews is a limitation, as well as strength. This methodology may lead respondents into some areas and allow them to ignore others, which may not be the case with fully open-ended interviews.

7.2 Validity of Workplace Assessment

This research has reported the views and opinions of people directly involved in workplace assessment and they report a high degree of validity and directness in the evidence used to make judgments about workplace performance. The validity and directness of workplace assessment constitute an argument for its continuation and is one area where stated intentions have been realised. Replication of these findings may explore validity and directness in other vocations. A possible research method would be to explore the opinions of independent experts, who were comparing 'blind' the level of knowledge and skill of two groups of people: those qualified through workplace assessment and those who had

undertaken traditional vocational study. Interesting and important questions would include: how far new, broad and deep knowledge was incorporated into each type of workplace training and assessment? Which group can do the job better? What does doing the job better mean?

7.3 Integrating Atomistic and Holistic Approaches: Hermeneutic Knowledge

I would argue that it is the absolute refusal by ambulance assessors to use clipboard type assessment, which would intrude into ambulance work, that has allowed them to find a practical solution to the persistent question of how to integrate atomised technical competencies and holistic real work. The interplay model offers a practical and workable way for learner/candidates and assessors to counter any tendencies to focus on reductionist lists of competencies. It would be of interest to explore how this holistic, hermeneutic assessment knowledge and practice is influenced by differing workplace circumstances, various supporting assessment materials and relative situations of power within workplaces. Research seeking the replication of the holistic model of assessment practice could be undertaken in comparative and different workplaces.

7.4 Fragmentation and Inconsistency

Consistency in assessment judgements meets the purposes of both candidates and assessors interviewed in this project. Serious inconsistencies in individual assessor judgment were not reported, although the evidence from third parties, which was used in training logbooks, was reportedly varied and sometimes arbitrary. The research project has identified a number of inconsistent practices in assessment; these include double and triple crewing, which may be seen as a fiscal constraint, and regional provider variations. The regional variations were interpreted as stemming from policies to combat provider capture. More recent developments in education policy (TEC, 2002, 2003) have reversed tendencies towards extreme provider competitiveness in education. Because of this lessening of competitive tension, opportunities may present themselves to investigate how variations in assessment practice may be ameliorated. Moreover, the project indicates that there is much scope for increased development of moderation as a policy and practice tool; and much attention needs to be paid to the kind of model developed.

7.5 Participatory Practices and Positive Closeness

The practices of the assessors that were most favourably commented upon by candidates in the ambulance interviews may be seen as participatory in nature. The two models presented in 6.6 may be useful for assessor support and training. The positive closeness model, which describes an atmosphere of equitable exchange, is a good model in a critical hermeneutic sense as it shows the candidates in the assessment process as active subjects, rather than being vessels in a Freirean sense. It may also point to the desirability of more culturally diverse assessors, as 'sameness' was one factor allowing the development of positive closeness.

7.6 The Interests of Workers

The practice of workplace assessment should not be allowed to intrude excessively upon the lifeworld of workers. The Future of Work project (NZ Department of Labour, 2003) is currently entrusted with an exploration of the work/life balance and this is also the subject of a campaign conducted by organised labour in New Zealand and elsewhere (NZCTU, 2003). Vocational education policies aimed at the current workforce need to take into account the interests of workers, their families and civic life. When considering ways to increase the capacity of the current workforce, it is not socially or morally defensible to expect workers to 'take up the slack', if resources are lacking. The research indicates that workers do value opportunities to complete qualifications but that they want to see real rewards attached to their learning. I am not suggesting that workplace learning should not involve hard work; that learning is work is not disputed. I however do suggest that policies for workplace learning should seek ways to make such 'work' matter for workers. This means that the work attached to workplace assessment remains a social responsibility and is not devolved to the individual through practices which pass on costs.

Workers were reported to frequently challenge the subjectivity of the learning organisation. Other workers may avoid workplace learning, as they see how it is bound up with excessive demands and little reward. Difficulties in workplace assessment (such as inconsistencies between competing providers and the way costs are absorbed) may stem from the disparate intentions with which it was implemented. New right thinking has

exerted an influence on workplace assessment and it is probably now an opportune point to discard these aspects of workplace assessment and focus on those which operate in the interests of the workers involved. Collins sums this up well:

"Critical pedagogy should make the connection between the quality of work and the quality of life as it is experienced on a day to day basis." (1998:103).

When looking to future vocational education policies, more attention should be paid to connecting the interests of workers, and their quality of life to workplace learning. This would best serve the substantial effort invested into workplace assessments by these workers.

Appendix One: Request for Interview Letter

5 Stratton Street

Lower Hutt

26 August 2002

Name

Address

Dear Name

I am writing to ask you to participate in a research interview on workplace assessment which I am completing as an adult student at Massey University. Your name was passed on to me by Mary Pecekajus and John Henwood from the NZ Ambulance Education Council.

The interview, which I hope to complete in August or September or October 2002, is part of a thesis towards a Masters in Adult Education. Two years ago I did a small project interviewing workplace assessors in Wellington Free Ambulance and I aim to relate that data to what some of the candidates for workplace assessment in the Ambulance Industry are saying about their experiences. I have an interest in the area as my job at the Open Polytechnic involves workplace assessor training.

I plan to conduct interviews of about 45 minutes to an hour in length, at a time that suits you; I am happy to come out to the ambulance station where you work. I hope you will consider my request favourably, workplace assessment is an important field for vocational training in NZ and there is not much hard data on the experiences of people who have been involved at the trainee level. I hope that the report on the research findings will indicate ways to encourage best practice in assessment. I have included an information sheet on the project overleaf which I hope you will find interesting.

147

There is also a consent form overleaf, which I would like to you to sign and return in the enclosed, pre-addressed envelope if you are willing to be interviewed. You can be assured that I am required to work with absolute confidentiality - your name would not be linked to any data. The interview findings will be collated and published and held in the university library and could possibly be used in academic articles.

I will be contacting you in the near future to hear of your decision and possibly make a date for October, or I can be contacted at home on 04 589 2741, at work on 04 913 5950, or on e-mail at pennyhm@paradise.net.nz. I look forward to working with you.

Regards

Penny Hoy-Mack

Appendix Two: Information Brochure

Appendix Three: Consent Form

IS WORKPLACE ASSESSMENT WORKING?

(A Research Project for Completion of the Requirements of the Masters in Adult

Education, Massey University.)

CONSENT FORM

I have read the information sheet and have the details of the study explained to me. My

questions have been answered to my satisfaction, and I understand that I may ask further

questions at any time.

I understand that I have the right to withdraw from the study at any time and to decline to

answer any particular questions.

I agree to provide information to the researcher on the understanding that my name will not

be used without my permission.

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

I also understand that I have the right to ask for the audio tape to be turned off at any time

during the interview.

I agree to participate in this study under the conditions set out in the information sheet.

Signed:

Name:

Date:

151

Appendix Four:

Interview Schedule One

Question Schedule for Ambulance Officer Candidates for Workplace Assessment

General Introduction

"This project aims to contrast the intentions of the workplace assessment system with the experiences of those who have been involved in a specific case study, namely the Ambulance Service. The project is called "Is Workplace Assessment Working?"

What I want to know is your experiences as a candidate being assessed in this system. I am going to spend about 1 hour asking you some open-ended questions about your experiences. Feel free to be honest, nothing that you say will be connected to your personal name and circumstances. It's only by hearing from people like you that I can make any sensible conclusions about whether workplace assessment is working".

Questions

- 1. What is your experience of being a candidate for workplace assessment?
- 2. What positives can you report about your experience?
- 3. What negatives do you feel about the process?
- 4. What changes would you make?
- 5. I there anything else you think is important that you think I should know about your experience with workplace learning and assessment?

Question Schedule for Ambulance Officer Candidates for Workplace Assessment

General Introduction (along these lines, copy for each of us)

"This project aims to contrast the intentions of the workplace assessment system with the experiences of those who have been involved in a specific case study, namely the Ambulance Service. The project is called "Is Workplace Assessment Working?"

What I want to know is how your experiences as a candidate being assessed in this system. I am going to spend about I hour asking you some open-ended questions about your experiences. Feel free to be honest, nothing that you say will be connected to your personal name and circumstances. It's only by hearing from people like yourself that I can make any sensible conclusions about whether workplace assessment is working".

Questions

- Tell me a bit about your role in the Ambulance Service, first of all, what do you do?
- Tell me a bit about the facts on the workplace assessments you have completed as a candidate. How many have you done? How long did they take? Where were they conducted? How many Ambulance Officers were present during the assessments?
- What were the reasons you got involved in doing the workplace assessments for the Ambulance qualifications? How do you feel about the time and costs involved in doing workplace assessments?
- What about the way you were prepared fro the assessment process, (the intention of workplace assessment is to get the candidate, you, involved in the

process well before it starts). What did you and the assessor do to prepare for the assessments? What did you take responsibility for?

- 5 How about the actual conducting of the assessments, what methods were used?
- 6 What kind of environment did the assessor create for you?
- Was it a fair assessment of your capabilities? Why/why not? How did the assessment relate to your training?
- 8 What was the best method from your point of view? What was good about it?
 Which methods do you think did not suit you?
- 9 How do you think it was for the assessor decided if you were competent? Do you think there were any grey areas?
- 10 How consistent do you feel the assessor's decisions were with other assessors?
 What, in your opinion, is the best way to achieve consistency?
- What about feedback, how did you feel about the feedback at the time? Do you feel differently about it now? What was the method of feedback you think the assessor was using?
- How about getting your results and the administration backup? How do you feel about how this went?
- Some more philosophical questions now, one of the most difficult criticisms to answer for the NQF is that unit standards are just a list of outcomes or behaviours that do not really reflect the whole job, especially the knowledge needed. How do feel about this?

- 14 How about the idea of the high-skill high-wage economy? What are the rewards for you for doing this qualification? Financial? Did you feel under pressure in any way to undertake the qualifications?
- What are the strengths of the workplace assessment idea? Was that borne out by your experience? Would you do it again?
- What do you not like about WPA? What did you not like about your experience?
- I there anything else you think is important that you think I should know about your experience with workplace learning and assessment?

Appendix Six:

List of Coding Nodes

NODE LISTING

Nodes in Set: All Tree Nodes

Created:

13/05/2003 - 12:27:42 p.m.

Modified:

13/05/2003 - 12:27:42 p.m.

Number of Nodes:

69

- 1 (1) /Length of Time for Assessment
- 2 (1 2) /Length of Time for Assessment/Integrated into work routines
- 3 (13)/Length of Time for Assessment/Excessive time used
- 4 (2) /Holistic assessment
- 5 (2 1) /Holistic assessment/holistic tasks
- 6 (2.2) /Holistic assessment/atomistic assessment
- 7 (3) /consistency
- 8 (3 2) /consistency/objectivity
- 9 (3 4) /consistency/double or triple crewing
- 10 (3 4 3) /consistency/double or triple crewing/national standards
- 11 (4) /assessment process
- 12 (4 1) /assessment process/assessor preparation
- 13 (42) /assessment process/support from management
- 14 (43) /assessment process/proactive candidates
- 15 (4.4) /assessment process/feelings about conduct
- 16 (4 5) /assessment process/how the assessment happens
- 17 (4 6) /assessment process/knowledge and reasoning
- 18 (47) /assessment process/feedback on performance
- 19 (4 8) /assessment process/flexibility
- 20 (49) /assessment process/reassessment
- 21 (4 10) /assessment process/candidate intuition
- 22 (4 11) /assessment process/assessment process
- 23 (5) /assessor~candidate relationship
- 24 (5 1) /assessor~candidate relationship/mentor~respect
- 25 (5 2) /assessor~candidate relationship/unobtrusive assessors

- 26 (5 3) /assessor~candidate relationship/familiarity~closeness
- 27 (5 4) /assessor~candidate relationship/distance
- 28 (5 4 7) /assessor~candidate relationship/distance/validity of workplace assessment
- 29 (5 5) /assessor~candidate relationship/Nervous
- 30 (5 6) /assessor~candidate relationship/confident
- 31 (5 7) /assessor~candidate relationship/self starter
- 32 (6) /opinions about assessment
- 33 (61) /opinions about assessment/scenario based assmt
- 34 (62) /opinions about assessment/exam or test assessment
- 35 (6 3) /opinions about assessment/equity
- 36 (7) /costs for workplace assessment
- 37 (7 1) /costs for workplace assessment/high costs
- 38 (8) /attitudes towards qualification
- 39 (8 1) /attitudes towards qualification/competition with non NQF
- 40 (8 2) /attitudes towards qualification/motivation for qualification
- 41 (9) /assessor judgement
- 42 (9 1) /assessor judgement/Valid and direct evidence
- 43 (10) /Search Results
- 44 (10 1) /Search Results/text search length of time
- 45 (10 2) /Search Results/text search -reasonable
- 46 (10 3) /Search Results/text search ~knowledge~
- 47 (10 5) /Search Results/text search 'force'
- 48 (10 6) /Search Results/Text search-~fair~
- 49 (107)/Search Results/text search powerful
- 50 (10 8) /Search Results/text search 'partners~
- 51 (109) /Search Results/text search 'equal'
- 52 (10 10) /Search Results/text search benchmark
- 53 (10 11) /Search Results/text search management
- 54 (10 12) /Search Results/text search 'pressure'
- 55 (11) /role of assessor
- 56 (12) /fairness & power

BIBLIOGRAPHY

- Allen, A., Woodhouse, V. (2002). Call centres: ICT97 telecommunications, call centres Office of Training and Tertiary Education: Melbourne.
- Apple, M. (1993). Official knowledge, democratic education in a conservative age. Routledge: New York.
- Apple, M. (1996) Cultural politics and education. Teachers College Press, Columbia University: New York.
- Argyris, C., Schon, D. (1974) Theory in practice. Jossey-Bass: San Francisco.
- Arksey, H., Knight, P. (1999). Interviewing for social scientists. London: Sage.
- Aronowitz, S., Giroux, H. (1991). Postmodern education: politics, culture and social criticism. University of Minnesota: Minneapolis.
- Assessment Research Centre, Faculty of Education, University of Melbourne. (2000). SPIRT Project Multi-Source. Downloaded 19 September 2001, from http//: www.ncver.edu.au.
- Babbie, E. (2001). The practice of social research. Wadsworth/Thompson: Belmont.
- Bagnall, R. (1994). Pluralizing continuing education and training in a post-modern world: whither competence? Australian and New Zealand Journal of Vocational Education Research. 2. (2), 18-29.
- Bailey, M. (1995). Competency Assessment, Evidence and the Discourse of Judgement. Australian and New Zealand Journal of Vocational Education Research, 3 (1), 1-12.
- Ball, S. (1990). Foucault and education disciplines and knowledge. Routledge: London and New York.
- Baptiste, I. (2001). Educating lone wolves: pedagogical implications of human capital theory. *Adult Education Quarterly*, 51 (3), 184-201.
- Barker, A. (1995). Standards-based assessment: the vision and broader factors. Peddie, R, Tuck, B (Eds), Setting the standards: the assessment of competence in national qualifications. Dunmore Press Ltd: Palmerston North.

- Barrow, M., Hodges, D., Rainsbury, E., Sutherland, J. (1996). Employers as evaluators-collaborative assessment of work-based educational projects. Paper presented to the *Partnerships in the assessment of student achievement conference*: Auckland.
- Beckford, N., New Zealand Qualifications Authority. (1996). Company use: the National Qualifications Framework and the workplace. NZQA: Wellington.
- Beckett, D., Hager, P. (2002). *Life, work and learning: practice in postmodernity*. Routledge International Studies in the Philosophy of Education. Routledge: London.
- Benton, N. (1995). *Recognition of prior learning: an introduction*. New Zealand Council for Educational Research: Wellington.
- Bernath, S., Hadfield, J., Skill NZ. (2000). Workplace assessment briefs for unit standards. Target Skills Associates (NZ): Wellington.
- Billet, S. (1995). Workplace learning: its potential and limitations. *Education and Training*, 37 (5), 20-27.
- Billet, S. (2002) Toward a workplace pedagogy: guidance, participation and engagement. Adult Education Quarterly 53 (1), 27-43.
- Blaxter, L., Hughes, C., Tight, M. (1996). *How to research*. Open University Press: Buckingham.
- Bloch, B., Clayton, B. Favero, J. (1995). Who assesses? In W. Hall (Ed), *Key Aspects of competency-based assessment*. NCVER: Adelaide. 9-26.
- Bloch, B., Thomson, P. (1994). Working towards best practice in assessment: a case study approach to some issues concerning competency-based assessment in the vocational education and training sector. National Centre for Vocational Research: Adelaide.
- Blumer, H. (1969). Symbolic interactionism; perspective and method. Prentice-Hall: Englewood Cliffs, N.J.
- Blunden, R. (1998). The interdependence of pedagogy, learning theory, morality and metaphysics. Australian and New Zealand Journal of Vocational Education Research, 6 (1), 27-51.

- Bogdan, R., Biklen, S. (1990). Qualitative research for education, an introduction to theory and methods. Allyn and Bacon: Boston.
- Booth, R., Clayton, B. House, R., Roy, S. (2002), Maximizing confidence in assessment decision-making. National Centre for Vocational Education Research: Adelaide.
- Bos, C., Roxborough, J. (1996). Pre-skill requirements for entry level for national certificates in manufacturing industries. A study conducted for the New Zealand Qualifications Authority by Basic Skills Training Ltd. NZQA: Wellington.
- Bouma, G. (1996). The research process. Oxford University Press: Oxford.
- Bowen-Clewley, L., Strachan, J. (1997). A report on an assessment stocktake undertaken for the NZQA, NZQA: Wellington.
- Bowen-Clewley, L. (2000). Assessing against competency standards in the workplace –a New Zealand perspective. In A. Arguelles, A. Gonczi (Eds), *Competency based education and training, a world perspective*. Editorial Limusa: S.A. de C.V., Mexico. 207-225.
- Broadfoot, P. (1992) Changing priorities in assessment, an international reform agenda.

 Paper presented to the *Qualifications for the 21st century conference*. Victoria University of Wellington: Wellington. 149-167
- Brookfield, S. (1996). Self-directed learning, political clarity and the critical practice of adult education. *Adult Education Quarterly*, 43 (4), 227-242.
- Brooks, J. (1995). Workplace learning: the challenges. *Literacy Learning in Aotearoa*. 11, 2-7.
- Bryman, A. Burgess, R. (1994). Analysing qualitative data. Routledge: New York.
- Callister, P. (1994). Economic impact of the National Qualifications Framework: stage one report. NZQA: Wellington.
- Capper, P. (1996). Assessing workplace skills for the National Qualifications Framework Paper presented to the *Partnerships in the Assessment of Student Achievement Conference*: Auckland.

- Capper, P. (2000). Understanding competence in complex work situations. In A. Arguelles, A. Gonczi (Eds), Competency based education and training, a world perspective. Editorial Limusa: S.A. de C.V., Mexico. 147-172.
- Catching the Knowledge Wave [kit]. (2001). Catching the Knowledge Wave Conference: Auckland.
- Chamberlain, K. (1995). What is grounded theory? Downloaded on 28 September 2003from List-serve entry on http://:www.impdx.edu.
- Chapman, G. (2002). Assessment in the Workplace. Training Agenda, 10 (3), 12-14.
- Christians, C. (2000). Ethics and politics in social research. In N. Denzin, Y. Lincoln (Eds), *The handbook of qualitative research*. Sage Publications: Thousand Oaks, CA.
- Ciulla, J. (2000). The working life: the promise and betrayal of modern work. Times Books: New York.
- Codd, J. (1994). Designing a framework for university qualifications: a question of standards. Paper presented at the Annual conference of the New Zealand Conference for Research in Education: Christchurch.
- Codd, J. (1997). NZQA and the economic rationalisation of education. ACCESS Critical Perspectives on Cultural and Policy Studies in Education, 16 (2), 1-13.
- Codd, J. (1999). Educational reform, accountability and the culture of distrust. *New Zealand Journal of Educational Studies*, 34 (1), 45-53.
- 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: the assessment of competence in National Qualifications. Dunmore Press Ltd: Palmerston North. 32-58.
- Cohen, R. (1992). Recognition of prior learning. In A. Gonczi (Ed) Developing a competent workforce. NCVER: Adelaide. 257-285.
- Collins, M. (1998). Critical crosscurrents in education. Krieger: Malibar, Florida.
- Connally, J. Jorgensen, K., Gillis, S., Griffin, P. (2003). A multi-source approach to the assessment of higher order competencies. Downloaded on 10 November, 2003, from http://:www.voced.edu.au.

- Conway, P. (2002). Presentation delivered to Work in progress: new directions in workplace learning conference. Skill New Zealand, Business NZ, Council of Trade Unions: Wellington.
- Cornford, I. (1997). Competency-based training: an assessment of its strengths and weaknesses by New South Wales vocational teachers. *Australian and New Zealand Journal of Vocational Education Research*, 5 (1), 53-65.
- Cornford, I. (2000). Competency-based training: evidence of a failed policy in training reform. *Australian Journal of Education*, 44 (2), 135-154.
- Coogan, P. (1996). Standards-based Assessment lessons for New Zealand from the UK. Paper presented to the *Partnerships in the Assessment of Student Achievement Conference*: Auckland.
- Crotty, M (1998). The foundations of social research: meaning and perspective in the research process. Allen and Unwin: St Leonards.
- Davidson, C., Tolich, M. (1999). Competing traditions. In C. Davidson, M. Tolich (Eds), Social science research in New Zealand. Pearson Education: Auckland. 23-38.
- Davidson, C., Tolich, M. (1999). Charting research design. In C. Davidson, M. Tolich (Eds), Social science research in New Zealand. Pearson Education: Auckland. 96-113.
- Davidson, C., Tolich, M. (1999). Collecting the data. In C. Davidson, M. Tolich (Eds), Social science research in New Zealand. Pearson Education: Auckland. 114-142.
- Davidson, C., Tolich, M. (1999). Introduction: the fascinating world of social research. In C. Davidson, M. Tolich (Eds), Social science research in New Zealand. Pearson Education: Auckland. 2-22.
- De Bruin, A., Eagle, L. (2000). Human capital theory and the economy. Access: Critical Perspectives on Cultural and Policy Studies in Education, 19 (1), 19-35.
- Delanty, G. (1997). Social science: beyond constructivism and realism. Open University Press: Buckingham.

- Denzin, N., Lincoln, Y. (2000). Introduction: the discipline and practice of qualitative research. In N. Denzin, Y. Lincoln (Eds), *The Handbook of Qualitative Research*. Sage Publications: Thousand Oaks, CA. 1-29.
- Dewey, J. (1916). Democracy and education: an introduction to the philosophy of education. Macmillan: New York.
- Docking, R. (1991). Assessment in the workplace: facts and fallacies. *Competence and Assessment*, 15, 8-10.
- Dwyer, M (2000). Options for improving information on job-related education and training: a report prepared for the Department of Labour. Department of Labour: Wellington.
- Eagle, L. (2000). Human capital perspectives on education markets, student decision process and the marketisation of education. ACCESS Critical Perspectives on Social and Cultural Policy Studies in Education, (19) (1), iii.
- Eagle, L. de Bruin, A. (2000). Ideological and theoretical underpinnings of the New Zealand education reforms. ACCESS Critical Perspectives on Social and Cultural Policy Studies in Education, (19) (1), 1-29.
- Eagle, L., McDonald, R. (1997). Competency based assessment: is the case proven for application to business programme? ACCESS Critical Perspectives on Cultural and Policy Studies in Education, 16 (2), 82-92.
- Eagle, L., McDonald, D. (2000). Intentions versus actualities: have the New Zealand education reforms met their objectives? ACCESS Critical Perspectives on Cultural and Policy Studies in Education, 19 (1), 79-96.
- Education Training and Skills Agency (ETSA). (1992). Education and Training Support Agency annual report. ETSA: Wellington.
- Education Training and Skills Agency (ETSA). (1997). Skill New Zealand in action. ETSA: Wellington.
- Education Training and Skills Agency (ETSA). (1998). Skill New Zealand: a stocktake. ETSA: Wellington.
- Ellsworth, E. (1989). Why doesn't this feel empowering? Working through the repressive myths of critical pedagogy. *Harvard Educational Review*, 59 (3), 297-324.

- Eynon, R., Wall, D. (2002). Competence based approaches: a discussion of issues for professional groups. *Journal of Higher and Further Education*, 26(4), 317-325.
- Field, L. (1998). Shifting the focus from 'training' to 'learning': the case of Australian small business. Australian and New Zealand Journal of Vocational Education Research, 6 (1), 49-66.
- Fenwick, T. (1998). Questioning the concept of the learning organisation. In S. Scott, B. Spencer, A. Thomas (Eds), Learning for life: Canadian readings in adult education. TEP: Toronto. 140-152.
- Fenwick. T. (2001). Tides of change: new themes and questions in workplace learning. In T. Fenwick (Ed), Socio-cultural perspectives on learning through work. New Directions for Adult and Continuing Education, 92. Jossey-Bass: San Francisco. 3-18.
- Fine, M., Weiss, L., Weseen, S., Wong, L. (2000). For whom? qualitative research, representations, and social responsibilities. In N. Denzin, Y. Lincoln, (Eds), *The Handbook of Qualitative Research*. Sage Publications: Thousand Oaks, CA. 107-132.
- Finger, M., Asun, J. (2000). Adult education at the crossroads: learning our way out. Zed Books: London.
- Fontana, A., Frey, J. (2000). The interview: from structured questions to negotiated text. In Denzin, Y. Lincoln, (Eds), *The Handbook of Qualitative Research*. Sage Publications: Thousand Oaks, CA. 645-672.
- Foucault, M. (1980). Power/knowledge selected interviews and other writings 1972-1977. Pantheon Books: New York.
- Foulkes, A. (1992). Training for mobility, equity and progression. Paper presented to the *Qualifications for the 21st century conference*. Victoria University of Wellington: Wellington. 447-452.
- Foyster, J (1995). Moderation. In W. Hall (Ed), Key aspects of competency-based assessment. NCVER: Adelaide. 135-150.
- Fraser, D. (2000) QSR NVivo NUD*ist vivo, reference guide. QSR International: Melbourne.
- Freire, P. (1972). Pedagogy of the oppressed. Penguin Books: Harmondsworth.

- Gallagher, S (1992). *Hermeneutics and education*. State University of New York Press: New York.
- Galloway, K. (1994). From words to action: towards guidance on equal opportunities in the development of and assessment in NVQs and SVQs. Competence and Assessment Compendium No. 3. 22-25.
- gilling, m. (2000). Research: the art of juggling. In m. gilling (Ed), Research: the art of juggling. WNP Press: Wellington.
- Giroux, H. (1983). Critical Theory and Educational Practice. Deaking University Press: Sydney.
- Giroux, H. (1995). Border pedagogy and the politics of postmodernism. In P. McLaren (Ed), Postmodernism, post-colonialism and pedagogy. James Nicholas Publishers: Albert Park, Vic.
- Giroux, H. (1996). Slacking off: border youth and postmodern education. In H. Giroux,
 C. Lankshear, P. McLaren, M. Peters (Eds), Counternarratives, cultural studies
 and critical pedagogies in postmodern spaces. Routledge: New York. 59-80.
- Glaser, B. (1992), Basics of grounded theory analysis. Sociology Press: Mill Valley, Calif.
- Glaser, B. (2002). *Grounded Theory*. Taped interview Downloaded on 15 May, 2002 from http://:www.grounded.theory.com
- Glaser, B., Strauss, A. (1967). The discovery of grounded theory: strategies for qualitative research. Aldine: New York.
- Glaser, R., Chi, M. (1988). Overview. In M. Chi, R. Glaser, M. Farr (Eds), The nature of expertise. Erlbaum Associates: Hillsdale, NJ.
- Godfrey, A. (1992). The Australian approach to reforming vocational education and training. Paper presented to the *Qualifications for the 21st century conference*. Victoria University of Wellington: Wellington. 367-394.
- Gonczi, A., Hager, P. (1992). The policy context for vocational education and training.
 In A. Gonczi (Ed), Developing a competent workforce. NCVER:
 Adelaide. 28-79.
- Grace, A. (1996). Striking a critical pose andragogy missing links, missing values. International Journal of Lifelong Education, 15 (5), 382-392.

- Greenwood, T., Wasson, A., Giles, R. (1993). The learning organization: concepts, processes and questions. *Performance and Instruction*, *April 1993*, 7-11.
- Griffin, P. (1995). Competency assessment: avoiding the pitfalls of the past. Australian and New Zealand Journal of Vocational Education Research, 3 (2), 34-59.
- Griffin, P., Gillis, S. (1998). Competency based assessment of workplace learning.
 Vocal: Australian Journal of Vocational Education and Training in Schools, 1
 (1), 5-8.
- Guba, E. (1990). The alternative paradigm dialog. In E. Guba (Ed), The Paradigm Dialog. Sage Publications: Newbury Park.
- Habermas, J. (1981). The theory of communicative action. Volume 1, Reason and the Rationalization of society, Volume 2, Lifeworld and system: a critique of functionalist reason. Beacon Press: Boston.
- Hager, P. (1994). Is there a cogent argument against competency standards? *Australian Journal of Education 38* (1), 3-18.
- Hager, P. (1995a). Competency standards- a help or a hindrance? an Australian perspective. The Vocational Aspect of Education, 47 (2), 141-151.
- Hager, P. (1995b). Assessment of Knowledge, Attitudes and Values. In W. Hall (Ed), Key aspects of competency-based assessment. NCVER: Adelaide. 47-58.
- Hager, P. (1995c). Assessment at Higher Levels. In W. Hall (Ed), Key aspects of competency-based assessment. NCVER: Adelaide. 26-31.
- Hager, P. (1998). On-the-job and off-the job assessment: choosing a balance. *Australian* and New Zealand Journal of Vocational Education Research, 6 (2), 87-103.
- Hager, P. (1999). Finding a Good Theory of Workplace Learning. In D. Boud, J. Garrick (Eds), *Understanding Learning at work*. Routledge: London and New York. 65-81.
- Hager, P., Beckett, D. (1998). What would lifelong education look like in a workplace setting? In J. Holford, P. Jarvis, C. Griffin (Eds), *International Perspectives on Lifelong Learning*. Kogan Page: London. 213-223.
- Hall, C. (1995). University qualifications and the New Zealand National Qualifications Framework: obstacles and a way forward. In R. Peddie, B. Tuck (Eds), Setting the standards: the assessment of competence in national qualifications. Dunmore Press: Palmerston North.

- Hall, C. (1996). Why universities do not want unit standards. *The Education Report*, 4 (1), 136-139.
- Hall, W. (1994). Review of research: competency-based training and assessment. NCVER: Leabrook, NSW.
- Hall, W. (1995). Research in competency-based assessment. In W. Hall (Ed), Key aspects of competency-based assessment. NCVER: Adelaide. 1-8.
- Harris, R., Guthrie, H., Hobart, B., Lundberg, D. (1995). Competency-based education and training: between a rock and a whirlpool. McMillan: Melbourne.
- Hawke, G. Oliver, L. (1992). Assessment in modern vocational education. In A. Gonczi (Ed) Developing a competent workforce. NCVER: Adelaide. 240-256.
- Hayton, G. (1992). Workplace reform and vocational education and training. In A. Gonczi (Ed), *Developing a competent workforce*. NCVER: Adelaide. 10-25.
- Hayton, G., Wagner, Z. (1998). Performance assessment in vocational education and training. Australian and New Zealand Journal of Vocational Education Research. 6 (1), 69-85.
- Hodgetts, I., Hodgetts, D. (1999). Qualifications. critiques, and reforms: the rhetoric surrounding the New Zealand Qualifications Authority. Waikato Journal of Education, 5, 33-49.
- Hood, D. (1992). Education and Qualifications: the challenge to the future. Paper presented to the *Qualifications for the 21st century conference*. Victoria University of Wellington: Wellington. 492-508.
- Hornblow, D. (1996). Partners in assessment: a viable mix of mercenaries, missionaries, misfits and mutants? Paper presented to the Partnerships in the assessment of student achievement conference: Auckland.
- Hoy-Mack, P. (2000). *Is Workplace Assessment Working?* Unpublished paper. Massey University: Wellington.
- Hutt Valley Polytechnic. (HVP). (2001). Workplace assessor training Hutt Valley Polytechnic: Lower Hutt.

- Hyland, T. (1994). Competence, education and NVQs: dissenting perspectives. Cassell: London.
- Industry Training Federation (ITF). (2001a). *Knowledge has left the academy....*Downloaded on 25 October, 2002, from http://www.itf.org.nz.
- Industry Training Federation (ITF). (2001b). Industry Training Federation submission to "Skills for a knowledge economy: a review of industry training.

 Downloaded on 25 October, 2002, from http://:www.itf.org.nz.
- Industry Training Federation., Association of Polytechnics of NZ. (2000). Best practice in the assessment of unit standards. ITF and APNZ: Wellington.
- Irwin, M. (1994). Curriculum, assessment and qualifications: an evaluation of current reforms. Education Forum: Wellington.
- Irwin, M. (1997). The National Qualifications Framework: where to now? ACCESS Critical Perspectives on Cultural and Education Policy, 16 (2), 14-30.
- Irwin, M., Elley, W., Hall, C, (1995). *Unit standards in the national qualifications framework*. Education Forum: Auckland.
- Jensen, P. (1996). Assessment in high consequence environments. Paper presented to the *Partnerships in the assessment of student achievement conference*: Auckland.
- Jessup, G. (1992). Developing a national framework of qualifications. Paper presented to the *Qualifications for the 21st century conference*. Victoria University of Wellington: Wellington. 346-366.
- Johnson, R. Hawke, G. (2002). Learning and assessment in the workplace: models of practice. Paper presented at Envisioning practice – implementing change, the 10th Annual international conference on post-compulsory education and training. Griffith University. 144-151.
- Kelsey, J (1999). Secondary Sources. In C. Davidson, M. Tolich (Eds), Social science research in New Zealand. Pearson Education: Auckland. 309-316.
- Kelsey, J. (1997). The New Zealand experiment: a world model for structural adjustment? Bridget Williams Books: Auckland.
- Kerr, M. (2001). Coming of age. In *Knowledge at work*. Skill New Zealand: Wellington. 52.

- Kerr, R. (1994). Ten myths about training. Paper presented to the *Funding and Managing* skill training: establishing an industry culture conference. Wellington.
- Kincheloe, J., McLaren P. (2000). Rethinking critical theory and qualitative research. In N. Denzin, Y. Lincoln (Eds) *The handbook of qualitative research*. Sage Publications: Thousand Oaks, CA. 279-314.
- Kohli, W. (1995). Postmodernism, critical theory and the new pedagogies. In P. McLaren (Ed), Postmodernism, post-colonialism and pedagogy. James Nicholas: Albert Park, Vic. 65-76.
- Kolb, D. (1984). Experiential learning: experience as the source of learning and development. Prentice Hall: Englewood Cliffs, N J.
- Knowles, M. (1990). The adult learner: a neglected species (fourth edition). Gulf Publishing Company: Houston.
- Lamburn, J. (2002). NQF Maturing. People and Performance, February 2002, 7-8.
- Lather, P. (1995). Post-critical pedagogies: a feminist reading. In P. McLaren (Ed), Postmodernism, post-colonialism and pedagogy. James Nicholas: Albert Park, Vic. 167-186.
- Lauder, H., Hughes, D., Watson, S. (1999). The introduction of educational markets in New Zealand: questions and consequences. New Zealand Journal of Educational Studies, 34 (1), 86-98.
- Law, M. (1993). The changing world of worker education: a historical perspective. NZ *Journal of Adult Learning*, 21 (1), 7-29.
- Law, M. (1996). Workers education and training in a new environment. In J. Benseman, B. Findsen, M. Scott (Eds), *The Fourth Sector: Adult and Community Education in Aotearoa New Zealand*. The Dunmore Press: Palmerston North. 159-176.
- Law, M (1998). Market oriented policies and the learning society: the case of New Zealand. In J. Holford, P. Jarvis, C. Griffin (Eds), *International Perspectives on Lifelong Learning*. Kogan Page: London. 168-179.
- Lees, H. (1995). Workplace assessment research underway. Learn, 6, 38-39.
- Lees, H. (1996). Research reveals lack of planning and preparation. Learn, 7, 45-48.
- Lees, H. (1996). Workplace Assessment. Performance Improvement Centre: Auckland.

- Lincoln, Y., Guba, E. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N. Denzin, Y. Lincoln (Eds), *The Handbook of Qualitative Research*. Sage Publications: Thousand Oaks, CA. 163-188.
- Locke, T. (2001). Curriculum, assessment and the erosion of professionalism. *New Zealand Journal of Educational Studies*, 26 (1), 5-23.
- Lowe, G. (2000). *The quality of work: a people-centred agenda*. Oxford University Press: Don Mills, Ontario.
- MacFarlane, K. (1995). Towards best assessment practice: key findings of the SCOTVEC "Towards Best Practice" project. *Competence and Assessment*, 22, 3-6.
- Maharey, S. (2001a). Speech notes, *Catching the knowledge wave*. Downloaded on 15 December, 2001, from http://www.executive.govt.nz/minister/maharey/.
- Maharey, S. (2001a). Media statement, Workplace learning works for New Zealanders.
 Downloaded 15, December, 2001, from
 http://www.executive.govt.nz/minister/maharey/
- Marshall, S. (1992). Paper presented to the *Qualifications for the 21st century conference*. Victoria University of Wellington: Wellington.
- Marsick, V. (1990). Action learning and reflection in the workplace. In J. Mezirow and Associates (Eds), Fostering critical reflection in adulthood: a guide to transformative and emancipatory learning. Jossey-Bass: San Francisco. 23-45.
- McCarthy, A. (1999). Getting serious about grounded theory. *Proceedings Western Australian Institute for Educational Research Forum*. Downloaded 13 July, 2001, from http://education.curtin.edu.au/waier/forums/1999/mccarthy.html.
- McCool, T. (1992). The Scottish action plan the past, present and future. Paper presented to the *Qualifications for the 21st century conference*. Victoria University of Wellington: Wellington. 312-335.
- McCurry, D. (1992). Assessing standards of competence. In A. Gonczi (Ed) Developing a competent workforce. NCVER: Adelaide. 222-237.
- McGookin, M. (1999). Some effects of the hidden curriculum of the New Zealand National Qualifications Framework on the teaching of adults. In M. Knight, L. Leach, A. Viskovic, N. Zepke, (Eds) Adult Learning Cultures: challenges, choices and the future. WP Press: Wellington. 72-81.

- McIntyre, J. (1993). Research paradigms and adult education. *Studies in Continuing Education*, 15 (2), 80-97.
- McKenzie, D. (1999). The clouded trail: ten years of public education post-Picot. *New Zealand Journal of Education Studies* 43 (1), 8-17.
- McLaren, P, (1995a). Post-colonial pedagogy, desire and decolonised community. In P. McLaren (Ed), Postmodernism, post-colonialism and pedagogy. James Nicholas: Albert Park, Vic. 227-248.
- McLaren, P. (1995b) Critical Pedagogy and Predatory Culture, oppositional politics in a postmodern era. Routledge: London.
- McLaren, P. (1996). Liberatory politics and higher education: a Freirean perspective. In H. Giroux, C. Lankshear, P. McLaren, M. Peters (Eds), Counternarratives, cultural studies and critical pedagogies in postmodern spaces. Routledge: New York. 117-148.
- Middleton, S. (1996). Doing qualitative educational research in the mid-1990's: issues, contexts and practicalities. *Waikato Journal of Education*, 2, 4-23.
- Miller, K., Bowen-Clewley, L. (1997). A workplace learner's guide to the National Qualifications Framework: collecting assessment evidence. NZQA: Wellington.
- Mills, C. (1970). The sociological imagination. Penguin: Harmondsworth.
- Ministry of Education, (2003). Statistical report for previous years: 2001 enrolments at private training establishments. Ministry of Education: Wellington.
- Mitchell, L., Sturton, J. (1993). Doing to or working with? the candidate's role in assessment. *Competence and Assessment*, 21, 22-24.
- Moore, L., Benseman, J. (1996). Literacy needs in the workplace: an exploratory survey. NZ Journal of Adult Learning, 24 (2), 5-37.
- Mulcahy, D., James, P. (1999). Knowledge-making at work: the contribution of competency-based training. Australian and New Zealand Journal of Vocational Education Research, 7 (2), 81-103.
- Moustakas, C. (1990). Heuristic research: design, methodology and applications. Sage: Newbury Park.

- Noble, D, (1997). Let them eat skills. In H. Giroux, P. Sannon (Eds), Education and cultural studies: towards a performative practice. Routledge: New York and London. 197-212
- New Zealand Council of Trade Unions (NZCTU). (2003). Work /life project.

 Downloaded on 20 December, 2003, from

 http://:www.union.org.nz/campaigs/getalife/dol-study.html.
- NZ Employers Federation. (1993). Assessing competence: a guide for employers on workplace assessment. NZ Employers Federation: Wellington.
- NZ Government. (1987). The report of a ministerial working party: the management, funding and organisation of continuing education and training. Government Print: Wellington.
- NZ Government. (1989). Education White Paper, Learning for Life. Ministry of Education: Wellington.
- NZ Government Green Paper. (1993). Education for the 21st century: a discussion document. Ministry of Education: Wellington
- NZ Government Green paper. (1997). A future qualifications policy for New Zealand, a plan for the NQF. Ministry of Education: Wellington.
- NZ Government. (1998). Tertiary education in New Zealand: white paper policy directions for the 21st century. Ministry of Education: Wellington
- NZ Government. (2003). Budget 2003: executive summary: minister's statement, the government's finances at a glance, new spending. Downloaded on 21December, 2003, from http://www.treasury.govt.nz/budget2003/summary/finances.
- New Zealand Qualifications Framework (NZQA). (1991). Designing the framework. NZQA: Wellington.
- New Zealand Qualifications Framework (NZQA). (1993). A future with standards: a guide to the NQF and its systems. NZQA: Wellington.
- New Zealand Qualifications Framework (NZQA). (1994). Working for industry: an introduction to workplace assessment and the National Qualifications Framework. NZQA: Wellington.

- New Zealand Qualifications Framework (NZQA). (1996). Learning and assessment a guide to assessment for the National Qualifications Framework. NZQA: Wellington.
- New Zealand Qualifications Framework (NZQA). (1997a). A workplace learner's guide: collecting assessment evidence. NZQA: Wellington.
- New Zealand Qualifications Framework (NZQA). (1997b). Flexible pathways. NZQA: Wellington.
- New Zealand Qualifications Framework (NZQA). (1998). The framework in action, new benchmarks for workplace training. *QA News* 28, 4
- New Zealand Qualifications Framework (NZQA). (1999) Moving on: projects simplify workplace assessment. *QA News* 30, 7.
- New Zealand Qualifications Framework (NZQA). (1999a). Working for industry: an introduction to workplace assessment and the National Qualifications Framework. New Zealand Qualifications Authority: Wellington.
- New Zealand Qualifications Framework (NZQA). (1999b). Qualifications that work: raising the profile of National Certificates and National Diplomas. *QA News. 30, 1*.
- New Zealand Qualifications Framework (NZQA). (1999c). *Qualifications that work*. NZQA: Wellington.
- New Zealand Qualifications Framework (NZQA). (2000a). The framework and industry. *QA News* 43, 10-12.
- New Zealand Qualifications Framework (NZQA). (2000b). Workplace learning comes of age. QA News 35, 12-13.
- New Zealand Qualifications Framework (NZQA). (2000c). Developing workplace assessment briefs for unit standards. Downloaded on 20 December 2003, from http://:www.nzqa.govt.nz/exploreframework/assessmentresources.
- New Zealand Qualifications Framework (NZQA). (2001a). *Unit Standard 4098 Use standards to assess candidate performance*. Downloaded on 1 February, 2002, from http://www.nzqa.govt.nz/searchframework.
- New Zealand Qualifications Framework (NZQA). (2001b). *Unit Standard 11551 Moderate assessment*. Downloaded on 1 February, 2002, from http://www.nzqa.govt.nz/searchframework.

- New Zealand Qualifications Framework (NZQA). (2001c). *Unit Standard 11552 Design assessment*. Downloaded on 1 February, 2002, from http://www.nzqa.govt.nz/searchframework.
- NZQA, (2002) Glossary English. Downloaded on 15 November, 2003, from http://www.nzqa.govt.nz/about/glossary/e/index.html.
- New Zealand Qualifications Framework (NZQA)., NZ Employers Federation. (1996). Building your business: the qualifications framework: a tool for change. NZEF & NZQA: Wellington.
- Oakley, A. (1981). Doing feminist research. Routledge and Kegan Paul: London.
- Opie, A. (1999). Unstructured Interviewing. In M. Davidson, M. Tolich (Eds) Social science research in New Zealand: many paths to understanding. Penguin: Auckland. 220-230.
- OPRA and Plimmer Buchanan., New Zealand Ambulance Education Council. (1999). A review of the training and of the career aspirations of ambulance officers. OPRA Publishing and Consulting Group: Wellington.
- Organisation for Economic Cooperation and Development (OECD). (1983). Reviews of national policies for education: New Zealand. OECD: Paris.
- Ovens, J. (2001). E-mail communication 20 February, 2002, accompanying February 2002 issue of *ASTE News*.
- Peddie, R. (1992). Beyond the norm? An introduction to standards-based assessment. NZQA: Wellington.
- Perrat, F. (1996). Concerns over workplace assessment. Learn, 7, 44.
- Peters, M. Lankshear, C. (1996). Postmodern counternarratives. In H. Giroux, C. Lankshear, P. McLaren, M. Peters (Eds), Counternarratives, cultural studies and critical pedagogies in postmodern spaces. Routledge: New York.1-40.
- Phillips, D. (1998). The switchmen of history: the development of a unitary qualifications framework: a thesis submitted to the Victoria University of Wellington in fulfilment of the requirements for the degree of Doctor of Philosophy in Education. Victoria University of Wellington: Wellington.

- Pont, B. (2003) Beyond rhetoric: adult learning policies and practices. Organisation for Economic Cooperation and Development: Paris.
- Popkewitz, T. (1990). Whose future? whose past? notes on critical theory and methodology in E. Guba (Ed), *The paradigm dialog*. Sage Publications: Newbury Park.
- Priestly, M. (1996). Unit standards assessment in the United Kingdom: a critical analysis of competency based training and assessment. *DELTA*, 48 (2), 49 (1), 141-138.
- Rabinow, P. (1984). The Foucault reader. Penguin Books: London.
- Reinharz, S. (1992). Feminist methods in social research. Oxford University Press: New York.
- Reason, P. (1988). Human Inquiry in Action. London: Sage.
- Richards, L. (2000). *Using NVivo in qualitative research*. QSR International: Doncaster, Vic.
- Rikowski, G., McLaren, P. (2003). Postmodernism in Educational Theory. In D. Hill, P. McLaren, M. Cole, G. Rikowski (Eds), Marxism against postmodernism in educational theory. Lexington Books: New York.
- Rist, R. (2000). Influencing the policy process with qualitative research. In N. Denzin, Y. Lincoln (Eds), The handbook of qualitative research. Sage Publications: Thousand Oaks, CA.
- Roberts, P. (1997). A critique of the NZQA policy reforms. In M. Olssen, K. Matthews (Eds), *Education policy in New Zealand: the 1990's and beyond*. The Dunmore Press: Palmerston North. 1-22.
- Sanders, J., Misko, J. (1995). Needs of special workers. In W. Hall (Ed), Key aspects of competency-based assessment. NCVER: Adelaide. 101-134.
- Schied, F., Howell, S., Carter, V., Preston, J. (1998). Creating contingency workers: a critical study of the learning organization. In J. Holford, P. Jarvis, C. Griffin (Eds), International perspectives on lifelong learning. Kogan Page: London. 280-290.
- Schratz, M., Walker, R. (1999). Research as social change: new opportunities for qualitative research. Routledge: London.
- Schwandt, T. (2000). Three epistemological stances for qualitative inquiry: interpretivism, hermeneutics and social constructionism. In N. Denzin, Y. Lincoln

- (Eds), *The handbook of qualitative research*. Sage Publications: Thousand Oaks, CA.
- Seddon, T (2001). Exploring capacity-building: from functionalist to political analysis.

 Australian and New Zealand Journal of Vocational Education Research, 9 (2),
 61-86.
- Senge, (1990). The fifth discipline: the art and practice of the learning organization.

 Doubleday/Currency: New York.
- Shapiro, S. (1995). Postmodernism and the challenge to critical theory. In P. McLaren (Ed), Postmodernism, postcolonialism and pedagogy. James Nicholas: Albert Park, Vic. 187-204.
- Sherrif, J. (1996). Assessing workplace competence to national standards: the process at Tasman Paper Mill. Paper presented to the *Partnerships in the Assessment of Student Achievement Conference*: Auckland.
- Silverman, D. (1993). Interpreting qualitative data: methods for analysing talk, text and interaction. Sage Publications: London.
- Silverman, D. (2000). Analysing talk and text. In N. Denzin, Y. Lincoln, (Eds), *The handbook of qualitative research*. Sage Publications: Thousand Oaks, CA. 821-834.
- Silverman, D. (2000). *Doing qualitative research: a practical handbook.* Sage Publications: London.
- Sissons, L., Reading, G. (1992). Role of workers in assessing competency. Paper presented to the *Qualifications for the 21st century conference*. Victoria University of Wellington: Wellington. 395-406.
- Skill NZ. (1999). Investing in skills for competitive advantage: a report from New Zealand enterprises. Skill New Zealand: Wellington.
- Skill NZ. (2001a). Knowledge at work, Matauranga i te waahi mahi: workplace learning in New Zealand. Skill NZ: Wellington.
- Skill NZ. (2001b). Moving forward: skills for the knowledge economy. Skill NZ: Wellington.
- Skill NZ. (2002a). Final report of Skill New Zealand to 31st December 2002. Skill NZ: Wellington.

- Skill NZ. (2002b). Voices: new directions in workplace learning = He reo: he huarahi akoranga hou i te wahi mahi. Skill NZ: Wellington.
- Skrtic, T. (1990). Social accommodation: towards a dialogical discourse in educational inquiry. In E. Guba (Ed), *The paradigm dialog*. Sage Publications: Newbury Park.
- Smelt, S. (1995). Industry training organisations: a report. Education Forum: Auckland.
- Smithers, A. (1997). The New Zealand Qualifications Framework. Education Forum: Auckland.
- Snook, I. (1999). The ethics and politics of social research. In C. Davidson, M. Tolich (Eds), Social science research in New Zealand. Pearson Education: Auckland. 69-82.
- Solomon, N. (2001). Workplace learning as a cultural technology. In T. Fenwick (Ed), Socio-cultural perspectives on learning through work. New Directions for Adult and Continuing Education, 92. Jossey-Bass: San Francisco. 41-61.
- Spencer, B, (1998). Workers' education for the twenty-first century. In S. Scott, B. Spencer, A. Thomas (Eds), Learning for life: Canadian readings in adult education. TEP: Toronto. 164-177.
- Spencer, B. (2001). Changing questions of workplace learning researchers. In T. Fenwick (Ed), Socio-cultural perspectives on learning through work. New Directions for Adult and Continuing Education, 92. Jossey-Bass: San Francisco. 31-40.
- Stevenson, J. (1998). Finding a basis for reconciling perspectives on vocational education and training. Australian and New Zealand Journal of Vocational Education and Training, 16 (2), 134-165.
- Stevenson, J. (2000). Seven years of vocational education research: a review of material published in the Australian and New Zealand Journal of Vocational Education Research. Australian and New Zealand Journal of Vocational Education Research, 8 (1), 93-133.
- Strathdee, R. (1994). Some factors driving the new qualifications framework. New Zealand Journal of Adult Learning, 22 (1), 80-89.
- Terrell, J. (2000). The National Qualifications Framework in private training establishments: a patch of evaluation in the seamless system, a thesis submitted in

- partial fulfilment of the degree of Masters in Education, Massey University. Massey University: Palmerston North.
- Tertiary Education Advisory Commission (TEAC). (2001). Shaping the strategy, third report of the Tertiary Education Commission. Downloaded on 20 December 2003 from http://:www.teac.govt.nz/Report3/teac_report.pdf.
- Tertiary Education Commission (TEC). (2002a). *Draft tertiary education strategy 2002/07*. TEC: Wellington.
- Tertiary Education Commission (TEC). (2002b). Industry training 2002. TEC: Wellington.
- Tertiary Education Commission (TEC). (2003). Budget 2003 education initiatives summary. Downloaded on 20 December 2003, from http://:www.tec.govt.nz/downloads/a-z_publications/budget2003.pdf.
- The Open Polytechnic of New Zealand (TOPNZ). (2001). Assessor Training for Unit Standard 4098. The Open Polytechnic of New Zealand: Lower Hutt.
- Thompson, J. (1997). Words in edgeways: radical learning for social change. NIACE: Leicester.
- Timma, H. (2001). Constructing worker identities through assessment. Paper presented to Knowledge demands for the new economy, 9th annual conference of postcompulsory education and training. Griffith University.
- Tolich, M., Davidson, C. (1999). Starting fieldwork: an introduction to qualitative research in New Zealand. Oxford University Press: Auckland.
- Toohey, S., Ryan, G., McLean, J., Hughes, C., (1995). Assessing competency-based education and training: a literature review. *Australian and New Zealand Journal of Vocational Education Research*. 3 (2), 86-117.
- Tough, A. (1990). Interests of adult learners. In A. Chickering & Associates (Eds), The modern American college. Jossey-Bass: San Francisco. 51-65
- Usher, R. (1997). Seductive texts: competence, power and knowledge in postmodernity.
 In R. Barnett, A. Griffin (Eds), The end of knowledge in higher education.
 Redwood Books: London, 99-111.
- Usher, R., Bryant, I., & Johnston, R. (1997). Adult education and the postmodern challenge: learning beyond the limits. Routledge: London.

- Usher, R., Solomon, N. (1999) Experiential learning and the shaping of subjectivity in the workplace. *Studies in the Education of Adults 31* (2), 155-164.
- Von Rosenberg. (2002). Downloaded 8 May, 2002, from http://rcswww.urz.tudresden.de/~lehre/classpages/class/Bourdieu.
- Viskovic, A. (2000). New Zealand qualifications authority at the turn of the century: What happened to the grand vision? *The New Zealand Journal of Adult Learning*, 28 (1), 68-85.
- Wadsworth, Y. (1997). Do it yourself social research. Allen and Unwin: St Leonards.
- Waterhouse, P., Sefton, R. (1997). Teachers at work: utilising professional teaching skills in industry settings. *Australian Journal of Education*, 41 (3), 262-275.
- Watkins, K., Marsick, V. (1993). Sculpting the learning organization: lessons in the art and science of systemic change. Jossey-Bass: San Francisco.
- Watts, P. (1995). Achieving effective assessment practice. *Competence and Assessment*, 31, 10-12.
- Web Research Centre for Work, Education and Business. (1996). Final report on workplace skills assessment: a literature review based on the entries in the NZQA literature database. NZQA: Wellington.
- Webb, C. (1995). Workplace Assessment, the use of distance methods in workplace assessor training. New Zealand Qualifications Authority and The Open Polytechnic of New Zealand: Wellington.
- Weitzman, E. (2000). Software and qualitative research. In N. Denzin, Y. Lincoln (Eds), The handbook of qualitative research. Sage Publications: Thousand Oaks, CA. 803-820.
- Welton, M. (1995) In defense of the lifeworld: a Habermasian approach to adult learning. In M. Welton (Ed) *In defense of the lifeworld: critical perspectives on adult learning*. State University of New York Press: Albany. 128-156
- Whitson, J. (1995). Post-structuralist pedagogy as counter-hegemonic practice. In P.
 McLaren (Ed), Postmodernism, post-colonialism and pedagogy. James Nicholas:
 Albert Park, Vic. 121-144.
- Wolf, A. (1995). Competence-based assessment. Open University Press: Buckingham.

- Woods, L. (1998). GITO: the great industry training outrage. ASTE (Association of Staff in Tertiary Education) News (6), 1.
- Zepke, N. (1997) Student-centred learning, knowledge and the New Zealand qualifications framework. *New Zealand Journal of Adult Learning*. 25 (2), 82-96.
- Zepke, N. (1998). The New Zealand qualifications framework and the politics of official knowledge. In M. Knight (Ed), *Research making*. WP Press: Wellington.
- Zepke, N. (1999). Autonomy, accountability in adult education and the politics of official knowledge. *New Zealand Journal of Adult Learning*. 27 (2), 1-26.