Developing a Research Culture in a Polytechnic:
An Action Research Case Study

A thesis

Submitted in fulfilment

Of the requirements for the degree

Of

Doctor of Philosophy

At

THE UNIVERSITY OF WAIKATO

By

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1999

THE UNIVERSITY OF WAIKATO

HAMILTON

NEW ZEALAND

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ABSTRACT

This study is about the process of research culture development within a New Zealand polytechnic in the period 1992 - 1999. Prior to 1990, polytechnics tended to focus on vocational and technical, rather than academically-oriented, education. But with the passing of the 1990 Education Amendment Act they were offered the possibility of granting degrees. This required the rapid acquisition of research skills, which had previously not been strongly evident in staff, who tended to pride themselves on quality teaching.

Working as a staff developer within the institution, I chose to use the action research approach as a compatible way for staff who had previously not carried out research, to learn the skills that the new environment demanded. The central question of my study is, "How effective is action research as a way of helping to develop a tertiary research culture?" While action research has previously been used extensively to improve teaching practice in educational institutions, it has not been used specifically to facilitate the development of research skills as a way of helping to develop a research culture. The study describes how I was able to introduce this method by teaching a certificated course, working within the quality assurance processes of the polytechnic, and constrained by its requirements to scrutinise the work of action researchers. I used interviews with the 1993 – 1995 graduates to contribute to this study.

Michel Foucault's tools, including his concepts of the panoptic gaze and of the linking of power and knowledge, have assisted me with my analysis of how the institution functions and shown me how I can operate as a 'specific intellectual' in an appropriate way. I have used interviews with a range of staff, and scrutiny of historical archives, to determine the appropriateness of my project. To carry out research in an institution where this has not been the norm is a challenging task. Basil Bernstein's schema, showing how curricula, assessment methods and teaching practices combine to build up and shape departmental identities, was helpful to me in recognising the marginalisation that new researchers in an institution such as ours can face.

The study has, overall, shown that action research – based on the reflective practice that is common in New Zealand polytechnic teaching – is a sound and familiar way of developing the research skills that many polytechnic educators now need to acquire.

PREFACE

Working on this thesis is undoubtedly the hardest thing I have ever had to do in my entire life. I have had three children, and the bearing of them was hard work. But at least it seemed finite (although one wondered at the time, when my firstborn was a month past her due date and my second three and a half weeks!) This work, by contrast, has seemed to be endless.

As with the production of children, I had fond hopes of what the thesis might look like when it was finished. But you can't really tell. All kinds of different influences go into the development of a thesis, as they do into the development of a child. What has emerged at the end of the process is quite a different beast than what I envisaged at the start.

I commenced this thesis about eighteen months after the submission of my Masters thesis, which had a firmly declared Freirean stance. When I read that thesis now, it seems patronising, preachy and fairly unrealistic, although I still espouse the values that motivated its construction. What my work for this thesis has shown is that I needed to recognise that the vision I had for the thesis at its inception were quite unrealistic. It has been a fairly painful process adapting my hopes to some that were more achievable in my context.

This adaptation has been effected with the careful assistance of my two supervisors, Prof. Sue Middleton and Dr Neil Haigh. To them I owe a huge debt of gratitude, as I recognised in my acknowledgements section, for helping me to move from an idealistic to a realistic perception of what a specific intellectual, working in a regional polytechnic, can achieve as transformative aims. They have also been great at supporting me through the trials and tribulations of life while working on a thesis.

Since 1992, when I first started reading for this thesis (I enrolled in August, 1993), the usual kinds of life events have affected my ability to work single-mindedly on my study. On Christmas Day, 1993, my father had a very acute haemorrhage and was rushed to hospital in a different town from where we were celebrating Christmas. Over subsequent months, and until his eventual death in 1995, we were involved in frequent visits to the town where he lived, which is fortunately only an hour and a quarter's drive away. In July, 1995, my mother-in-law was diagnosed with cancer. As best we could, when we lived four

hours' drive away, we supported her and my father-in-law through this horrendous experience, culminating in my nursing her at home for her last eight days of life. At one stage, when guilt about not meeting thesis deadlines was dominating my thoughts, Sue said, "Don't forget, Pip, life doesn't stop because you're writing a thesis!" Her understanding was much appreciated, as has Neil's been when I have been stressed about my work. His quiet and calm intervention and empathetic phone calls on occasions have helped to keep me steady when my inclination was to feel very stressed.

In 1994, two major events occurred. My 19-year-old daughter got married and I was the successful applicant for a British Council sponsored teacher exchange grant to visit the U.K. This involved yet another house move, as before Fiona's wedding we had moved into a flat, and needed to leave a more permanent venue for the incoming English teacher. We achieved this successfully, and left for England with our two younger children in September, 1994, for three months' teaching at City College, Norwich.

The U.K. experience was great for a number of reasons. Besides giving me insight into the functioning of teacher education in a different country, it enabled me to attend a conference on "Emerging Approaches to Inquiry" in Stroud, with Peter Reason and Judi Marshall; to meet with and interview Jack Whitehead, Jean McNiff and lastly Jack Sanger, under whose tutelage my research skills were extended at City College. In between this work, I dashed around the Norfolk countryside conducting classroom observations, while my husband and two daughters took in the local sights. I am most grateful to the British Council, and to Peter Johnson, then Principal at TWP, for their support towards this exchange.

What doctoral study has brought home to me is my privilege in being able even to contemplate such work. We are not a wealthy family, but have been able to cope with the cost of part-time Ph.D fees (and the dissemination of the results of the study at various overseas and local conferences). In both cases, some assistance has been forthcoming from the polytechnic where I work, but the bulk of the expense has had to be met by our family. While I have not had the luxury of a dedicated working space, as my computer is located on a desk in our bedroom, at least I have had the use of my own computer. Given the computer usage in our household, this has been great. At times during the study,

my husband Bruce has been self-employed and needed the 'good' computer to carry out various parts of his work, and of course my daughters have used a computer in their own studies.

It concerns me, given the content of this thesis, that only relatively 'wealthy' students can afford to complete doctoral study. The power/knowledge issues that I discuss in this work show the connection between an ability to have one's knowledge recognised and valued, and access to situations where one can exercise power effectively in our society. If only the relatively wealthy can reach the highest levels of knowledge certification (and then, only as individuals, when group certification might be more appropriate), then our society suffers from the exclusion of other ways of knowing, and the exercise of power by others who might better preserve the values that many of us espouse.

In his work, Jack Whitehead often refers to what happens when 'the truth of power' dominates over 'the power of truth', and talks of his own efforts at reversing this imbalance. What I have tried to achieve in this study (and in my life) is an attempt to promote 'the power of love' against what I have seen in aspects of New Zealand education and in our wider society, 'the love of power'. Love, in this situation, is not an emotional, 'warm fuzzy' feeling; it is the love that Christ showed for the world. It is an attempt to overcome injustice, to open up spaces where people may achieve to the best of their potential regardless of their paper credentials or 'class background'. These are the values that have motivated my work and given me courage to continue when I felt exhausted and overwhelmed.

CHAPTER ONE: INTRODUCTION

'In periods when fields are without secure foundations,
practice becomes the engine of innovation'
(Marcus and Fischer, 1986:166)

INTRODUCTION

This study tells the story of the development of my knowledge, understanding and educational practice as I have investigated how I might contribute to the developing research culture of The Waikato Polytechnic (TWP), in which I have been employed as a staff developer since 1985. As exemplified in the quotation from Marcus and Fischer above, our institution is going through a time of transition. Our foundations have been shaken. The Waikato Polytechnic has traditionally been perceived, and has perceived itself, as a place where teaching was valued above all. Now it has become a degree-granting institution and, since current policies define degrees as taught by staff engaged in research, many staff now have to develop skills in research. Therefore, as the quotation suggests, it makes sense to make practice 'the engine of innovation'. The practice has been teaching; I show in the thesis how this teaching can be used as an engine of innovation in the development of research skills.

How can teaching be used in this way to help staff with no - or little previous - experience, develop research skills? My thesis is that action research provides an ideal vehicle to accomplish this task. How can action research help to develop a research culture in an institution in transition? I argue that the collaborative nature of action research constitutes a catalytic force to help to bring about such a development. Is action research an appropriate intervention to use at TWP, has it been used elsewhere to develop a tertiary research culture, and has it been effective in accomplishing this development at TWP? The investigation and answering of these questions are the content of this study. But why did I choose to investigate them?

Our polytechnic got approval to offer its first degree in 1991. In 1992, I had a very upset staff member in my office - I will call her Joan. Joan told me that she had been informed that she would no longer be able to teach the course she had taught for some years. Was her practice deficient? Had her students complained? No, Joan's course had been subsumed into a new degree, which her department was soon to be accredited to teach. She had been informed that she needed to hold a degree in order to continue to teach her course. She had a professional qualification (which took three years to acquire) but no degree.

I listened, sympathetically at first, but on reflection with a burning sense of injustice that credentialling was becoming such an issue compared with competence in practice. Ultimately, I could not do anything practical about Joan's situation - she subsequently left the polytechnic. But her story made me stop and think about the direction the polytechnic was taking, what had given rise to this direction, what impact the introduction of degrees was likely to have on a range of staff in the polytechnic, and what my role would be in this changing environment. Her experience made me reflect on the nature of knowledge, about who exercises power - and how it is exercised - in my institution, and about what, if anything, I could do to assist staff who might otherwise be negatively affected by the changes. This thesis traces the direction of my thinking, my reading and my practice from the years 1992 to early 1999.

As a staff developer, I am responsible for helping staff to develop the skills that the institution requires them to exercise. I therefore had a mandate for assisting with the development of the research skills which the institution now required. I decided to use action research as my method of assisting individual staff (and through them the institution) in our changing environment. I had encountered action research during my own training and could see how it might be a useful tool to introduce staff to the research skills they were going to need in the future, as I worked to change and improve our minimal research culture. My main question, then, is "How effective is action research as a way of helping to develop a tertiary research culture?"

I also needed to understand more about the context in which I was working. I had a reasonably good intuitive understanding of this context as I have worked in the institution for fourteen years now. But for the purposes of a doctoral thesis I need to be able to show how I understand my context in order to justify why my intervention is an appropriate one. Therefore two additional research questions needed to be answered. The first pertains to the forces affecting our institution currently. I asked: "How can I understand and account for the changes affecting the institution within which I work, and which affect New Zealand education more broadly?" The answers to this question would help me to interpret and hopefully to use for positive purposes in the polytechnic, the broader forces that were underpinning institutional change. As well, since my intervention aimed to help develop our research culture, I needed to consider other research that had this aim. Hence the question, "How can an institution such as ours, faced with the requirement to engage in research, develop a research culture?"

I have investigated all three questions concurrently. In terms of the structure of this thesis, however, I explain my methodological approach first, then present the research on the changes affecting the institution, followed by my investigation into ways of developing a research culture. The data from these two questions paint the background of a picture for which my action research intervention forms the main feature. This work is investigated in later chapters. In this chapter, I analyse the macro-level forces that motivated the change in our local context. I then discuss briefly the local site and its culture at the time that my research commenced. Following this, I present the theoretical tools that have assisted me in my work – tools suggested by Michel Foucault's work; by various action researcher scholars; by advocates of reflective practice (and its critics). Later in the thesis I shall also introduce work by Basil Bernstein which helped me to understand how our institution functions, but prefer to defer this discussion until it naturally fits in the narrative. I conclude with a summary of the work outlined in each subsequent chapter.

A CHANGING CONTEXT

In this section I consider some broad contextual influences on TWP's development. While I had worked in the institution for over eight years at the time I commenced this study, I could not claim that I understood its development well. To help me understand changes in TWP's functions now that we can offer degrees, I needed to do some historical analysis. This would help me to answer the question, "How can I understand and account for the changes affecting the institution within which I work, and which affect New Zealand education more broadly?"

In New Zealand, the granting of degrees has traditionally been seen as a university function, part of a prevailing academic discourse that was originally foreign to technical institutes. While one polytechnic, the Central Institute of Technology in Lower Hutt, offered a degree in physiotherapy for some years prior to the opening up of this possibility to other polytechnics, The Waikato Polytechnic was not legally able to do so until 1990. Historical details specific to polytechnics and their role in New Zealand's educational environment are considered in depth in Chapter 3, using analysis of relevant policy documents, scholarly writing by previous researchers, and interviews with several foundation staff members who were still employed at TWP in 1994.

The impetus for TWP to commence offering degrees and thus to change the face of education within the institution was brought about by the passing in 1990 of an Education Amendment Act. This Act was characteristic of broader changes in New Zealand's economic, educational and political discourses over at least the preceding seven years. In 1984, the year before I commenced work at the then Waikato Technical Institute[1], the fourth Labour Government had been elected in a constricting economic environment in which a tendency to use the ideas and practices of the economic marketplace was affecting governments worldwide (Apple, 1990; Jury, 1995; Olssen and Morris Matthews, 1997). Economic rationality - the belief that the needs of individuals are best met by concentrating on sound economic policies - now characterises many political and educational policies (Jury, 1995).

The resultant marketisation of education, as Lauder (1990) argued, has the following major features: the encouragement of more competition among educational institutions, an increase in user-pays policies, and the promotion of further elements of privatisation into education. These features were to characterise the changes to New Zealand's educational system under both the Fourth Labour Government and its National successor, and have been seen as a shift away from earlier discourses of providing equal educational opportunities for individuals (Beeby, 1992). They were introduced through a variety of policy documents - influential Reports and Acts of Parliament.

When Labour remained in power at the 1987 elections, very influential briefing papers to the incoming government (*Government Management Volume Two: Education Issues*) were produced by the New Zealand Treasury. These have been seen by some analysts (e.g. Codd, 1990; Grace, 1990) as highly influential on subsequent government policies. They embodied dual discourses: on the one hand, they espoused some of the neo-liberal beliefs of the New Right (see below); on the other, they promoted an emphasis on respect for equity issues and the need for the country to recognise the principles legislated for in the Treaty of Waitangi. This Treaty is regarded as the 'founding document' of New Zealand and was signed in 1840 between Maori and British partners, though it was not given much practical credibility until the 1990s. A concern for the effects that this abrogation of responsibility has had on Maori has characterised my work over the past decade (e.g. Ferguson, 1991), and permeates this thesis.

While Treasury is generally described as being dominated by economic rationalist thinking (Codd, 1990; Codd, Harker & Nash, 1990; Gordon, 1990),

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[1] Throughout most of its history, the institution in which I work was called the Waikato Technical Institute. Technical Institutes throughout New Zealand were redesignated as polytechnics in 1987, in recognition of their expanding teaching areas.

the incongruous mix of ideologies in their briefing papers has been seen as a result of previous government initiatives. These had been expressed in, for example, the June 1986 report *Learning and Achieving*, which included among its recommendations that the educational success of Maori students be targeted and that all students should leave school both with a better understanding of New Zealand's diverse cultures and with respect for these. The recommendations were supported and declared as 'urgent' in a subsequent report - *The Curriculum Review*, July 1986. While the Review has been criticised - Olssen (1990) for example referred to it as 'a piece of liberal rhetoric littered with fine-sounding but vacuous ideas and ideals' – Labour Party policy indicated that liberal notions of equity should be incorporated into Treasury's 1987 briefing papers to the incoming government.

But alongside the emphasis on equity came a decidedly neo-liberal change to the delivery of education in New Zealand. Critics have argued that the Treasury briefing papers epitomised

> ... the ideas of the world-wide political and economic movement commonly referred to as 'the New Right'...In brief, the central arguments of the New Right emphasise individual choice and a limited role for the state in defence of individual liberties and property rights….New Right economic theories emphasise the competitive, acquisitive nature of individuals. Within this perspective, education is viewed primarily in economic terms: as a means of providing trained human resources to 'meet the needs of the economy', and as a commodity to be chosen and consumed by individuals (Middleton, Codd & Jones, 1990:xi).

The danger of this approach was spelled out in a recent (1997) essay. Jane Kelsey, Associate Professor in the School of Law at the University of Auckland, explained how the New Zealand Government's signing of an extension to the GATT (General Agreement on Tariffs and Trade) to include services (GATS, General Agreement on Trade in Services) had exposed New Zealand's education system to exploitation by overseas interests (Kelsey, 1997). If education is treated as a commodity and exposed to elements of privatisation then agreements like the GATS mean that effectively the government can no longer guarantee control of its own education system.

The 1987 Treasury briefing papers signalled this new approach to education as a commodity. They also recommended fundamental changes in the administration and delivery of education. A flurry of reports and policy documents followed in the next five years. Included were two relating to early

childhood education; six, which predominantly affected the primary and secondary sector, and several, which affected tertiary education. Some of these documents were to signal profound changes across the entire education sector even though their thrust was specifically targeted at early childhood, or primary and secondary, or tertiary. For the purposes of this study, I shall concentrate mainly on those specifically affecting the tertiary sector.

1987 saw the publication of *New Zealand Universities: Partners in National Development* (the Watts Report). But the universities were also affected by other reports that influenced the development of the wider tertiary sector. The 1988b 'Hawke' *Report on Post-compulsory Education and Training* was followed by *Learning for Life* (1989), a Ministerial policy statement. The creation of the New Zealand Qualifications Authority (NZQA), one of the initiatives resulting from these Reports and policy documents (including *Learning for Life: Two),* has had a major impact on the polytechnics. In the 1990 Education Amendment Act this Authority was established, and it proved to be a real source of dominance in polytechnic education. Whereas before its establishment the standards and certification of programmes in New Zealand non-university tertiary education had been set and monitored by a range of credentialling agencies (the Authority for Advanced Vocational Awards and the Nursing Council, to name but two) NZQA's responsibilities were to:

- co-ordinate all qualifications in post-compulsory education and training (from upper secondary to degree level) so they have a purpose and relationship to one another that the public and students can understand;
- set and regularly review standards as they relate to qualifications;
- ensure New Zealand qualifications are recognised overseas and overseas qualifications are recognised in New Zealand;
- administer national examinations, both secondary and tertiary (NZQA, 1993:frontispiece).

The universities in New Zealand have so far managed to stay outside NZQA's direct surveillance. But in the polytechnics, Unit Standards (the basic 'building blocks of content') recognised by the Authority, effectively dictate curricula in many areas (Ferguson, 1996, Willyams, 1995).

The passing in 1990 of the Education Amendment Act formalised as law many of the changes recommended in the policy documents mentioned. Besides establishing the NZQA and replacing the existing Department of Education and local Education Boards with a Ministry of Education, it established a monitoring agency - the Education Review Office (ERO) - to ensure that standards were being achieved in primary and secondary schools across the country. The Act

also opened up tertiary education in ways that had not existed before, such as giving polytechnics the ability to offer degrees. Its effects on polytechnic education, then, have been to offer both constraints and possibilities.

While the Act made it *possible* for degrees to be offered at polytechnics, it did not make such action *mandatory.* How did The Waikato Polytechnic choose to react to the new possibilities? Tertiary technical education institutions are relatively young in the New Zealand educational scene, having been formally in existence only since the early 1960s. Traditionally, where universities have provided academic courses leading to degrees (and hence had staff who were required to do research), polytechnics taught vocational and technical courses leading to certificates and diplomas. Their work included teaching informal and hobby-type courses with no certification, and in later years they also met government demand to provide training for unemployed people. Put another way, the prevailing discourse of the universities was primarily academic; that of the polytechnics technical and vocational (Beverland and Bretherton, 1997). Research belonged in academic institutions, not technical and vocational ones. It is fair to say, however, that this polarity is changing, in the face of neo-liberal influences. Michael Peters, Associate Professor in the School of Education at the University of Auckland, claimed that the university system has been re-aligned 'to reflect the needs of an emerging 'post-industrial' economy' in which the emphasis is on the production of 'highly-trained, multi-skilled, tertiary-educated workers' rather than intellectuals (Peters, 1997:16). This emphasis would previously have been considered to be more the domain of the technical institutes.

If TWP decided to offer degrees, then, it would be driven by an imperative to have staff engage in research, a situation that would be foreign to almost all of them. This was spelled out in NZQA's requirement that

> 3. *The teaching staff involved in the [degree] course:*
> *..b demonstrate significant and verifiable involvement in research*
> (NZQA,1993:12)

For the first time, our staff would be *required* to carry out research if they taught on a degree programme. NZQA further required staff teaching on such a programme to have 'significant and verifiable experience and/or expertise in teaching, and in the supervision of research' (ibid., 13). Polytechnics have a proud tradition of teaching vocational and technical subjects, so the first requirement was well met. However supervising research when they had not, in the main, done any themselves could constitute a real difficulty for our staff. As

Sylvester (1997, quoted in Clear, 1999) expressed it, 'The majority of academic staff have come into the sector from careers in the private sector with limited, if any, research experience.'

Research, then, has not traditionally been part of polytechnic culture; to offer degree programmes was going to require a 'culture change' (Harvey, 1997). On the face of it, The Waikato Polytechnic *chose* to take up the opportunity of offering degrees. It was not required by government to do so. However, a range of internal and external pressures made any resistance to offering degrees difficult. There were pressures from industry, from students, from some staff and from the competition being caused by other Polytechnics who indicated that they would offer degrees (see also Codling, 1997), and together these proved too strong to resist. Our first degree was approved in 1991, and by 1997 the polytechnic offered six degrees. How has the institution sought to implement the necessary culture change? In this next section, I shall move from examining macro issues to looking briefly at their effects on the local site – a more in-depth consideration of these effects will appear in subsequent chapters.

CHANGING THE CULTURE OF THE WAIKATO POLYTECHNIC

My second research question asks, "How can an institution such as ours, faced with the requirement to engage in research, develop a research culture?" There is a whole literature on organisational culture, and during this study I have subscribed to an Internet 'listserv' group on the topic. However, as a general sociological definition, culture may be thought of

> ..as being synonymous with tradition or heritage. It is a way of life particular to each society, that is passed on to each succeeding generation. Culture contains the ideas and values, skills, art and technology of a people. It is the means by which each of us is able to guide our daily interaction with others (Webb & Collette, 1973:49).

I trace the development of our 'overall culture' in Chapters 3 and 4, using archival records and interviews with a range of staff, as well as an investigation of the writing of researchers from both within and outside the institution throughout its thirty-two year history. This investigation reveals aspects of the polytechnic's culture up until the time when degrees were introduced, stressing particularly the pride in vocational and technological education and quality teaching which marked the polytechnic.

To continue the analysis of what constitutes a culture, I quote Hargreaves (1994:166), who gave a definition specifically related to teaching.

The *content* of teacher cultures consists of the substantive attitudes, values, beliefs, habits, assumptions and ways of doing things that are shared within a particular teacher group…The content of teacher cultures can be seen in what teachers think, say and do. It is "the way we do things around here".

Research cultures are investigated in more depth in Chapters 5 and 6, but a brief definition is provided here. A research culture might be described ideally as the common values, beliefs, attitudes and 'ways of doing things' that affect the carrying out of research tasks in an institution. However, my study throughout the development of this thesis has revealed that while research cultures may aim for the homogeneity expressed in the definitions above, in practice they are quite often characterised by uneasy compromises and expectations which differ considerably (see, for example, Harvey, 1997; Hill, 1993; Poole 1991; Poole 1994). Nevertheless, it has been fascinating to trace the various ways in which individuals and groups have sought to define and extend our research culture at TWP.

The institution has taken a number of actions to develop its research culture. In 1992, it established a Research Committee, on which I was a staff representative for two years. It committed a relatively substantial budget to assist new researchers to carry out their work. In response to the dictates of NZQA, it amended the teaching workloads of staff engaged in the degree programmes. These workloads are checked by NZQA monitors (external appointees who scrutinise aspects pertaining to the delivery of degrees) in the early stages of the degree's implementation. They also check research development in the degree granting institution. In this way the degree-granting institutions are subject to surveillance and normalisation - terms I shall define shortly - by government agencies.

The Research Committee worked hard to develop and articulate policies and processes to facilitate the conducting of research, and to determine appropriate research projects, standards and ethics. The Committee's Executive Officer produced booklets outlining how to prepare proposals, how to write reports and how to meet the parameters that the Committee had set, in order to gain funding. The Committee also promotes increased awareness of colleagues' research by running lunchtime seminars at which researchers can present the results of their study for critique and discussion.

In addition, the institution, recognising that its existing library was inadequate to service degree work, committed itself to a multimillion dollar library rebuilding and restocking programme. The former was completed in

1996; the latter will be ongoing. The library staff are very active in their encouragement of staff to request appropriate material and act quickly to acquire recommended books and journals. They also run a wide range of educative seminars to assist students and staff to use the resources of the library, both printed and electronic, to support their research work. A Tertiary Study Skills Centre assists students with academic tasks. All these initiatives contribute to the development of our research culture.

In 1993, as part of a major self-study called the "Auaki" - a Maori word meaning survey (TWP:1993-94) - the institution commissioned its Academic Director Eugene Crotty to survey staff about their perceptions regarding a number of issues at TWP at the time. One was that of research and its place in the institution. To summarise this section of the research briefly, only 38.5% thought all teaching staff should be actively involved in research; 38.5% felt research activities should not necessarily have a high profile in the institution; 54.1% felt all TWP departments should be engaged in research. The data analysis does not show a departmental breakdown of the responses so it is impossible to tell within which departments resistance to the place of research at TWP was high. However staff from a range of departments, including those granting degrees, expressed both to me and to their Heads of Department (HODs) and research leaders, unwillingness to undertake research work (Chapter 4, pages 117, 130; Chapter 5, page 142; Hill, 1997).

I am not located in a department that currently offers degrees. Why, then, did I choose to take an individual initiative to assist with the development of our research culture? Having worked in the polytechnic for nearly a decade, I had a 'gut feeling' that it made sense to try to link teaching and research in our changing environment, rather than to see them as dichotomous. As a staff developer I was in a position to attempt this linking. Through individual consultations and interviews I had become convinced that part of some staff's resistance revolved around the fear that teaching would be devalued in the new environment. It is my role as a staff developer to 'facilitate and support staff so that they may fully serve their own and their institution's needs' (Webb, 1996a). My contribution to the development of our research culture was to be the introduction and promotion of a method of doing research which, rather than devaluing teaching as staff had told me they feared it would be, treated it as a strength and sought to improve it.

This intervention is compatible with the discourses of staff development. Indeed, Graham Webb[2] recommended action research as a very appropriate way for staff developers to assist their colleagues.

> If better staff development means increasing the participation of, and giving 'voice' to, both teachers and students; collaboration on an equal footing; open-ended and progressive inquiry; the emancipation of those involved; then we begin to see why, for staff developers, the prospect of critical theory driven by action research holds much hope (Webb, 1996b:59).

My use of action research was designed for just such purposes as Webb describes – to give 'voice' to teachers, to promote collaboration on an equal footing, to subvert the 'higher education development discourse' that Webb suggests silences the voices of individual teachers in favour of promoting 'generalizable theory rather than context-specific (subject-oriented) theory' (ibid, 64).

The role of a staff developer in my institution involves multiple tasks. One important task is the provision of initial teacher education for a range of staff, whose entry qualifications range from doctorates to few formal qualifications but considerable practical and trade experience. All are required by their employment contracts to undertake up to twelve weeks of training, usually spread over a three year period, interspersed with their teaching practice. At TWP, this training is called the Certificate in Tertiary Teaching (CTT).

The staff are a diverse group. They include people from the strong trades sections (e.g. mechanical and electrical engineering, building and construction, agriculture) upon which the polytechnic was based at its inception, along with lecturers in nursing, midwifery, design, music, catering, Maori language and cultural practices, tourism, communications, computers, business and office technology, community and continuing education. The staff of the polytechnic has, however, been changing over time. There is a growing number of Maori staff across departments, and an increasing number of people with high educational qualifications.

This staffing change has been brought about in response to the 1988 (and subsequent) government instructions to institutions (e.g. Picot Report, Department of Education, 1988) to meet the needs of their communities and work towards cultural sensitivity (the latter motivated by the recent emphasis on honouring the Treaty of Waitangi). It was also brought about by our

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[2] Graham Webb was Associate Professor and Director of the Higher Education Development Centre at the University of Otago. He is now a Professor at Monash University, Australia.

involvement with degree programmes, necessitating higher qualifications for staff. At our polytechnic, too, it has been affected by our developing awareness of the educational needs of local Maori. Demographic projections suggest that by 2005 33% of the 5 - 14 year olds in our area will be Maori (Tainui Report, 1991:13, quoting figures from Waiora Waikato 1991:61-62).

Our institution is built on Maori land, unjustly confiscated from the Waikato Maori tribes during the Land Wars of the 1860s and subsequently. During the 1990s, the Waitangi Tribunal, a government agency set up to ensure that the guarantees which were made to Maori under the 1840 Treaty of Waitangi are met, negotiated compensation between the Polytechnic, the Crown and local Maori. A financial compensation and lease-back arrangement for this seizure was not effected until 1996. Maori staff now comprise a significant group for whom appropriate staff development needs to be arranged. Furthermore, our Strategic Plan commits us to providing this, as it requires us to provide appropriate staff development for all polytechnic staff. Any initiative I took in assisting with the development of our research culture, then, needed to provide appropriate professional development for Maori staff.

I am not, myself, Maori. My ancestry is Scottish, Danish, English and Italian. My background as a middle-class, middle aged academic woman with a string of certificates, diplomas and degrees is not that of most of the staff in the Polytechnic, Maori or non-Maori. Therefore I have to be sensitive that in my position of power as a staff developer in the polytechnic (Webb, 1996b) I try not to impose onto other staff, inappropriate 'solutions' for problems that I identify. Nevertheless, I work from the perspective of what Michel Foucault terms the specific intellectual, who aims

> ...to facilitate, for a subordinate social group, its ability to speak for itself...the specific intellectual is rooted in a particular institution. From a position in, and knowledge of, that institution he or she may speak about its structure of domination without claiming more than his or her due (Poster, 1989:37).

Although it is arguable whether the staff of the polytechnic would describe themselves – or be described by others - as a subordinate social group, it will subsequently become clear how external policy dictates construct all of us at the polytechnic as subordinate to some degree.

Kearins (1996:13) emphasised the ability of specific intellectuals to 'make a difference' in their own institutions, by working at a local level. She said that 'in resisting power at the local level, changes within institutions could lead to changes in the effect of the multiplicity of institutions'. It is my hope that the work I have undertaken in my context may also assist other New Zealand

polytechnic staff developers in assisting with the development of research cultures in their own institutions. However, given the reservation about my background and power position expressed above, I have needed throughout the work on this thesis to bear in mind a caution about intellectuals. Foucault indicates that whereas the 'left' intellectual purports to represent the universal (Foucault, 1977a:12), 'the intellectual is not the bearer of universal values' (Foucault, 1980b:132). I have had to proceed in my intervention with caution, recognising the ways in which I am myself part of the 'structure of domination' in our institution (Kearins, 1996).

Bearing in mind the needs of the diverse group of staff at TWP and my own positioning and biases, I decided that my way of contributing to our research culture would be via the teaching of courses in action research. This would enable me to investigate my initial question of how effective action research is as a way of helping to develop a tertiary research culture. The action research approach enables people to research their own contexts, using their own questions and working (ideally) in collaboration with others. The course would be situated within the compulsory CTT programme, as an optional course. This situation was carefully considered; it was one way I could see of levering time out of the institution for people to do research based on their teaching, and at the same time, to develop the research skills which the new environment required them to have. The courses are short (one week of in-class time and a further week's equivalent of independent working time) and assessed via a reflective log and a research report on completion of the course.

My hope was that, being collaborative, the action research approach would act as 'a catalyst for change', that it would lead to some improvement of teaching, and the development and strengthening of research skills for teaching staff within the institution. Based on my study of the ways in which Maori had been disadvantaged in the education system in the past (Ferguson, 1991; 1992), I particularly hoped that action research would be compatible with Maori ways of operating. It is based on collaborative, shared experience, a common pattern for Maori researchers (see Bishop, 1996a; Cleave, 1997a & b; Herzog et al, 1997).

Our role as staff developers requires us to provide appropriate staff development for all staff, Maori and Pakeha (white New Zealanders) alike. I wanted to see whether action research might prove a useful research approach for the increased numbers of Maori staff now employed in the institution, if any should elect to take the course. If so, then the disadvantage suffered by Maori in the past through being researched 'on' by non-Maori (Durie, 1992) might be addressed in our context. I also wanted to ensure that the research methods

approved by the institution were broad enough to include those favoured by many Maori.

When I considered the way that power is exercised within TWP, it concerned me that Maori perspectives were not, initially, given a high priority in the developing research culture. As Foucault (1977b: 213) expressed it, 'it is often difficult to say who holds power in a precise sense, but it is easy to see who lacks power'. By their absence from the powerful Research Committee, which defined research policy and approved research projects at TWP, I could see how Maori were excluded from the exercise of power vis-à-vis the institutional processes that 'normalized' and validated research approaches. If, as Foucault (1980b;52) expressed it, 'it is impossible for knowledge not to engender power', the formal recognition of 'Maori knowledge' and ways of researching should enable Maori to exercise power in the institution in a more equitable way.

I have briefly discussed why, in our context, I decided to introduce action research courses and the possibility of these making 'space' for Maori knowledge to be recognised. The quotation above is from Michel Foucault, so this is an appropriate place to move from consideration of local site issues, to explore the range of theoretical tools I used in this study.

THEORETICAL TOOLS USED IN THE STUDY

I have used a range of theoretical tools as I have investigated my context and how I might intervene in it appropriately. I have used the work of Michel Foucault, of Basil Bernstein, of action research proponents and of advocates and critics of reflective practice to illuminate and critique my work. In this section, I describe how Foucault's tools helped me in my project.

Michel Foucault

My situation confronted me with complex issues of power. My previous reading had not left me equipped to interpret what I saw happening, so I needed suitable tools to help me analyse these issues. Foucault's philosophical project involved the analysis of historical data and current practices to show how power operates and how individuals are constituted as subject in society. He studied hospitals, schools, prisons and psychiatric institutions. Rather than focusing on global issues, Foucault urged researchers to look at how power works locally.

> We should, he said, research the apparatuses of power less from the top-down point of view of policymakers, and more from the bottom-up perspective of everyday life within the architectural spaces of institutions such as prisons, hospitals, asylums, and schools (Middleton, 1998:xvi)

This bottom-up perspective is exactly what I was trying to investigate, though I needed to look at the top-down viewpoint of policymakers as well as the impact of recent changes on ordinary teaching staff. Foucault saw educational institutions as key sites to study (Middleton, 1998). As Olssen explained, 'Foucault is interested in explaining the discontinuities, breaks, and ruptures that signal fundamental changes in discursive systems' (1995:73). Fundamental changes were occurring in TWP's discursive systems because of the introduction of degrees – we were moving from purely technical and vocational discourses to the introduction and expansion of an academic one. Foucault's interests and my need to understand my environment therefore coincided well.

In his work, Foucault investigated ways in which governments exercise power, and discipline those they govern. He described the change from government via sovereign right in preindustrial times to that of modern systems of governance of populations via the construction of compilations of data about those populations (Foucault, 1980a). These descriptions are collected by medical workers, prison staff, teachers and adminstrators in education, among others. The data enable populations (and through them, individuals) to be normalised and controlled. Professional ways of knowing (discourses) in professions are used to shape us all, teachers and students alike in educational contexts, as subjects. In schools, for example, by using a power of examination individuals can be placed

> ...in a field of surveillance [which] also situates them in a network of writing; it engages them in a whole mass of documents that capture and fix them....A "power of writing" [is] constituted as an essential part of the mechanisms of discipline (Foucault, 1977a:189).

I have had to grapple in this study with the ways in which I as 'examiner' in my various courses, 'capture and fix' my students through what I require them to write. Goodwin (1996:66) described 'practices that Foucault termed 'governmentality'.' How these work is via 'a conception of power operating at multiple points through the social network, a conception of the management of the population as central to the task of government, and a conception of continuous surveillance as a means of control'.

Foucault's concepts are flexible in that they show the multiple positioning of exercisers of power. While I am an examiner to my students in the example I have just quoted, I am also rendered 'knowable' by the institution and its external monitors through my declaration of my research publications in our Research Register, and by the University through this thesis. In a 1997 paper, Harvey, Head of Research in the Faculty of Arts at Auckland Institute of Technology, suggested that 'one wonders if the research register may not become tertiary education's Foucauldian panopticon' (Harvey, 1997:188), a way of rendering individuals 'knowable' that I shall explore on page 18.

This requirement to be 'known' impinges on institutions as well as on individuals. In Chapter 4, the introduction of an Academic Board, the Research and the Quality Assurance Committees, requirements of the State, are investigated. These subject the institution to continuous scrutiny by its own staff, for externally auditable purposes. NZQA's approval and accreditation of degrees are another form of control. I have been part of such regimes of power as an NZQA monitor for a sister institution. It is hard to escape this type of knowledge, for, as Middleton (1998:6) expresses it,

> Like blood in the tiny capillaries of the human body, the disciplinary knowledge of professionals – articulated to the powers of government – flow through the conduits of intersecting professional networks, information systems, and social institutions.

We work in social institutions, use their information systems and rely on intersecting professional networks, so how can we avoid being 'known' through these engagements?

Foucault further described 'micropractices of power' which operate in everyday life to control and shape individual bodies towards conformity and subjectivity. In my institution, these micropractices operate both through obvious ways, such as when, what and how we assess, and also through more subtle practices, such as who may park where on site, what 'size' of office space one may occupy, even what type of chair one may use. I remember noting with some amusement about eight years ago the annoyance expressed by one senior manager when he observed that one of my female colleagues was using "an HOD (head of department) chair!" Shor's (1980) description of the analysis of classroom chairs as instruments of political repression came to mind on that occasion. In his course, Shor used a scrutiny of state-provided furniture to help his students explore ways in which educational institutions constrain them and render them docile subjects.

I am describing here ways in which Foucault's theoretical tools have helped me to make sense of my own context. In my institution staff were being required to 're-present' themselves as researchers as well as teachers. To determine how this requirement came about, I needed to investigate how policy is formed in New Zealand education, simultaneously with considering its effects on individual subjects in the polytechnic. Before I commenced my study, I had little understanding of how policy is made, tending to see it as imposed by powerful people in Government. Of what motivated them, I had little understanding. Foucault's analysis of power was helpful as a tool. He considered that power operates in a fluid way. He claimed that power is not a possession or a capacity (Foucault, 1980b); it does not emanate from a king or from the state. Rather, it

> ..must be analysed as something which circulates, or rather as something which only functions in the form of a chain. It is never localised here or there, never in anybody's hands, never appropriated as a commodity or piece of wealth. Power is employed and exercised through a net-like organisation...In other words, individuals are the vehicles of power, not its points of application (Foucault, 1980b:98).

As I discuss in Chapter 3, this interpretation of power was congruent with the perspectives of some of the 'powerful', the policy-makers also (Openshaw, Lee and Lee, 1993). They described ways in which they felt pressured by others in the power networks in which they operate.

But Foucault's interpretation of power also permitted possibilities for my action. Individuals 'are always in the position of simultaneously undergoing and exercising ... power' (Foucault, 1980b:98). As a staff developer, I could act as a vehicle to promote research approaches through which staff could interpret demands to conduct research in ways that were congruent with their perceptions of themselves as teachers first and foremost. If we were being forced to render ourselves as knowable research subjects, at least we could present ourselves as research subjects in ways that felt appropriate to us. Action research was the means whereby I could do this. First, though, I needed to understand the workings of power within the institution.

How is power exercised with respect to the staff at The Waikato Polytechnic, particularly with reference to research requirements? Foucault (1980b:39) urged the study of the way power works every day in what he termed its 'capillary form of existence, the point where power reaches into the very grain of individuals, touches their bodies and inserts itself into their actions and attitudes, their discourses, learning processes and everyday lives'. Investigation

of TWP's archives, of Acts of Parliament and of policy documents helped me to understand some of the ways in which power can come to touch the bodies and affect the discourses of staff at TWP; analysing this material through Foucault's lenses assisted my understanding.

One of Foucault's concepts that I found helpful emerges from the Benthamite description of the Panopticon, a circular prison situation in which the guards could theoretically observe prisoners at any time of day or night. Foucault described how the prisoners came to internalise the 'gaze' (le regard) of the guards to the extent of monitoring their own behaviour according to the guards' requirements (Foucault, 1977a). He extrapolated this notion of control and self-monitoring from the prison situation to that of hospitals and schools. The gaze is intended to render individuals as docile and controllable members of society who each occupy spaces which are deemed appropriate for them and provide ways of disciplining them, and of causing them to discipline themselves. The 'beauty' of the surveillance system is that it is economical - 'A superb formula: power exercised continuously and for what turns out to be a minimal cost' (Foucault, 1980b:155). As Middleton (1998:112) expressed it, 'knowing that we are being watched for some of the time encourages conformity all of the time'.

My research in this thesis describes some of the ways in which I, and other staff at the polytechnic, subject ourselves to this 'gaze' as we reconstruct ourselves as research subjects. The concept also confronted me with ways in which, even in my action research course, I cause staff to submit themselves to scrutiny via my assessment processes, and thereby become a vehicle of panoptical power. It is hard to see how such surveillance can be resisted. Indeed, Foucault claimed that 'it's a machine in which everyone is caught, those who exercise power just as much as those over whom it is exercised' (Foucault, 1980b:156). I am caught in a system that requires me to assess, as I have situated my course in a certificated programme; I am required to report on my assessment results as much as my students are required to submit their work if they want to complete the course. The institution itself is required to be assessed also, via the submission of yearly Statements of Objective which it is required to self-audit in the Annual Report, submitted to the Minister of Education and tabled in Parliament (Education Amendment Act, 1990: Section 220). Additionally, we have teams of government auditors who visit yearly to ensure that what we claim is indeed being carried out. We are all, individually and institutionally, subject to sources of dominance and control from both within and outside our institution. The notion of surveillance that Foucault articulated has

therefore been another useful tool for me in understanding how power operates in and around the institution, and through whom.

Action Research

Foucault recommended studying power operation at local, and via bottom-up, perspectives. My introduction of action research courses as a way of assisting staff to acquire research skills was just such a study. I aimed to assist staff to see how they could use research as an exercise of power to transform their teaching practice which I knew they valued, rather than seeing research as something foreign and an additional burden which they might resist. Why did I have faith in the ability of the action research approach to accomplish this transformation? In this section I shall present the action research definitions, concepts and approach that I used throughout this study.

In my course, I use several writers' definitions of action research as I help staff to come to grips with the approach. I quote that of Carr and Kemmis (1986:165-5) in its entirety, as it is the definition used in my course:

> It can be argued that three conditions are individually necessary and jointly sufficient for action research to be said to exist: firstly, a project takes as its subject matter a social practice, regarding it as a form of strategic action susceptible of improvement; secondly, the project proceeds through a spiral of cycles of planning, acting, observing and reflecting, with each of these activities being systematically and self-critically implemented and interrelated; thirdly, the project involves those responsible for the practice in each of the moments of the activity, widening participation in the project gradually to include others affected by the practice, and maintaining collaborative control of the process.

This definition is broad enough to encompass *any* practice. My project involves teaching. Teaching is a social practice that is susceptible of improvement. It is possible to improve teaching practice by following the 'plan, act, observe and reflect' spiral, and teachers can learn how to follow these spirals self-critically and systematically. It is my observation, however, that good teachers follow this cyclical process largely intuitively (a process known as reflective practice; Woodhouse, 1997, also identified this tendency). So as far as the process is concerned, not a lot of new learning is needed. Finally, as teaching is frequently an individual activity in that teachers are generally on their own in their classrooms with their students,[3] they are responsible for their own practice. The

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[3] Team teaching is relatively uncommon, largely for resource reasons.

collaboration that this definition stresses has, however, proved difficult in our context.

How common is the above interpretation of action research? McNiff discussed action research in a specifically teaching context in her 1988 book, 'Action Research - Principles and Practice.' She explained it as improving education through change, by encouraging critical awareness of the individual's own practice. She stressed collaboration with others, particularly noting that 'it is research WITH, rather than research ON' (McNiff, 1988:4). The research WITH rather than research ON aspect is important to bear in mind when I discuss the likely usefulness of the approach for Maori staff. In later writing, McNiff stressed the affective aspect of action research also, an aspect often not mentioned in other discussion:

> For me, in my perhaps idiosyncratic understanding of action research, it is that ability to be able to share the passion, the awe, the wonder, the beauty, the delight in your own life and share that with somebody else, to show that you really do delight in your own life, and each moment is better than the last, and help someone else to share that view of delight, and help someone else to find the delight in their own life (McNiff, 1994a:19).

This aspect really resonates with me – it mirrors the passion I have felt for the work described in my project, and my wish to share with others the action research approach that has assisted me in a critical examination of my own practice. In her elaboration, McNiff placed a strong emphasis on the fact that action research may be largely a *personal* research endeavour, in which the researchers investigate their own practice with the aim of sharing with someone else what the research has revealed. It does not imply that the action researcher's specific contextual learning is necessarily appropriate for or should be applied to the work of others. McNiff's emphasis on 'help[ing] someone else to find the delight in their *own* life' (italics mine) made this aspect plain.

Others have also added their perspectives to the action research literature. Kemmis and McTaggart emphasised the valuing of social justice in the conducting of action research – this is not stressed by all action research writers. They observed that action researchers take their collaborative action 'in order to improve the rationality and justice of their own social or educational practices, as well as their understanding of these practices and the situations in which these practices are carried out' (Kemmis & McTaggart, 1988a:5). It is important to note, however, that some people (e.g. Foote, 1993; Forward, 1989; Roberts, 1993) described uses of action research either purely or mainly for purposes of

improving the teacher's own practice, sometimes in a solitary way. Broader issues of social justice, whether in their own context or looked at more widely, were not their immediate concern, and there is debate over whether, and to what extent, action research *must* be carried out collaboratively (Elden & Chisholm, 1993; Zeichner and Noffke, 1998).

How common is Kemmis and McTaggart's broad perspective on action research internationally? As attempts to define action research continued, the emphasis on social justice did not always find expression. During 1989, there was a major action research conference held in Australia, which I attended. The international audience at that conference worked together to develop a common definition of action research. The points that I wish to stress from this lengthy working definition, quoted in its entirety in Zuber-Skerritt et al. (1990:19), are its stress on publication of results; 'power sharing and the relative suspension of hierarchical ways of working towards industrial democracy', the following of a 'self-reflective spiral of planning, acting, observing, reflecting, replanning etc', and 'reflection which supports the idea of the "(self-) reflective practitioner"'.

This discussion ties in with those of Carr and Kemmis, and McNiff in its emphasis on individuals working to improve their *own* practice; its use of the same plan, act, observe and reflect spiral, and its emphasis on collaboration. It does not mention, specifically, working for social justice. The World Congress on Action Research did, however, spell out the need for publication, power-sharing and ideally, absence of hierarchical ways of operating which are not overtly mentioned in the other definitions. It also noted connections with the tradition of reflective practice.

Action research, then, is a research approach with the following three agreed characteristics. Firstly, it is about individuals working in their own contexts to bring about improvements in their own practice in areas that *they* determine. Secondly, it follows a systematic process characterised by planning, acting, observing and reflecting. This is described as a spiral because the cycles of planning, acting, observing and reflecting tend to be ongoing. Thirdly, action research places a high priority on collaboration and on sharing of knowledge. As the World Congress discussion stressed overtly, this collaboration aims for the power-sharing to be egalitarian and the ways of working increasingly to become non-hierarchical. Kemmis and McTaggart emphasised that there should be some benefit for justice in the wider community, although this is not common to all approaches to action research. My action research journey as I have undertaken this study demonstrates the first two of these characteristics. Later in the thesis I discuss ways in which I have attempted to work collaboratively.

For me as a staff developer at TWP, this approach offered the possibility of helping staff to develop research skills through working in their own context, utilising the reflective practice approach which observation had taught me was common at the institution. Action research's emphasis on collaboration suggested the possibility of promoting an approach that is compatible with Maori ways of researching (Bishop, 1996a; Clark, 1998; Cleave, 1997b; Herzog et al, 1997); and the hope that a rapid spread of research skills would be brought about through the sharing. If this occurred, my fellow action researchers and I would be making a substantial contribution to our emergent research culture.

So far, I have discussed the way that some writers stress the need to work for social justice when conducting action research, and argued that this is not universal. One attempt to explain differences in action research approaches was laid out in Carr and Kemmis' elaboration on the way action research may be done for technical, practical or emancipatory purposes. Because of the importance of this elaboration in my thesis, I shall discuss their differentiation in some depth here. It is important to understand the distinction at this point because my own preferred approach is the emancipatory one, in terms of its commitment to endeavouring to make workplaces more egalitarian (Tripp, 1990a). However for pragmatic reasons to do with time and workloads, most of my action researchers use the practical approach. The distinctions pertain to the initiator, conduct and outcomes of the research, and are as follows. *Technical action research*

> ..occurs when facilitators persuade practitioners to test the findings of external research in their own practices, but where the outcome of these tests is to feed new findings into external research literatures. In such situations, the primary interest is in the development and extension of research literatures rather than the development of practitioners' own practices on the basis of their own collaborative and self-reflective control (Carr and Kemmis, 1986:202).

Here, clearly, the facilitator is not a practitioner, and is frequently a university academic (Kincheloe, 1991). This form of action research *may* provoke the practitioners to investigate their own contexts along lines which *they* choose, but the emphasis is on adding to an existing body of knowledge defined by outsiders rather than chosen by the practitioners themselves. It is not common at TWP, where the action researchers define their own questions and the outcomes are largely practical - publications are often published purely internally.

Practical action research, by contrast, puts the emphasis on the conduct and outcomes of the research back on the practitioners themselves.

> Outside facilitators form cooperative relationships with practitioners, helping them to articulate their own concerns, plan strategic action for change, monitor the problems and effects of changes, and reflect on the value and consequences of the changes actually achieved...Such action research may be labelled 'practical' because it develops the practical reasoning of practitioners (ibid., 203).

The concerns, obviously, are those of the practitioners. The outside facilitator's role becomes one of providing systems and support for the practitioners to investigate their *own* issues, rather than providing the issues which practitioners are asked to investigate, which is the technical approach. It is this practical approach which has characterised my teaching of action research courses at TWP, although I have hoped that an emancipatory approach will emerge subsequently in the researchers' own contexts, once the research skills have been learned.

> *Emancipatory action research* occurs when

> ...the practitioner group takes joint responsibility for the development of practice, understandings and situations, and sees these as socially-constructed in the interactive processes of educational life. It does not treat teacher responsibility for classroom interaction as an individual matter, but, on the contrary, takes the view that the character of classroom interaction is also a matter for school determination and decision-making.....[it leads to a situation where] a process of collaborative action research is employed in an open-minded, open-eyed way to explore the problems and effects of group policies and individual practices (ibid., 203-4).

In emancipatory action research, the focus is clearly broader and there is a practitioner group, rather than an outside researcher or facilitator, responsibility for the process. As Carr and Kemmis pointed out, emancipatory action research leads the group involved to 'take responsibility for its own emancipation from the dictates of irrationality, injustice, alienation and unfulfillment' (ibid, 204). The group looks at the policies and practices typical of the institution in which it works, and the group's own complicity in maintaining these. The group investigates whether the culture in which it works is just and equitable, and tries to determine how to improve the culture if deficiencies are noted. In my own context, despite my difficulties in establishing a collaborative group with which to work, I have tried to find ways in which my action researchers' and my own educational values can be worked out in our practice. Through attempting to understand better our common situation, to transform both it and our practices,

we can claim to be working within the emancipatory perspectives of action research to a limited extent. I discuss this possible fluidity in approach below.

Action research has provided an alternative, and frequently challenging, approach to the methods of the natural sciences and even to some other social science research methods in which the 'researcher' attempts to remain a neutral observer. But action research is, itself, contested terrain, as the previous discussion about definition demonstrates. The strict separation of action research approaches into technical, practical and emancipatory research 'designs' has also been contested. Professor Robin McTaggart, in a seminar presented at TWP in July 1998, discussed ways in which so-called practical action research can also be construed as emancipatory - that changes in individual practice, even though ostensibly practical, will have an impact for change on the wider educational context, a blurring of boundaries supported by Zeichner and Noffke (1998). They argued that

> As practitioners change their practices and document what they do, they live out as well as problematize particular orientations to the larger social order, including ethical stances on how one should "be" with children in the classroom, and the uneven distribution of knowledge and privilege in society (Griffiths, 1994; Maher, 1991, quoted in Zeichner & Noffke, 1998).

To perceive particular instances of action research as working entirely within one of Carr & Kemmis' three approaches, then, may be problematic and unnecessarily restrictive. In several cases, including my own, emancipatory intentions by one or more of the researchers were counteracted by other issues operating in the environment (e.g. overworked teachers wanting to focus on the practical rather than the 'revolutionary'). Tripp neatly summarised the difference between technical, practical and emancipatory approaches as follows.

> ...the technical tends to treat the social world as if it were part of the natural world, whereas the practical recognizes the difference between the two but accepts the social world as it is. The emancipatory, however, not only recognizes the difference between the natural and social worlds, but critiques and seeks to improve the latter by, for instance, making it more egalitarian (Tripp, 1990a, 160).

There is likely to be ongoing debate between action researchers who seek tidy categories and the rather messier world of practice, in which practical work can have unforeseen emancipatory outcomes just as emancipatory intentions can be subverted by work pressures and/or peer and student resistance, producing

instead mundane and mechanistic analysis of practice - with little significant implication for change.

I have tried to utilise an emancipatory action research approach in both my own teaching, and my work for this study. It has been my intention to 'question the social assumptions' on which the changes in our educational practice are posited in order better to understand these and help my fellow teachers to understand them. However, despite my own emancipatory intentions, analysis of research outcomes using Carr & Kemmis' distinction reveals that practical action research has been the predominant approach of those in my course. Because of my 'power' as a staff developer in the institution (Webb, 1996b), I have had to be careful that my personal emancipatory agenda is not imposed on my students, particularly given the power differential of my having to assess them, a caution about which Zeichner & Noffke (1998) also warned. There are many differing discourses of education at TWP; my way of improving teaching practice in an emancipatory way is only one of these.

It will become clear as I continue this account that it is my concern for the social situation and philosophical context within which I work, the discourses of education in general and of TWP more specifically, that have led me to use action research to try to improve my own practice. I also suggest to others that they might choose to improve their practice using action research, building on the skills of reflective practice that I have observed in the institution. It is this nexus between action research and reflective practice that I shall consider now.

Reflective Practice

What discourses of practice are observable within TWP? Why did I decide to use action research, rather than just providing a standard Introduction to Research Methods course, in our context? One of the latter was introduced into our Diploma in Adult Learning and Teaching programme in 1997; why action research in 1993? I have already mentioned my observation that good teachers within the institution demonstrate the qualities of reflective practice. This claim is based on study of a literature surrounding reflective practice that has been presented and debated over the past twenty years in education. While I have already presented definitions and some discussion of action research, including the World Congress definition which links action research with reflective practice, I need to make more overt the links between the two. This is because it is a cornerstone of the legitimacy of my intervention that the two are not only compatible but that reflective practice already exists quite widely at TWP, as well as elsewhere in New Zealand tertiary education (Woodhouse,

1997). For this reason I chose to use action research as my way of changing and improving our research culture, and of striving to incorporate teachers' knowledges in the emergent discourse of research.

First, I shall look briefly at the history of the concept. The notion of teachers as reflective practitioners arose in reaction to a tendency for research to be done *on*, rather than *by*, teachers. In the early 1970s Stenhouse, at the University of East Anglia, promoted the change from reliance on outside 'expert' research (Stenhouse et al, 1970; Stenhouse, 1975), a discourse in which teachers were the intended recipients of advice from university-based researchers who wrote papers on what constituted good practice. As Kincheloe (1991) pointed out, this advice was usually ignored by the teachers who perceived it as irrelevant if they were aware of it at all (see also Elliott, 1994: Smith & Lovat, 1991, Zeichner & Noffke, 1998). Woodhouse (1997:363) went further, suggesting that not only was there little impact of such research on teaching, but that there is 'a strong suggestion of a negative relationship.'

Stenhouse was at the forefront of the 'researching teacher' movement in the U.K., claiming that all teaching ought to be based on research but that research and curriculum development should be the preserve of teachers who gain understanding of their work through studying their own problems and effects (McKernan, 1991). Stenhouse coined the term "teacher as researcher" (quoted in Zeichner & Noffke, 1998). Elliott and Adelman (1973) further promoted teacher-research work using action research in their Ford Teaching Project, which aimed to promote pupil independence, teacher identification of problems through utilising systematic reflection, and the ongoing development of teacher self-awareness.

Elliott's later work (1978) argued that *teaching* is inescapably a *theoretical* activity (quoted in McKernan, 1991:22). Teachers, according to Elliott, should interpret their everyday practice through the pursuit of reflective self-development. His thesis was that the two areas, split by the tendency for theory to be developed in universities and promoted to practitioners, should be reunified through being developed by teachers themselves. This kind of thinking has been continued and further developed in other countries around the world. It has been used at Deakin University in Australia by McTaggart et al, (1982); Carr and Kemmis, (1986); Kemmis and McTaggart (1988b); in South Africa by Dison & Murray (1998); Walker (1993, 1995), and in the U.S. by Cochran-Smith & Lytle, (1990), and Noffke & Zeichner, (1987), among other educators.

However, the notion is currently contested terrain. Despite the promotion of teachers as researchers who utilise the skills of reflective practice to improve

their own situations, there is some debate about the extent to which the teacher-as-researcher movement *is*, or even *should* be, replacing a reliance on university-based research. Zeichner (1995) discussed the way that many classroom teachers still see research as an activity conducted by those outside the classroom for the benefit of those outside the classroom. Indubitably, there are some staff in my own institution who would agree with this view, as interviews with foundation staff will show (pages 141-142).

McIntyre (1997), presenting his presidential address to the British Education Research Association, questioned the 'relation between the practice of teachers on one hand and research done by professional researchers on the other' (1997:131). In this statement McIntyre clearly polarised the two areas, which Elliott had worked to integrate. He quoted Elliott's (1989) presidential address in which Elliott claimed that there could be no educational research in which teachers played no important role in the process of articulating, analysing and hypothesising solutions to complex educational problems, and that professional researchers should be subordinate to this. McIntyre, by contrast, argued that 'It seems to me simply unreasonable to demand of teachers that they be researchers as well as teachers, when the expertise required for the two activities is so very different' (ibid., 132).

Why did McIntyre think that teaching and research were incompatible activities? His argument was based on the notion that the split-second judgements which teachers need to make to practice effectively are at variance with the single-minded concern with clearly-formulated agendas, careful planning and analysis of what has happened, the skills which McIntyre argued are needed from researchers. Woodhouse, Director of the New Zealand Universities Academic Audit Unit, agreed, stating that there is 'an assumption that all academics can be good at both teaching and research, which*, given the quite different nature of the two activities*, should not be expected to be universally true' (Woodhouse, 1997:360; italics mine).

My intervention using action research based on reflective practice - teaching teachers research skills by encouraging them to reflect on and improve their own teaching - is therefore not unproblematic theoretically. Even the notion of reflection is debated (Adler, 1991; Bengtston, 1995; Cole, 1997; Grimmet et al, 1990; Hatton and Smith, 1995 - all quoted in Haigh, 1998), and McTaggart, 1995:32). The most frequently quoted proponent of reflectively practising teachers was Donald Schon, whose 1983 *The Reflective Practitioner* most concisely presented the developing discourse. The kinds of split-second judgements based on professional past experience which McIntyre considered

both typical of good teachers and simultaneously incompatible with their adopting of a research function concurrently, are spelled out in Schon's work, summarised by Gilbert. As Gilbert explained it, Schon described:

> *Knowing-in-action* [which] is the professional knowledge that practitioners actually use, as distinct from the theoretical, scientifically derived knowledge that technical-rationalist approaches assume that they used. [There is also] *Reflection-in-action* [which] occurs when new situations arise in which a practitioner's existing stock of knowledge - their 'knowing-in-action' is not appropriate for the situation. It involves reflecting on 'knowing-in-action'. 'Reflection-in-action' is a process through which hitherto taken for granted 'knowing-in-action' is critically examined, reformulated and tested through further action. It is a process of *research* through which the development of professional knowledge and the improvement of practice occur together (in much the same way as in action research) (Gilbert, 1994:516, italics hers).

In this quotation, Gilbert, too, linked reflective practice with action research.

The linking of the two is not a novel connection. Walker found, in her work in South Africa, 'that action research underpinned by a view of teachers as reflective practitioners (Schon, 1987) is one appropriate model for INSET (inservice education for teachers) in South Africa' (Walker, 1993:106). The World Action Research Congress definition, quoted earlier, made the same connection. Working as a second language teacher within my own institution, Melles (1998:8) commented that 'Action research, especially, has become an option for introducing practitioners, not only to reflective teaching but also to the research endeavour', quoting second language users of the method (e.g. Nunan, 1998, in Melles 1998). So my decision to use action research as a staff development initiative to assist teachers in the development of research skills, based on my identification of the parallels between action research and reflective practice, is not unusual. What is novel is the use of action research as a tool consciously to help to develop a research culture.

In this section I have considered the linking of reflective practice with action research. I have avoided at this point any discussion of whether reflective practice *per se* can be considered research. I shall engage with this discussion in Chapter 4, when TWP's definitions of research are considered further, and in Chapter 5 where research culture development is considered, drawing on interview material from foundation staff among other sources.

Criticisms of Reflective Practice

Are the criticisms by McIntyre, quoted above, of Elliott's claim that teachers should predominate in research on educational practice, common? How

widely accepted is reflective practice as a way of improving teaching? As I am presenting reflective practice as a norm for good teachers within the polytechnic, and basing my intervention on this reflective practice, I need to consider criticisms of the reflective practice approach which have been advanced by some writers. I shall consider a number of studies in presenting this criticism.

Linda Valli (1993) suggested that current definitions of reflection are a Westernised concept, stressing an analytical method that prizes objectivity and emotional detachment. Valli's criticism was also expressed by Houston and Clift (1990:211), one of whose 'working hypotheses' at the end of their discussion of research and reflective practice was: *Current definitions of reflection are strongly influenced by the Western cultural heritage, which emphasizes analysis and problem solving as opposed to negotiation, contemplation, or enlightenment.* Valli further warned that reflective practice can become too process-oriented to the detriment of purpose, content and quality of reflection, a warning echoed by Calderhead & Gates (1993); Knowles (1993) and Tann (1993).

As well, said Valli, reflection can be inserted into programmes that remain fundamentally unchanged, a criticism also made by Zeichner (1987). If this were to happen, the critical awareness that teacher educators attempt to awaken in their 'trainees' would not be being demonstrated by the teacher educators themselves. Haigh (1998b) warned that advocates of reflective practice need to reflect on their assumptions about the capacity of people to reflect productively on their own experiences, noting that sometimes the advocates' assumptions seem unreasonable. He quoted work by Bengtston (1995) and Cole (1997) who were concerned about 'a notion of reflection' being used 'that seldom is clarified' (Bengtston, 1995:24, in Haigh, 1998b). Haigh's own definition of reflection is stated: 'Thinking about an experience with the intention of deciding what it means, how it can be explained and what the meaning and explanations might imply for the future' (Haigh, 1998b.)

Having taught a reflective practice module myself, a separate course from action research and one that is compulsory for all our new staff, I concede the power of these criticisms. My unit's understanding of reflection coincides with that of Haigh, as in our course we attempt to move participants from description through analysis to suggestions for future improvement. Some staff *do,* as Valli and others suggest, seem more preoccupied with style than with content; the most frequent areas for resubmissions on journals I have marked have to do with description rather than analysis; the listing of works read or videos viewed rather than an attempt to react to or integrate these works in their own theories of

teaching. We attempt to integrate critical awareness in developing staff across the programme, rather than restrict it to the Reflective Practitioner module.

As I write this, I am aware that once again I am describing a 'power of examination' with regard to the reflective practitioners in the course. The production of an assessable journal requires them to produce for my gaze as an assessor, a 'normalised' work in which analysis is promoted above 'mere' description. Competing discourses are observable here. On the one hand I espouse an emancipatory action research perspective in which I strive to encourage developing teachers (and myself) to determine our own values and be true to these in our practice; on the other, I operate as the vehicle of normative power for the institution to ensure that the standards it has set down are achieved before certification is granted. I am caught in the same web vis-à-vis my work for this thesis. The university requires me to subject myself to its normalising power in order to demonstrate that this work meets the conventions of doctoral format, even when my inclinations are frequently to present it otherwise.

SUMMARY OF THE CHAPTERS

In the remaining chapters, I show how I have answered the research questions I posed at the start of Chapter 1. In the production of this thesis I tackle first the question, "How can I understand and account for the changes affecting the institution within which I work, and which affect New Zealand education more broadly?" Chapter 2, therefore, outlines the methodological tools I have used in carrying out this study. These include the work of Basil Bernstein, introduced as a way of explaining the way that TWP functions academically and administratively. The research site I studied is described, and the relevance of action research at TWP is analysed. The action research course itself is briefly outlined.

I then move from the general theoretical issues covered in Chapters 1 and 2, to specifically context-related ones. In Chapter 3, the development of technical education in New Zealand is sketched. Discourses of local and central control, academic and technical and vocational education permeate the chapter. I reaffirm my intention to work from the position of a specific intellectual as I outline the development of technical education both nationally and locally. The discourses affecting the ongoing development of the institution from its inception in 1967 until the late 1990s are analysed, in an attempt to show 'political and moral responsiveness' (Fendler & Popkewitz, 1993:26) to these.

The ability to grant degrees at TWP has provided the incentive for my study. At the start of Chapter 4, therefore, structural changes at TWP in the 1990s are described. The minimal kinds of research that had been carried out at TWP prior to the implementation of degree granting status are considered. I then describe chronologically the development of the five degrees that were in place by the end of 1996 and argue that similar themes emerge through all five degrees. This chapter concludes my approach to the first research question, and demonstrates how my understanding of my context has developed over the period of my doctoral study.

The second question asked, "How can an institution such as ours, faced with the requirement to engage in research, develop a research culture?" Chapters 5 and 6 wrestle with this issue, analysing work done in similar institutions both in New Zealand and elsewhere (mainly in Australia, because of similarities between the two countries). In Chapter 5, issues relating to the development of research cultures are discussed, along with a consideration of how research cultures might best be developed. An investigation of whether the reflective practice which formed part of some of the foundation staff's involvement in research, *is* legitimately research, follows. I conclude that although it is research, it does not help develop the research culture in that, as it is generally not publicised, it makes no contribution to the formally measured research culture of the institution.

Chapter 6 utilises a personal narrative strand as I present from my perspective as a novice researcher in the polytechnic, issues that constitute barriers to the development of a healthy research culture. I use my own experience to demonstrate the relevance of work others have done in developing research cultures, and to expand on this work. Work on research cultures investigated in Chapters 5 and 6, and the local and broader educational context in which I work in the preceding chapters, therefore provides the background against which the appropriateness of my intervention can be measured. I devote the rest of the thesis to 'painting in the main feature', a consideration of the question "How effective is action research as a way of helping to develop a tertiary research culture?"

In Chapter 7 I describe how I sought to encourage staff in the polytechnic to use action research as a method of developing research skills. The course is described in some detail, including statistical information on course completers and the processes I followed in seeking feedback from the participants. In Chapter 8 the action research participants' reactions to the course are quoted and analysed, with strong support for the approach being expressed by almost all

participants. Maori action researchers' comments on the approach are highlighted. An alternative, and very effective, way in which action research has been used to develop a departmental research culture at TWP is briefly presented. The chapter concludes by summarising the main themes that the action researchers reported.

Chapter 9 concludes the thesis. It summarises the discourses still prevalent in the polytechnic at end of the century. It looks at the effectiveness of the tools I have used to help me to understand the functioning of power within and around the polytechnic. I defend my use of Foucauldian tools while still striving for personal and social change and look at ways that both I and other polytechnic staff have acted as specific intellectuals in changing our context. I conclude that in my context, action research is an appropriate and effective approach to use in introducing polytechnic staff to the acquisition and expansion of research skills.

By the end of the thesis I believe I have demonstrated some movement towards becoming a more appropriate critical intellectual in my own context. I have had to adjust my vision – to recognise the blend of practical and emancipatory action research that has characterised both my own work and that of some of my action researchers. I have had to be more realistic about what my work can achieve than I was at the start of my study. As Lather expresses it:

> To abandon crusading rhetoric, and begin to think outside of a framework which sees the 'other' as the problem for which they are the solution, is to shift the role of critical intellectuals. This shift entails a move away from positions of either universalizing spokespeople for the disenfranchised, or cultural workers who struggle against the barriers which prevent people from speaking for themselves. This postmodern re-positioning of critical intellectuals has to do with struggling to decolonize the space of academic discourse that is accessed by our privilege, to open that space up in a way that contributes to the production of a politics of difference. Such a politics recognizes the paradox, complexity and complicity at work in our efforts to understand and change the world (Lather, 1992:132.)

Ultimately, it is my peers and students who will be the best judges of this claim.

PART ONE: METHODS AND CONTEXTS
CHAPTER TWO
RESEARCH METHODOLOGY

INTRODUCTION

How does an inquiring teacher researcher, operating from inside her research situation, decide on the most appropriate way of carrying out her research? There are a wide range of research tools or methodologies with which she might work. Some past teacher research has relied heavily on an 'outside' expert, usually a university or teachers' college academic, coming into a teaching situation and using various means of persuasion to co-opt practising teachers to be participants in the research. Kincheloe (1991) discussed the extent to which this construed the actual practices of teachers as 'bad work' in need of remedy. Larabee (1992) argued that educational psychology, normal schools and administrative studies sections within colleges of education had contested the territory of teacher education, with teachers themselves having little part to play in the debate.

Shulman (1986) described the debate over the past 20 years as being dominated by two differing paradigms. The first was termed process-product research in which effective teaching was explored via the method of correlating teachers' behaviours (processes) with particular 'products', usually the assessment results gained by their students. This is a very technical view of teachers' roles. The second is far more diverse and was referred to by Shulman as 'classroom ecology'. It concentrates on teaching as a complex, context-specific activity in which difference, rather than sameness of approach, is critically important. This ties in with the complexity identified by Schon (1983) in his description of teachers as reflective practitioners. As Shulman pointed out, however, both types of research have been carried out predominantly by university researchers rather than the teachers themselves. Therefore, while the latter may more accurately take into account the complexities of the teaching situation, in this scenario the actual voices of teachers are still excluded from the discourse of research on teacher education. Cochran-Smith and Lytle (1990:2) stated that teachers themselves, who 'have daily access, extensive expertise and a clear stake in improving classroom practice, have no formal way to make their knowledge of classroom teaching and learning part of the literature on teaching'.

Against this messy and disputed background of teacher education research I needed to select an appropriate research approach. Before presenting a comprehensive outline of my research design and implementation, I shall describe the physical research setting and outline the institution's purpose. TWP's historical and developmental context will form the substance for chapters 3 and 4.

THE INSTITUTIONAL CONTEXT

The following information is drawn directly from a formal document of The Waikato Polytechnic, as it was at the commencement of this study (late 1992) although there have obviously been changes over time, noted in chapters 3 and 4.

> The Polytechnic is a major provider of continuing education and training in the Waikato region. The Polytechnic occupies one central and two subsidiary sites in Hamilton City; three outposts at Morrinsville, Piarere and Coromandel and employs off-campus tutors in the Hauraki-Thames Valley and Northern King Country constituencies. The Polytechnic also supports a Rural Education Activities Programme at Taumarunui and a Learning Centre at Te Kuiti. [see map, Appendix C].
>
> A characteristic of The Waikato Polytechnic is that it serves the diverse needs of urban and rural populations. Hamilton City has 102,000 residents but the relatively high density farming industry of the Waikato region has resulted in 344,000 people living within the Region. The Waikato Polytechnic also serves the largest Maori population of any polytechnic. The Tainui people are noted for their efforts to increase economic wellbeing by increasing their participation in industry and commerce....The Waikato Polytechnic currently services the education and training needs of 15,000 full and part-time students each year by offering a mix of full-time, part-time, block-release, day, evening and weekend programmes. There are students of all ages but the majority are in the 17 - 20 years range.
>
> ...The Waikato Polytechnic has expanded rapidly since its inception 21 years ago, now catering for approximately 3,000 equivalent full-time students. There is an increasing problem of lack of space to grow on the relatively small mid-city site. There is an urgent need for a second major site in Hamilton both to relieve pressure on the central city site and to permit a planned programme of long-term expansion and rationalisation.

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Besides these data on the Polytechnic's physical context and the breadth and numbers of people for whom it provides education, it is important also to consider data on the Polytechnic's mission and management structure as these pertained at the commencement of the study. Charters describing an institution's mission were required of educational institutions under the 1990 Education Amendment Act - a good example of central government's power of examination.

Our educational purpose, stated in the 1991-1995 Charter, committed us to values of providing wide-ranging continuing education; responding to student needs and interests; recognising the Tangata Whenua [indigenous people] in accordance with the principles of the Treaty of Waitangi; providing on an equitable basis for under-represented and disadvantaged groups; making courses accessible; creating a safe, caring environment which meets individual needs of students and staff and provides for full personal development; developing an organisation which encourages pride, self-esteem, initiative, creativity and pursuit of excellence amongst staff and students; valuing staff and recognising that we can only achieve our purpose if they are competent, well motivated and supported; identifying and responding to distinctive needs of our community; meeting regional and national requirements of industry and commerce; using resources efficiently and effectively; and recognising the diversity of cultural traditions within New Zealand (1991-195 Charter for The Waikato Polytechnic, June 1991, page 3). Goals for achieving the above aims were listed subsequently.

To assist the Polytechnic to achieve these goals, a Government-designated Council comprising members appointed by the Minister of Education, the Polytechnic's CEO (a Council appointee), and various other members elected by staff, students and local interest groups was in place. The specific management positions under this Council are represented in the organisational management chart on the following page.

THE WAIKATO POLYTECHNIC

Figure 1.

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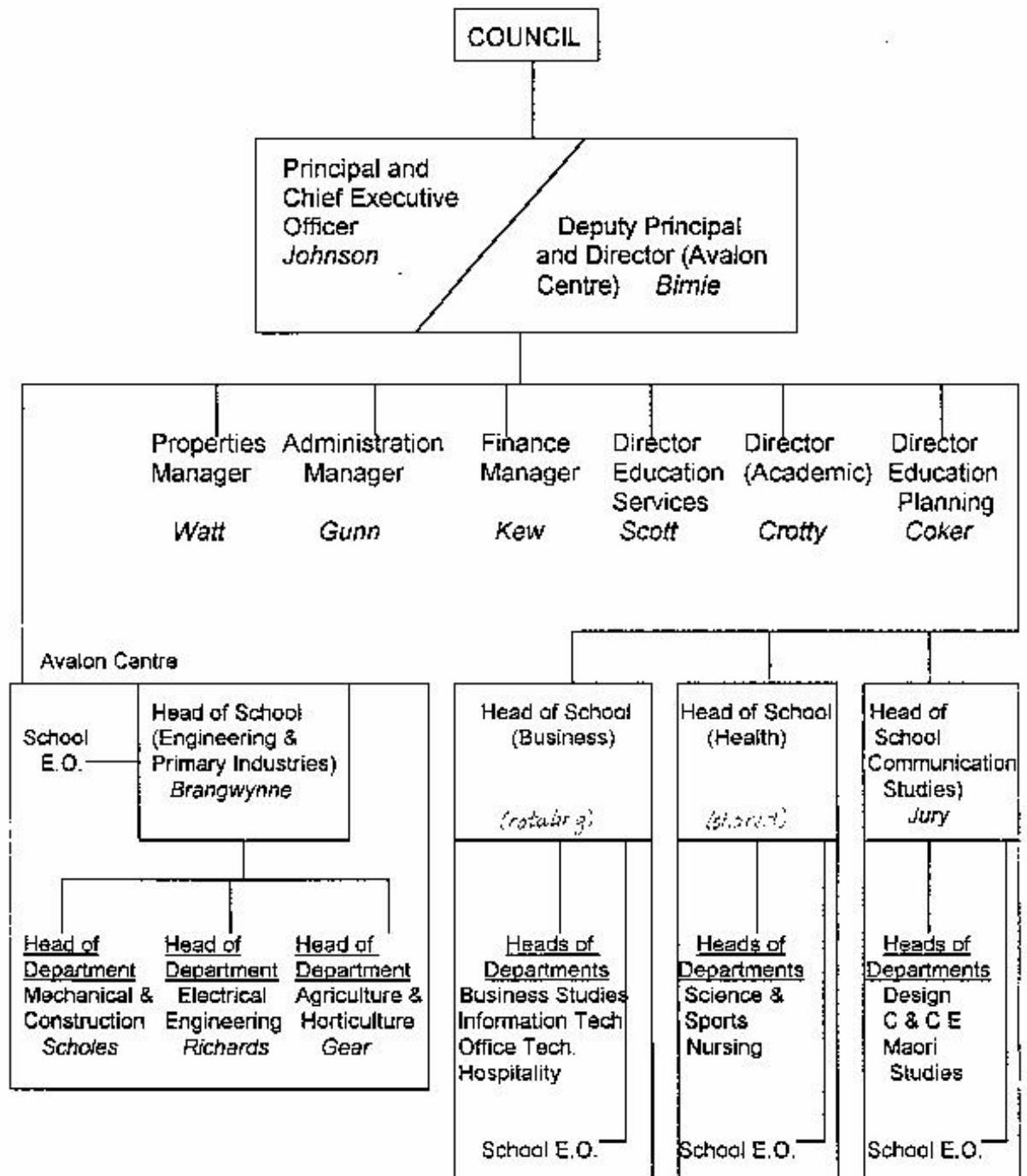
Classification and Framing at TWP

To assist me in analysing and interpreting the context in which I work, I have utilised Basil Bernstein's concepts of knowledge codes. This has also been used by Middleton (1987), and by Morris Matthews (1993) to help them make better sense of the structures and operations of a university. As the latter writer puts it,

> What Bernstein does…is indicate the importance of curriculum categories and the relations between them in an educational setting. His knowledge codes could be applied to [Morris Matthews' study] because they helped reveal the structures operating within universities which might help or hinder developments taking place within them (Morris Matthews, 1993:55).

Bernstein's theoretical model helped me to conceptualise my institution as an organisation within which staff experience both constraints and possibilities. The management diagram above shows lines of responsibility; what it cannot show is the *culture* of the polytechnic. Bernstein described educational knowledge codes, 'the underlying principles which shape curriculum, pedagogy and evaluation' (Bernstein, 1971:47) and explained how the form these codes take 'depends upon social principles which regulate the classification and framing of knowledge made public in educational institutions' (op. cit, 47-8).

> He used the term 'collection code' to refer to patterns of curriculum organisation in which the 'contents' of various academic 'subjects' are insulated from one another through such organisational devices as compartmentalised timetabling, hierarchical subject-based departments, and rigid subject specialisation amongst teachers. Conversely, the term 'integrated knowledge code' refers to curricula in which boundaries between contents or disciplines are blurred (Middleton, 1987:26).

Bernstein's notion of classification helped me to interpret aspects of the way the polytechnic functions.

By classification, Bernstein described the nature of relationships between curriculum contents and between those involved in teaching and administering those contents. He described areas of 'strong classification' as being ones in which the various 'subjects' are well insulated from each other, with clear

boundaries. This is a helpful notion in understanding potential constraints in developing an institution-wide research culture given departments that, I shall argue, operate under a strong classification code. The strong boundaries between curriculum contents mean that common research projects are unlikely to occur. Where strong boundaries exist, even if a common interest area were to be found, different timetabling arrangements and lack of communication between participating departments would be likely to cause difficulties in successfully and efficiently completing the research. Such attempts are currently uncommon at TWP; an attempt to offer a joint degree in Leisure Studies between the polytechnic and the local university foundered over just such issues. QAC Minutes of 17 April, 1996, noted that 'There is little doubt that the co-ordination of timetables….is the single concern resulting in most problems for students.'

The alternative to strong classification, said Bernstein, is a weak classification system in which insulation between the curriculum areas is broken down, resulting in blurred boundaries. The Women's Studies courses offered at the University of Waikato from 1974 were an example of this, as they transcended departmental boundaries (see Middleton, 1987). In such a situation the development of a common culture (such as a research culture) is potentially easier. I am aware of only one officially reported research project involving between-department research having occurred at TWP by 1997. It was a collaborative project between an Information Technology tutor (Flagg) and an Agriculture tutor (Raill) aimed at assisting 'small' landowners to access and use the Internet (Flagg, 1997).

In a polytechnic, different norms and curricula affecting both teachers and students in departments are maintained by using specific pedagogies – what Bernstein described as frames – governing 'the form of the context in which knowledge is transmitted and received' (Bernstein, 1971:50). These help shape the discourses of the polytechnic, and in turn are shaped by the discourses operating within it. At TWP, staff rarely meet and mingle across departments except when attending tutor training, which promotes common basic pedagogical skills, or at staff development seminars, at union meetings or via the Social Club. Strong boundaries therefore tend to insulate curricula, staff and students in one department from those in others. The one exception outside my unit is the

Communication Department, which has the responsibility of providing appropriate communication skills courses *across* departments. Given the impact which the changing discourses of teaching and research were having on the institution, the impetus which gave rise to this study, an ability to discern the differing classifications and codes which operate within the institution was an advantage for me.

This discernment also enabled me to theorise how, by applying Bernstein's schema to the conducting of research, I could weaken the framing that might otherwise restrict teachers' access to research. Where, in the past, the little research that had been done was positivist[4] (see page 40, and Chapter 5), I began to see how I could encourage the development of a research culture in which the common practice of teaching could enable researchers across the polytechnic to share a common research approach. Researching teaching could provide a common 'language' for Maori and Pakeha, for different departments' staff, be they nurses or builders. Action research was the means whereby I might accomplish this weaker framing and thereby encourage staff both to research improvements to their own teaching, within their own collection code curricula, and to share and appreciate each other's research across departments.

As staff developers, I and my fellow team members are required to offer appropriate professional development to staff across the polytechnic. Bernstein's concepts assisted me in interpreting trends that I had already noticed through working with these staff. It was from this position of noting areas of common practice, such as the reflective practice on which good teaching in the institution has been based, that I sought to encourage staff to blur the boundaries of the classification codes across the polytechnic. I thought that if they learned research skills using action research this blurring of boundaries could be accomplished. I believed that the richness of practice observable within each department could thereby be shared, and improved teaching practices developed alongside the research skills which the institution's developing research requirements demanded. If I could encourage, across departments, an 'integrative research knowledge code' (my expression, not Bernstein's) in which teaching was perceived as a legitimate field of practice for researchers, then

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[4] A good example of strong framing

perhaps I could help to 'declassify and so alter power structures and principles of control; in so doing to unfreeze the structuring of knowledge and to challenge the boundaries of consciousness' (Bernstein, 1971:67).

The chapter so far has described a physical context which is cramped, ready to explode outwards and changing, and, similarly, a culture subject to enforced change but operating traditionally along 'collection code' lines where comparatively little exchange between departments occurs. Why did I select a participatory approach in my study? As Wadsworth (1984:44) said, 'Action research is essentially participatory research.' What are the alternatives?

Ways of Conducting Research

Throughout most of the past four centuries, the positivist methods of the natural sciences have provided the benchmark for what constituted 'proper' research. 'Positivism denotes the "received view" that has dominated the formal discourse in the physical and social sciences for some 400 years' (Guba & Lincoln, 1994:108) and presumes that there is an 'apprehendable reality', driven by immutable natural laws and mechanisms, which can be discovered using appropriate research tools (see also Burns, 1994; Fay, 1987). In this paradigm[5] the researcher as an outsider claims to act as a neutral observer who manipulates and controls contexts in order to deduce and specify laws and rules which are then generalisable to other situations. It places a high priority on 'validity', the (claimed) elimination of bias and subjectivity and the demonstrated appropriateness of the research method for its context.

Positivism has been challenged during the course of this century by postpositivism, an amended version of positivism which sets out to falsify rather than verify hypotheses and recognises that only flawed versions of reality can be identified. However it still prioritises 'objectivity', though it places less stress on manipulation and control, preferring to do inquiry in more natural settings through collecting situational information (Guba & Lincoln, op.cit., 110), and the researcher remains an outsider. Generalisable findings are still sought.

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[5] Set of basic beliefs, worldview which defines the nature of the world – Guba & Lincoln, 1994:107

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The third research paradigm identified by Guba and Lincoln, and that into which the versions of action research to which I subscribe best fit, is that of critical theory. This recognises the fluid nature of reality and how it is formed by social, political, cultural, economic, ethnic and gender factors but sees these constructions as 'real' for all practical purposes. The position of the researcher is one of being interactively linked with those s/he is investigating. There is no suggestion of neutrality or objectivity. The emphasis is on dialogue (Freire, 1972; Giroux, 1988) and the aim is 'to uncover and excavate those forms of historical and subjugated knowledges that point to experiences of suffering, conflict, and collective struggle' (Giroux, 1988:213).

While a range of authors (e.g. Alcorn, 1986; Burns, 1994; Carr & Kemmis, 1986; McTaggart, 1991b; Webb, 1996b) have also linked action research with critical theory, it should be noted that some versions of action research, both currently and historically, have also fitted into a more postpositivist mould. Corey (1952) advocated hypotheses and generalisations in action research studies; Zeichner and Noffke (1998) suggested that Carr and Kemmis' (1986) view of emancipatory action research challenged other models as conservative and positivistic. The technical description of action research quoted in Chapter 1 could also be executed using postpositivist methods. To draw exclusive lines around the paradigm into which action research may be said to belong is inappropriate given its wide range of applications across the globe.

Henry and McTaggart (paper supplied by latter in 1998, and undated) described the approach as "a broad church" using a variety of research methods, including both qualitative and the quantitative methods which are frequently (incorrectly) ascribed as exclusively the tools of positivism. Their view is supported by a range of other writers (Dick, 1995; Reason, 1994; Stringer, 1996; Zeichner & Noffke, 1998) - Guba and Lincoln (1994:105) stated outright that 'from our perspective, both qualitative and quantitative methods may be used appropriately with any research paradigm'. Both are used in this study, although the emphasis is on the qualitative.

Given my situatedness within the institution I wished to study, my historical preference for 'liberatory' approaches (see Ferguson, 1991), my concern about the forces which were currently affecting my institution and which

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were perceived by Joan and others to impinge negatively on their work context, and my desire to do what I could as a staff developer to bring about increased consciousness and positive utilisation of grassroots power in the institution, a participatory approach was the one which best suited my purposes. As Morris Matthews (1993:39) stated, 'Participatory research models allow the researcher to acknowledge particular biases relevant to the project.'

The role of the researcher within a participatory action research (PAR) approach is indubitably one of active involvement, not detached manipulation; of attempted egalitarianism, rather than being hierarchical; and of being avowedly political, rather than pretending neutrality. Zeichner and Noffke (1998) stated that the researcher in a qualitative approach should both make explicit, and problematise, her own assumptions. She should be aware of her potential for the 'imposition of [her] beliefs on preservice teachers' (ibid., 34), should 'show how the research is important for informing and improving educational practice' (ibid., 46) and should 'deal with important issues and problems that arise for practitioners' (ibid., 46). Perhaps as a way of making these assumptions and biases explicit, Smith (1994:301) challenged action researchers to include 'more personal context, larger chunks of autobiography in their research statements'. In this study I have attempted to follow these writers' advice. This occurs particularly strongly in Chapter 6.

A personal narrative approach has been used by other women in describing their own contexts. Jones (1992:27) made the reason for this overt. 'Unlocated objective knowledge is a (logical) absurdity, and an explicit self-consciousness about the necessarily partial and limited stories we (social and other scientists) tell is thus needed as a basis of rational social research/writing'. According to Jones, we should make the 'I' central in our writing, not for egotistical reasons but to highlight the partiality and possible biases of our perspectives. In the Introduction to her 1993 book, *Educating Feminists*, Sue Middleton explicitly described the context in which she carries out her writing, foregrounding her experiences as a way of drawing their 'otherness' to the attention of non-Antipodean readers. Later in the book, she used her own experience in an attempt 'to avoid the partiality or fragmentation of experience that comes about when the various feminist grand narratives...dominate personal accounts' (1993:18). Laidlaw (1997), in her doctoral thesis, described how

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profoundly traumatic personal experiences had affected her ongoing work with the young women she teaches. She had turned this personal tragedy to positive use in her teaching: 'I believe the way forward here is to do with a loving integrity on my part in which I genuinely value each girl equally, not rhetorically' (p. 26). Her own values and beliefs permeated her thesis. Personal narrative as part of a doctoral thesis or in other academic writing is not, then, uncommon. As Laidlaw expressed it, quoting Denzin and Lincoln (1994:11): 'The search for Grand Narratives will be replaced by more local, small-scale theories fitted to specific problems and specific situations.' Foregrounding one's own experience makes the scale of these theories more realistic.

Recognising at least some of her own limitations and biases, how does a passionate action researcher operate ethically? While the action researcher needs to beware of imposing her own beliefs on others, some degree of overt leadership may be required of her. Reason, recognising the inconsistency of advocating 'leadership' in an avowedly egalitarian approach, nevertheless recognised that 'many PAR projects would not occur without the initiative of someone with time, skill, and commitment, someone who will almost inevitably be a member of a privileged and educated group' (Reason, 1994:334; see also Webb, 1996b). This leadership should be provided because such members are privileged by virtue of their economic and social status (Rahman, 1991) and by implication 'owe' leadership to those whose situations they are working to transform. Leadership within a PAR approach may be seen as a matter of commitment and reciprocity with those involved in the project rather than as a top-down exercise of power 'over'. I have had to exercise such leadership in my own context in order to assess the effectiveness of action research in changing and improving our research culture.

RESEARCH METHODS

Action research uses a range of methods in pursuit of its transformatory aims. Some of these can be unorthodox - Reason (1994) described storytelling, sociodrama, plays and skits, puppetry, song, drawing and painting as ways of gathering data that cannot be obtained by more orthodox methods (see also Lomax & Parker, 1995; McNiff, Lomax & Whitehead, 1996, quoted in Zeichner

& Noffke, 1998:60). This diversity of data gathering methods has a significance that I shall explore further in the conclusion when discussing emergent indigenous approaches to research. Reason also noted that:

> PAR may also use methodology that looks more "orthodox": The systematic gathering of information, for example, through survey techniques and then making sense of it from the perspective of the community is often an important source of people's knowledge and empowerment (Reason, 1994:329).

The methods that I have used in this study fit into the 'more orthodox' category.

As Burns (1994) and Dick (1995) suggested, the use of multiple sources of evidence, which demonstrates convergence of data from all sources, aids in establishing the credibility of research findings. Accordingly, I have used structured interviews with the foundation staff and the action researchers (Bogdan & Biklen, 1992; Burns, 1994; Wadsworth, 1984); unstructured interviews with the HODs and other key informants (Taylor & Bogdan, 1984); analysis of documents from historical archives (Janesick, 1994; Wadsworth, 1984), 'insider' perspectives through my participation as an appointee to relevant committees (TWP's Research Committee; the Academic Board; membership of two Auaki working groups; and two Maori-related working groups – assessment and research), and perusal of a range of writing by others both within and outside the polytechnic.

Together, these offered me a broad yet cohesive picture of how my institution functions and how it came to be the way it is (Middleton & May, 1997). I have checked with my informants that my interpretation of their interview material feels appropriate to them, while also recognising the constraints which may prevent them from challenging this (McWilliam, 1994; Wadsworth, 1994). A specific description of these methods follows. First, I consider and critique my use of interview technique. Second, documentary selection and analysis is explained, and, finally, I discuss some strengths and problems of 'insider status' encountered in this study.

Interviews

I began interviewing in May, 1994. The first group of people interviewed were foundation staff who were still teaching at the time. This was a small pool of six men, all of whom received a letter from me inviting their participation (see Appendix A). Given the size of the group, I wished to interview them all. Five agreed to be interviewed; one declined without giving a reason, as was his right. My intention in interviewing these men was to gain their perspective as to how the institution had been viewed 'from the inside' at its inception and how it had changed over time, with particular emphasis on the place of research. In my text, all except the then Principal Peter Johnson are identified by pseudonyms (approved by each). Johnson's perspective as principal is unique, so he could easily have been identified, pseudonym or not, and I have his written approval to quote him by name.

My relationship with these men was such that I had previously had comparatively little to do with three of them, as I had not been involved in teacher training with any foundation staff, apart from one or two short staff development offerings in their area. One was a real enthusiast about innovative teaching, and I used to stop and chat with him whenever I was in his area. My perspective is that we knew each other quite well and respected each other's enthusiasms. I had always had a cordial although not close relationship with Peter Johnson, the only member of this group who was in a position of 'power over' me within the institution. I would have felt that the remaining foundation staff and myself were peers, although I did not check out their perception of any power differential between us. As Jones (1992:22) described it, I could have been seen by these men as 'the university researcher who presumes access into others' spaces in the quest of Knowledge for her own use' although I hoped that my location in our mutual context might have down-played perceptions of 'colonisation' of their knowledge for my own purposes.

Interviews with these men, following the questions contained in a subsequent memo to them, were conducted in a quiet room with the use of a small Sony tape recorder. While most interviews took about an hour, some exceeded that time. Two of the men expressed their appreciation of having

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received the questions in advance, as it gave them time to recall thoughts and items of interest from their personal 'archives' which they may otherwise have forgotten. This is common practice when using the oral history method (see, for example, Middleton & May, 1997). In each case, we spent several minutes prior to the tape recording of our conversation discussing the current polytechnic situation and how this had provoked my interest in this doctoral study. The material from these interviews helped me with my question, "How can I understand and account for the changes affecting the institution within which I work, and which affect New Zealand education more broadly?" They also helped me to analyse the history of TWP's research culture development.

The second group of people whose interview material assisted me with this question was the Heads of Department (HODs) who were in charge of those departments that opted to offer degrees during the period of my study. As in the case of the foundation staff, this was a small number (4), so I interviewed them all. There was comparatively little written information on *why and how* this degree-granting process had occurred - at least, not from the perspective of departments - when I dug into the archives of the polytechnic. All HODs were still in the institution when I conducted the interviews (in 1995), although one has subsequently left and another had stepped down from being HOD at the time of the interview. My approach to them was informal, explaining my research study (which all knew of, anyway) and requesting an opportunity to interview them to gain their perspectives on how their departments came to offer degrees. They were all positively responsive to my request for interview, and their perspectives were invaluable in helping me to understand how the institution came to take up the government's offer of degree programmes being conducted in polytechnics, thus radically changing the discourses of the institution. Furthermore, the interview data helped me to change the preconception I had that it had been the impetus of our then principal which had been most instrumental in the institution's deciding to offer degrees.

Because of the idiosyncrasy of the data I have named the four HODs and have their written approval for this. My relationship with these HODs was obviously one of power differential as far as the management structure of the polytechnic was concerned. I had not had dealings with two of the HODs in any

depth before; however the other two have helped me with aspects of my research and I in turn shared resources with them, which I understand from stated comments that they appreciated. The relationship with these two felt more collegial than one of disparate power, from my perspective. Interviews with the HODs were conducted in a quiet room and tape recorded, although in general were much shorter than with the other two groups of interviewees. Partly this was because of the pressured, busy lives of HODs and partly because I was interested specifically in how degrees came to be offered in their departments, so they tended to be more tightly focussed than with the other two groups of interviewees. The interviews did not follow a structured questioning line but were emergent from a general question, "Tell me how your department came to be offering a degree." Nevertheless, by the time I got to the third HOD interview a pattern was beginning to appear. This caused me subsequently to request specific information from HODs 3 and 4 about the role of senior management in supporting the degree introduction.

The final group whom I interviewed were my action researchers - the staff who had opted to take the action research course as part of their tutor training (no selection was involved in this; we take all interested staff). The course itself - its structure, assessment, examples of handouts and work done - is described in detail in Chapter 7. To help me answer the question, "How effective is action research as a way of changing and improving our research culture?" I wanted to gather data from course participants that might show from the teacher practitioners' viewpoint whether they believed the process was effective.

There was some selection involved in this sample. I eliminated from the interview process those from outside our polytechnic who had undertaken the course, as their perspectives would not affect our research culture. Two action researchers who took the course had subsequently left the polytechnic, while three others had not completed their project. The sample, therefore, constituted all remaining staff who had completed the course in 1993, 1994 and 1995 (12 in all). All agreed to participate, having been advised in the year that they took the course, that I would be approaching them a year later to invite their participation. I have not identified any of these respondents by name except the two whose

case study material is considered in more depth, as exemplars of the type of work undertaken. They have agreed in writing to this identification.

Despite the incongruency of power differentials in an action research context, my position as teacher and assessor on the course meant that there was inevitably a power imbalance between the course participants and myself at the time they undertook the course and handed in work for assessment. Lomax (1994) has discussed such difficulties when action research is located within an award-bearing course. Although the interviews were conducted well after this process had been completed, it is possible that, although I no longer felt a power disparity between us, the action researchers may have still felt vestiges of this in the relationship. As Gorinski (1997:123) expressed it, there may be ' a risk that respondents will tell a researcher what they think s/he 'wants' to know' even though assessment was no longer a contaminating factor (see also Middleton, 1993). I need to be overt about the possible flaws in my research process, however - as Jones (1992) suggested, I should address such contradictions in the text, rather than gloss over them.

My relationship with my 'student' action researchers varied. I had taught most of them on previous tutor training courses but despite this knew some of them only slightly. There were others with whom I had had quite a lengthy working relationship. For example, if they had asked me to be their 'probation staff developer', I would have been involved in regular six monthly classroom observations and advice. I conducted all the interviews, as I had with the foundation staff and the HODs, in a quiet room. I preceded the formal questions (see Appendix A) with informal discussion designed to put them at ease and to inform them, if they asked, of the progress of my study.

Times of interviews varied considerably, from about 40 minutes through to nearly two hours. I felt it important to respond to the expressed needs of the interviewees rather than to restrict the length of interview only to what I needed as data. Accordingly, one person in particular took the opportunity to talk extensively about a difficult work environment. I consciously asked each interviewee the 'given' questions, in the same order, although these were frequently interspersed with comments and elaborations in response to questions raised by them. I concluded the questioning with an opportunity for the

interviewees to raise any questions they wished to ask about the action research course, process, or my study at the polytechnic.

In the early stages of the project I transcribed my own interview material with the foundation staff. I had learned touch-typing during a year's American Field Service scholarship tenure in the U.S. Typing had not been a skill considered appropriate for 'academic girls' at the high school I attended in New Zealand. (Discourses shift, and – in a 'computer age' - I would be surprised if similar attitudes pertain in that school today.) When it comes to thesis production, the ability to type fast and accurately is a vital skill. However, as my workload increased, I sought and obtained permission (from two of the HODs and several of the action researchers) for our departmental secretary, who was then part-time and operating her own private business, to transcribe their tapes for me on a paid basis. Ethics required me to specify who would be the transcriber, as Anne works within the institution and is known by all those whose tapes she subsequently transcribed. None expressed concern about this procedure.

In the transcriptions, I recorded minimal encouragers and laughter in an attempt to convey the full flavour of the interview and to show where I was prompting the interviewee. Several times, particularly where the speaker had a quiet voice, the tape recorder was unable to capture specific words and phrases. I showed this in the transcription by the convention {....}. I do not feel that these small portions of missing data constitute a severe impairment to my understanding of the dialogue. As the transcripts show, at times my interviews digressed from the set questions. This happened when respondents wanted to elaborate on their answers and contribute other thoughts, or when I needed to clarify something they had said that intrigued me or that I didn't fully understand. The interviewer has a responsibility to try to ensure that the interview serves the purposes of both parties – and not to act as if she is in 'the God position' (Jones 1992:22), ignoring the needs and desires of the interviewee.

Immediately after transcription was completed and before analysis had begun, I offered the foundation staff the opportunity to view the entire transcripts. They, of all the groups interviewed, were narrating their life histories in these interviews, and I felt a sense of responsibility to them to get data from

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their interviews back for their perusal. As Morris Matthews (1993) also found, there was little interest in perusing these for editing purposes. However, one indicated that he would like a copy of the cassette as he was investigating his family history and thought his children might be interested in it. Middleton and May described their transcripts 'as a gift to our interviewees and their families' (Middleton & May, 1997:14). When Peter Johnson retired, I had an entire copy of his (lengthy) transcript professionally bound and presented it to him along with a copy of the cassette. He expressed warm appreciation of this gesture, although he said he was embarrassed at the 'ums' and 'ahs' that I had left in the transcript. Middleton and May's interviewees had similar reactions:

> Some were appalled by the appearance of transcribed text in comparison with written language and requested detailed editing of the text to bring it into line with 'correct usage' (Middleton & May, 1997:14).[6]

Four years after the interviews took place, one foundation staff member died and I was able to offer his widow a copy of the cassette we had recorded. In these ways I attempted to 'give something back' to my interviewers, as did Morris Matthews (1993:52). The HODs, who are identified by name, were also offered the opportunity to view entire transcripts and to censor parts that they did not wish me to use. Because the action researchers are not identified by name, apart from the two whose case studies appear in more depth, I did not provide entire transcripts to them although I subsequently provided all who were still working at the institution in 1999 with copies of the relevant chapter (8) with the request that they challenge any usage of their data or interpretation which I had put on the material. Only one asked for a footnote to be added; some commended the work as being very interesting to them.

Faced with frequently lengthy transcripts, how did I analyse my data? I used verbal descriptors, rather than the more usual colour coding (e.g. Middleton, 1993; Middleton & May, 1997; Morris Matthews, 1993) in sorting out the main themes in each transcript. Qualitative data analysis software such as the NUD*IST package that Middleton and May described (Middleton & May, 1997:15), was not available to me on commencement of the study and concern

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[6] The HODs, when I submitted my draft chapter for their approval, had similar reactions. One asked me to remove the offending colloquialisms, which I did.

about the time constraints in learning this caused me to adhere to known, 'manual' ways of analysing data.

The foundation staff interviews and those with the action researchers tended to fit into *some* common categories, based on the structured nature of the questions asked. My technique involved ruling up a page into columns, with each column relating to a particular respondent. Down the left side of the page I wrote descriptors of common themes, such as "Teacher as researcher", "Research belonging in Universities not Polytechnics" for the foundation staff, and "Found AR familiar", "Appreciated flexibility in AR" for the action researchers. Within the grid thus formed I noted page numbers and paragraph numbers of the transcript data to which I could subsequently refer when I began to write up the research. Strong themes were identified towards the top of the page, as I perused each respondent's transcript for patterns, and more idiosyncratic responses towards the bottom, such as "Learned time management skills", "Found library/internet skills great" in action research, and "Prioritised teaching over admin", "Principal's perspectives - not common" in the foundation staff transcript analysis.

As Wadsworth (1984:30) stated, "Bias is inevitable" when one conducts research. While I have tried scrupulously to identify what seem to me to be significant themes emerging from the data and to comment briefly on the 'minor' suggestions, inevitably this identification results from my own background and values. It is possible that my version of the transcripts is prone to what Middleton (1993:71), quoting Dorothy Smith, called 'conceptual imperialism'. I have captured my informants in a 'power of writing' (Foucault, 1977a:189) even if it is transcription, in which I then use the micropractices of research to sift, sort and determine what constitute the discourses in our context. This kind of 'imperialism' is hard to avoid, however strenuously one attempts to check out perceptions with those whose words one is utilising.

I also conducted informal interviews with a number of key informants at the Polytechnic as issues arose that needed clarifying. These people were positioned to provide such information and were prepared to do so, although one has requested to remain anonymous. Others are identified by name where their input is referred to.

Document analysis

'Good' research requires that one attempt to check out the justifiability of one's claims by referring to possibly disconfirming evidence. A standard criterion for social science research is that of triangulation. Two of Denzin's (1978) descriptions of this criterion are of relevance to this study. They are those of data triangulation (the use of a variety of data sources in a study) and theory triangulation (the use of multiple perspectives to interpret a single set of data (Janesick, 1994). My use of interviews, document analysis, insider involvement and literature reviewing are examples of the former and my use of Foucault, Bernstein, the reflective practitioner and action research writings examples of the latter. Additionally, I warm to Richardson's (1994:522) expansion of the concept of triangulation to include the notion of 'crystallization', the postmodernist image of seeing things from multiple perspectives, not the two or three of standard triangulation theory.

> Crystallization, without losing structure, deconstructs the traditional idea of "validity" (we feel how there is no single truth, we see how texts validate themselves); and crystallization provides us with a deepened, complex, thoroughly partial, understanding of the topic. Paradoxically, we know more and doubt what we know.

I have not yet discussed postmodernism, which is an important disruption to traditional, especially positivist, ways of seeing the world. As Richardson expresses it, postmodernism 'is the *doubt* that any method or theory, discourse or genre, tradition or novelty, has a universal and general claim as the "right" or the privileged form of authoritative knowledge' (ibid., 517). Traditional notions of validity, therefore, are disputed (Lather, 1986; Lincoln & Denzin, 1994; Richardson, 1994; Threatt, 1994 – quoted in Zeichner & Noffke, 1998). In this study, the validity of my approach and of my data should be judged by the degree of specificity of the procedures used, the effectiveness of my checking out with respondents that their perspectives have been appropriately represented, and the consistency between the various sources used.

Documentary analysis was a strong feature of Morris Matthews' (1993) research. She used archival material held at the University of Waikato and elsewhere to assist her in her investigation of how 'Women's Studies' was set

up, and how it is taught in New Zealand universities. Similarly, Gorinski used document analysis in her interpretation of the mentoring and discipleship techniques at Bethlehem Teachers' College. She described document analysis as 'the analysis of the written or visual contents of a document' (Gorinski, 1997:129), specifying as a major advantage of this approach that it can be carried out unobtrusively. This has proved to be less the case in my institution, where surveillance on matters of access to records is becoming increasingly marked (see below, and in Chapter 6). However, as Gorinski noted, replication of content analysis by another researcher is relatively easy and the approach provides confirmation of research claims.

Documents used in this study were the formal records of the institution - Minutes from the Research Committee; from Boards of Studies; from the Academic Board; of the Polytechnic Council, especially the Principal's Reports to this Council appended to the Minutes. I also used formal statements of the institution's mission and objectives, and its Annual Reports (produced periodically in response to government imperatives); and less formal documents such as personal memos and research proposals and reports (including my own). I have drawn material from my action researchers' reports but not from the reflective journals which are also an assessable part of the course, to avoid exposing these to excessive 'official surveillance.' I have already expressed my reservations about the ways these are scrutinised currently (see Chapter 1, page 15).

A disruption occurred to my document perusal and analysis following Peter Johnson's retirement. This well reflects the changing discourses of the institution and also the ways in which our research culture is emerging in practice. Johnson had permitted open access by researchers both from within and outside the institution to both documents and relevant policy-making. I checked this perception out with two staff who had recently carried out research in the polytechnic (Chambers, 1995, and Jury, 1995) and they both confirmed this perception, as did a comment in Stevens (1975).

However when I formally sought access to Executive Committee and Management Committee minutes from Dr Rawlence, our new CEO in 1996, his reply was that 'if every minuted discussion were to be freely available for public

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examination at TWP, my ability to obtain advice would be severely reduced'
(Memo dated 14 May, 1996). Access to these Committee Minutes was denied,
although approval was granted to access Resource Committee and Research
Committee minutes. A subsequent request to the Academic Director to peruse
approval and accreditation reports and follow-up monitors' reports for the first
four degrees (Memo to T. Barnett, 5 November 1996) in an attempt to ascertain
the effectiveness of our developing degree culture, was referred on to the CEO.
His reply (Memo dated 18 December, 1996) refused access, citing 'a difficult
balance between your individual access to information, and the collective welfare
of The Waikato Polytechnic', with the latter outweighing the former.

Furthermore, in the days when Johnson was Principal there was no
separation of Minutes in Parts A (public) & B (confidential). The inquiring
researcher had access to uncensored Minutes, although there were occasional
references to meetings 'going into Committee'. In our changing environment,
given the competition being engendered subsequent to the Education
Amendment Act of 1990, this open access began to be restricted. From 1996
onwards Minutes began to be kept in Parts A & B, with only those belonging to a
particular Committee able to view Part B Minutes. I checked with Terry Barnett,
Academic Director, early in 1998 what had brought about this change. He
advised that while it is provided for under the Local Government Official
Information and Meetings Act, 1987, and the Privacy Act, 199, the impetus in
TWP's case had in fact been an unfortunate reporting of a particular situation
which had caused concern to a community representative on one of the
committees. Accordingly, it had been decided that all Minutes should
henceforth, where appropriate, be written up as Part A and Part B for the legal
protection of the institution and out of consideration for individuals' reactions.
Whatever the reason, as far as this study is concerned open access pertained until
mid 1995 when Johnson retired, and a more restricted situation has prevailed
since.

My use of the documents was to try to trace the historical development of
the polytechnic and, particularly, to find out the discursive underpinnings of the
official 'printed' statements of the institution with respect to research and its
place in the polytechnic, both historically and currently. These documents were

also helpful when I came to trace the introduction and further development of the degrees. As a research resource, document analysis may provide additional information that supports the interpretations and claims made by informants in a study (Strachan, 1997). Inevitably, given both the size of the task and the limitations which were later made to my access to these documents, I may have missed specific records which could have contributed significantly to the picture I have painted of my institution. My perspective can only be partial.

Insider Perspectives

It is impossible for an action researcher who claims to operate from an emancipatory perspective to operate as other than an insider. From the beginning, I was committed to this. Nevertheless, it needs to be explained and its possibilities and constraints investigated. Because I was positioned as a researcher who was part of the institution I was studying, I had a number of advantages over researchers 'coming in from outside'. These were accessibility (of myself to my co-researchers in the action research course; of my interviewees to me and vice versa); credibility, in that I was already perceived as being in an appropriate position to carry out the research, as a staff developer; trustworthiness, in that I hope I was perceived as being someone who could be relied upon to carry out the research with integrity and not to misconstrue the results; commitment, in that as this was my own context I was investigating, I had a personal interest in its success; and lastly familiarity with my research context and personnel.

Conversely, when an insider carries out research on a common site respondents may feel obliged to co-operate. It is possible, given power differentials in the action research course, for me to have exploited my respondents by consciously or unconsciously indicating that emancipatory action research was what I really wanted. Being an insider in the institution, I have undoubtedly interpreted my context from a different perspective than would have been gained from somebody outside the situation doing the analysis. I explored these possibilities and constraints, which are common to insiders in other contexts, with Gorinski in a joint paper to a recent New Zealand Association for Research in Education Conference. We both felt that 'insider research has both

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advantages and disadvantages. It has the potential both to exacerbate heavy workloads and irritate colleagues, and also to provide space for colleagues to reflect, share and support each other' (Gorinski & Ferguson, 1997).

A possibility that definitely offers itself to insiders rather than outsiders is that of membership of committees (and therefore access to their discussion and records). It was through my membership as staff representative on our Research Committee over two years of this study that I gained vital insight into the thinking of individuals in the polytechnic, and to access to levels and aspects of debate which would not otherwise have been open to me. My membership of two of the working groups on the Auaki (TWP: 1993) was similarly insightful. Insider status, therefore, has been not just a requirement of my research approach but a positive strength in terms of the credibility of this study.

It is common in action research studies for the 'literature review' to be scattered throughout the study rather than written up in one chapter. As Dick expressed it, 'much of the more specialised literature will be accessed only as the study progresses, and reported adjacent to the relevant findings' (Dick, 1995;13). My study was no exception to this pattern. I have striven to locate and use all relevant work on the institution by staff themselves (Chambers, 1995; Crotty, 1992; Hill, 1993, 1997; Hill & Barnett, 1997; Jury, 1995; Matheson, 1993; McEldowney, 1995; Melles, 1998; Musgrave et al, 1996ff; Signal, 1983; Wells, 1997). Outside work on the institution includes the official history (Tonkin-Covell, 1993), plus theses or papers by Edwards (1973) and Stevens (1975).

I have used the usual 'paper' library resources, plus utilised modern techniques such as Internet searches and e-mail. The e-mail contacts have been particularly relevant and formative, as I have engaged in dialogue with both novice and experienced action researchers via such listserv groups as arlist-l, armnet and, earlier, qual-rs, as well as frequent personal communication with active researchers. As Lincoln and Denzin suggest, 'electronic mail systems have already created new communities of qualitative researchers, and these communities will continue to grow' (1994:583; see also Middleton, 1996b).

There are some ethical issues that have not so far been raised. In quantitative research there is a tendency 'which fosters believing - on both sides - that the researcher knows best' (Lincoln & Guba, 1985:290) whereas in

interpretive approaches 'the researcher interacts with participants in order to understand their social construction' (ibid., 290). It is vital in research approaches such as mine, then, that the 'researcher', the person with responsibility for conducting and writing up the research, attempts to ensure that this social construction is not misconstrued, nor used to the detriment of the informants.

I have described how I sought participants for my interviews. All approached, agreed to participate apart from the one foundation staff member. As the letters presented to the interviewees show (Appendix A), the purpose of the study was indicated to them (Keats, 1988; Spradley, 1979) and they were advised of their right to withdraw their material at any time (Glesne & Peshkin, 1992). Most, apart from the cases already indicated, were assured of anonymity. Copies of the final draft were provided to all available interviewees before publication proceeded, to ensure both their safety and the credibility of the resulting text further. Written authorisations have been obtained from those who agreed to waive their right to anonymity, and also to seek approval to use material from their transcripts for subsequent academic papers (e.g., Ferguson, 1996; Ferguson, 1998 a & b; Gorinski & Ferguson, 1997).

While some research studies rely on obscuring the identity of the institutions involved (e.g. Sultana, 1987) any attempt to obscure the identity of The Waikato Polytechnic would be futile given the large amount of insider research referred to, and the necessary identification of our academic archives in the bibliography. As far as is possible given the biases to which all researchers are subject, I have tried to report data as accurately as I can (Burns, 1994; Spradley, 1979). I shall lodge a copy of the completed doctoral thesis in the Polytechnic library as part of the reciprocity I feel I owe to my institution for support received. It is not feasible to provide all involved with a copy, as Spradley (1979) recommended, but the existence of the library copy will be advised to all interviewees. Ultimately, as Strachan (1997) suggested, the researcher's own integrity, professionalism and personal accountability are the best insurance in producing research which has been ethically conducted 'in situ'. I have attempted to carry out this research in accord with my usual high professional standards (see comment by Shah, page 222).

Some possible limitations with regard to bias and perceived obligation on behalf of interviewees have already been referred to. Power differentials between Johnson, HODs and myself may have limited what they felt free to tell me, although it did not appear to me that this was the case. However the power differentials between myself and the action researchers, contingent on my assessing of them, may have distorted what they reported (Orne, 1962; Burns, 1992). Given my identification as an academic woman with a string of degrees under my belt, which would have been known to the foundation staff, I would inevitably have been considered 'other' (Jones, 1992) to these men. Their comments to me, and my interpretation of these, may therefore be read as potentially problematic.

Furthermore, despite my concern to make the stories of staff heard clearly throughout this study, inevitably in a work of this size I have been able to represent only a fraction of the interview material I gathered. What I present is what *I* consider the important data, and I have already described my preferences and biases. Others, including some of the interviewees, may feel that alternative portions of the interview material deserve greater importance, despite the failure of some to take up the opportunity to change what I have written.

A major limitation of the study has been the positioning of action research within a certificated programme, and I discuss this further in Chapters 7 and 8. This limitation does not undermine my claim that action research *is* a useful catalyst for change; rather, it underlines the importance of 'getting the context right'. I did what I needed to do within the spaces available to me to help develop research skills within the institution and to promote an approach within which the stories of teachers can be heard, and the knowledges of both Maori and Pakeha valued.

CONCLUSION

This chapter has described the research design and methods underlying the study. The institutional site within which the study was carried out was described, along with a brief consideration of its mission and management structure. My reasons for selecting a participatory action research approach were

presented, along with a brief comparison of alternative approaches that were discarded as inappropriate.

Data gathering methods that can be used in action research contexts were described, and those used in this study explained and justified. I have tried to be overt and honest about the ethical issues I have had to consider in this study, as far as treatment of interviewees is concerned. I discussed the range of data gathering techniques used - interviews, document perusal and analysis, utilisation of an insider perspective, and additional literature pertinent to the study.

The data provided help to make transparent the conduct of this research, to uncover some of the constraints and possibilities existing in this context, and to set the scene for the remainder of the thesis. In the subsequent chapters, these tools and methods will be seen in practice, commencing firstly with the use of interviews and historical document analysis in tracing the history and development of The Waikato Polytechnic.

CHAPTER THREE: TECHNICAL EDUCATION IN NEW ZEALAND IN THE TWENTIETH CENTURY

"We have to know the historical conditions which motivate our conceptualization. We need a historical awareness of our present circumstance"
(Foucault, 1982:209).

INTRODUCTION

When I decided in 1992 to intervene actively in the development of TWP's research culture, I acted out of a 'gut feeling' that action research would provide an effective medium for introducing staff to the research skills which our new environment demanded. I had worked in the institution for over seven years at that time and had recognised the importance its staff placed on teaching. I also recognised that the perceptions of many with regard to research were that it was something done in universities rather than in the polytechnic, and that their images of researchers were of 'little men in white coats in laboratories' rather than of practising teachers investigating their own questions. What I did not know was how polytechnics had developed and why the discourses I observed in our context had come to be influential.

In this chapter and the next, I identify several discourses, such as those listed below, as a framework in which to conceptualise the history of technical education in New Zealand, and more specifically later, of The Waikato Polytechnic. This historical exploration will demonstrate how I have provided evidence to justify the appropriateness of my action, as I investigate the research question "How can I understand and account for the changes affecting the institution within which I work, and which affect New Zealand education more broadly?" I will then investigate in Chapters 5 and 6 the question "How can an institution such as ours, faced with the requirement to engage in research, develop a research culture?" Together, the answers to these two questions provide a solid basis from which to explore my main question, "How effective is action research as a way of helping to develop a tertiary research culture?"

There are a range of discourses that will be investigated in this chapter. I shall merely list these here and expand on them in the next section when I consider discourses in more depth.

At national level, and affecting political and economic as well as educational areas:

- a discourse of 'survival of the fittest' (particularly evident from the late 1880s until the post-World War Two period, and currently enjoying a resurgence)
- a discourse of 'equality of opportunity' (from around the mid 1930s, and still evident in the late 1980s). This discourse has had particular relevance for Maori and women.
- a 'remedial' discourse of equality of outcomes (from around the mid 1980s). This discourse is also important for Maori and women.
- a discourse of individual responsibility for one's situation (whether good or bad) which is being promoted since the late 1980s. This is associated with 'victim blaming' as a way of explaining high unemployment figures.

At national level, and affecting broad educational areas:

- an 'academic discourse' (mainly affecting universities)
- 'technical and vocational discourses' (those mainly affecting polytechnics)
- a discourse of developing the individual against a competing discourse of meeting nationally-determined needs

Specifically polytechnic-related discourse:

- a discourse of education as 'remedial' (related to that of individual responsibility and victim blaming).

How do these discourses operate? How have they come into being? This investigation will help me to show how the intervention I have used to assist the development of the research culture at TWP has been an appropriate one given the discourses affecting the institution. It is one that is compatible with our historical development while I was introducing a novel practice – action research - into the institution.

THE DISCOURSES

In Chapter 1 I described discourses as 'professional ways of knowing'. McNay (1992:27) further describes them as 'an amalgam of material practices and forms of knowledge linked together in a non-contingent relation', drawing on Foucault's idea that 'it is in discourse that power and knowledge are joined together' (Foucault, 1978a:100, quoted in McNay, 1992). I wanted to investigate the practices and forms of knowledge that have given birth to polytechnics, from

New Zealand's educational past. This investigation is useful in helping to conceptualise how polytechnic educators can help to influence the development of these discourses.

Foucault described discourses as 'practices that systematically form the objects of which they speak' (1974, quoted in Barrett, 1991:130). Middleton (1998:5) further described them as 'the professional ways of knowing…developed within institutions such as hospitals, prisons and schools'. Discourses provide both constraints – restrictions on what may be said and done – and possibilities. These possibilities include the current situation in which the polytechnic finds itself, of offering degrees, and the concomitant requirement for staff to engage in research. The possibility of offering degrees is an example of the 'discontinuities, breaks, and ruptures that signal fundamental changes in discursive systems' (Olssen, 1995:73).

A clear statement that signalled such a fundamental change as far as polytechnics are concerned is that of Gary Hawke, who chaired a government-commissioned Report on Post Compulsory Education and Training in 1988. Hawke wrote:

> …polytechnics should have wide objectives reflecting their role as important instruments of national policy in relation to vocational education and training, labour market adjustment, social equity, issues of access and equal opportunities for lifelong learning and retraining, and the transition of young people to adult life, and that this includes offering appropriate courses at degree level (Hawke, 1988:12).

It is possible to identify several discursive influences in this statement. One is the discourse of educational institutions as instruments of national policy. A remedial discourse which has involved polytechnics rather than universities is apparent in the 'labour market adjustment' comment as I shall show when investigating the 'transition education market' in which the polytechnic became involved in the late 1970s. Discourses of social equity, access and equal opportunity are apparent in this statement also.

But a new discourse is suggested in the final clause – an academic discourse of offering appropriate courses at degree level. This had not been promoted in previous government policy documents, although polytechnics themselves had hinted at the possibility from their early days (see Tonkin-Covell,

1993). What the Hawke statement neatly demonstrates is that a number of discourses may be operational at any given point. In Chapter 1 (page 4) I outlined the dual discourse promoted by the 1987 Briefing Papers to the Incoming Government in which equity issues were espoused alongside a number of recommendations based around the discourses of economic rationality. Both discourses were dominant, and operating concurrently.

I shall now investigate the origins and influence of the discourses I listed in the introduction to this chapter. Discourses affecting New Zealand policy-making as a whole will be considered first. I suggested that New Zealand had been influenced by a discourse that I named 'survival of the fittest'. This is not my own term; it has been used by others (Beeby, 1992; Middleton, 1996a; Renwick, 1986). It was prominent in New Zealand policy-making from the late 1880s through to the 1920s and 30s, although aspects of it are still apparent today. The discourse developed out of the beliefs of Social Darwinism, based around the principle of biological evolution applied to human society (Abercrombie, Hill & Turner 1984; Spencer, 1884, in Abercrombie et al, op.cit.). Middleton (1996a:23) noted that one effect of Social Darwinism in secondary schools was that it had 'left unquestioned the resulting relegation of Maori and working-class Pakeha to the manual streams.'

Some examples of the effects of the discourse of Social Darwinism were more offensive than even this relegation. Attitudes to Maori in the late 1800s in New Zealand were that they were a dying race (W.B. (sic) 1905:105, quoted in Ferguson, 1991) for whom the role of government was to 'soothe their pillow' as they died (see also Barrington & Beaglehole, 1974: Openshaw, Lee & Lee 1993).   Positive action to reverse the decline received comparatively little emphasis in this discourse. Social Darwinism was promoted from Spencer's time up until the end of the Second World War, with Humanitarian International (1998:1) describing it as 'the ideology of the Nazis' as an extreme example of the discourse at work. New Zealand's economic needs in our early days were for the taming of a new country, and the high economic need for manual labourers supported a discourse of survival of the fittest.

Next, I identified a discourse of equality of opportunity. This was 'premised on the notion that "equal means the same"' (Middleton, 1996a:6), that fair treatment meant offering everybody the same opportunities. This discourse

was particularly strong from the mid 1930s until the late 1970s. It has been challenged, as statistical and anecdotal evidence has been presented that significant groups, despite the rhetoric of equality, have been discriminated against (e.g., women – Julian, 1989; O'Neill, 1990; and Maori - Shirley, Easton, Briar & Chatterjee 1990). In this discourse, it is argued that government educational and social policies should aim to ensure that all have equal *access* to opportunities in education, health, housing and the labour market in the hope that they will then achieve on ability. It recognised that, previously, individuals had been disadvantaged in accessing these areas and sought to remedy this. Lauder and Hughes explained how this discourse operates:

> By promoting equality of opportunity...inequalities can be justified and explained by reference to the individual characteristics of intelligence and motivation. Those with the brains and drive will 'get to the top' while those of lesser abilities and motivation will sink or remain at the bottom of society (Lauder & Hughes, 1990:44).

In this discourse there is an emphasis on individual responsibility for advancement or failure, rather than a recognition that there may be structural causes for the situation. Harker (1990) critiqued the discourse by claiming that only the children of the dominant group are able to take full advantage of possibilities offered under this claimed 'equality'. Middleton (1993:30) similarly argued that, in education, 'although promised equal opportunities that would be limited only on grounds of merit or ability, many were to experience marginality or alienation from the culture of the academic'.

The discourse has taken on a new face in the 1980s and 1990s with the New Right emphasis on individual responsibility via user-pays policies in education and the economy. In this, access to goods and services is conceptualised as being equitable in that the users pay only for what they 'choose' to access. The discourse of equity (see below) operates alongside this via, for example, the encouragement of students in tertiary education to take out 'cheap' loans to enable them to access tertiary education. In this way, the discourse argues, *anyone* meeting appropriate academic criteria can have access to and gain a tertiary education. But obviously, the children of the rich can afford to access education without such loans, and without starting their working life having incurred huge debts.

As the failure of the equality of opportunity discourse to achieve its intended outcomes became evident, a new discourse began to develop alongside it. In this, equality of *outcomes* is stressed (Middleton, Codd & Jones, 1990). This discourse was formally legislated for in various government policy documents, such as *Tomorrow's Schools* (Department of Education, 1988c). This document specified that schools should provide 'policies and practices [that] seek to achieve *equality of educational outcomes* for both sexes, for rural and urban students; for students from all religions, ethnic, cultural, social, family and class backgrounds and for all students irrespective of their ability or disability' (page 8, italics mine). In this discourse, structural causes of inequality are recognised and attempts are made to treat people *differently* in order to achieve equitable outcomes.

Part of this equality of outcomes discourse was demonstrated in subsequent government targeting of specific educational and financial assistance to disadvantaged groups. For example, recognising that discrimination existed against Maori and other ethnic groups in the private housing rental market, the Government's Housing Corporation built 1500 houses in 1985 and 1986 to provide low-cost rentals to such people (Waldegrave & Coventry, 1987). Harker, however, critiqued the discourse as being 'enmeshed in the knowledge code of the dominant group, who by establishing *their* criteria as the only legitimate criteria are able to control outcomes' (Harker, 1990:39). The rhetoric of equality of outcomes may sound praiseworthy; Codd argued that it promises an ideal society which 'does not exist outside the liberal-humanist ideology within which it is conceived' (Codd, 1990:146). The discourse is therefore a contested one.

Having discussed some of the dominant discourses that influenced New Zealand social policy more generally, I shall now describe those that affect education at the national level. These include discourses of academic and of technical and vocational education, and the tension between developing the individual to his/her full potential and that of developing individuals to meet the needs of the economy.

Throughout New Zealand's educational history there has been a series of discourses surrounding university-based academic education which differ in significant respects from those traditionally pertaining at technical institutes. I

shall compare the two sets of discourses concurrently here. Academic discourses support the notion of education as being about 'learning the processes of autonomous and rational inquiry' (Middleton, 1998:4); of the purpose of university education being a concern with 'more advanced learning, the principle purpose being to develop intellectual independence' (1990 Education Amendment Act, quoted in Haigh, 1998a, Abstract). This aim is represented in the University of Waikato's 'ideal graduate attributes' which stress that a graduate is intellectually independent, intellectually interdependent, and an accomplished communicator (teaching notes provided by Haigh, 1998b). The quotation from Hawke (page 63) showed that polytechnic discourses revolve more around the needs of the labour market, acting as instruments of national policy, assisting young people in their transition to adult life, and meeting equity objectives. There is no stated general graduate profile for a polytechnic graduate at TWP, although degree programmes state profiles specific to each degree. In general, these stress both knowledge acquisition and the ability to apply this knowledge immediately in the workplace.

As the Act also specified, in universities 'research and teaching are closely interdependent and most of their teaching is done by people who are active in advancing knowledge' (Education Amendment Act, 1990:33), although this discourse is starting to permeate technical education also in the 1990s. Historically, however, technical institutions, unlike universities, have not been seen as being actively involved in the research that advances knowledge. Codling (1997:84), reflecting on 'a typical New Zealand polytechnic', claimed 'an institutional history dominated by teaching to the virtual exclusion of research', while Clear (1999:9) described research as 'a new educational discourse for polytechnics', arising from the deregulation of tertiary education. Also, and most distinctive of the differing discourses, universities 'accept a role as critic and conscience of society' (Education Amendment Act, 1990:33), a situation which has never been typical of technical education institutions, whose role has traditionally been a pragmatic one of equipping individuals for the workforce (see comments from foundation staff, page 85).

Universities have also shown more openness to different curriculum codes (Bernstein, 1975), encouraging students enrolled in one discipline to include in their degree, subjects from other areas. This possibility was not

considered appropriate at TWP until 1996[7], and was still not occurring at the end of 1998. Bernstein described how socialization into one subject, if that subject operated along collection code lines, 'creates relatively quickly an educational identity that is clear-cut and bounded' (Bernstein, 1971:55). Perhaps it is not surprising that in an institution like TWP, struggling to establish an 'academic' identity, ambiguity of the type possible when curriculum codes are blurred, is resisted.

There are other differences in the practices that operate in academia compared with technical and vocational education. Middleton (1993), building on Foucault (1977a) discussed ways in which the physical bodies of students are scrutinised, normalised and controlled in educational environments. At universities, education tends to take place in lecture theatres, tutorial rooms and laboratories rather than in the workshops, kitchens and salons where much technical education occurs. Qualifications awarded tend to be degrees and diplomas of various types rather than certificates (although technical institutes have in the recent past granted diplomas also, and can grant degrees in the 1990s). Graduation ceremonies involve traditional robes, uncommon at polytechnic ceremonies until the mid-1990s. Where universities have produced academic calendars for decades, TWP's first institution-wide academic calendar was produced for the 1999 academic year, in both electronically accessible and paper versions.

This leads to a consideration of the discourses of developing individuals compared with the development of 'productive bodies' (Foucault, 1977a) as competing outcomes of education. Peters (1973:88) described the historical debate over what he termed 'utilitarian or moulding models of education' which aimed to produce a specific type of person needed by the dominant groups in society. The alternative was an 'individual development' model in which children should be encouraged to develop in ways which suit their natural bent, rather than to conform to pre-determined needs (see Beeby, 1992; this chapter, page 73). This tension is not a simple matter. Oliver (1995:9) described educational purpose as being

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[7] Although see an unsuccessful attempt to do so – p. 119

..concerned with contrived learning which can contribute to the development and pursuit of such things as the "worthwhile life", "living well", the "Good Life" or "human flourishing".

He went on to elaborate that

Even without offering a substantive account of any of these, we could tell immediately that an education system devoted to equipping students for jobs, or gearing up human capital for economic growth, would be insufficient to count as educational (1995:9).

Oliver's point is that if educational purpose is accepted as being that which contributes to the traditional concept of some sort of worthwhile life, then to reduce the purposes of education to the merely instrumental is not to educate but rather to indoctrinate. However Levett and Lankshear (1990b:13) proposed that New Zealand's current changing social and economic reality makes broad purposes of education potentially problematic. 'How well we do as a nation and as individuals from here on will depend very much on how well our education system responds to this challenge.' They argued that there needed to be close links between economic demands and the role of the schools. 'The curriculum [needs to] keep sight of the economic base of society in which schools pursue their social goals' (Levett & Lankshear, 1990a:67). The discourses are contradictory and complex, and link with the previously identified discourses of academic and technical/vocational education. They also inter-relate in complex ways with the discourse of equity (development of each individual to their full potential regardless of gender, race, religious belief etc – see *Tomorrow's Schools*, Department of Education, 1988c).

The final discourse I wish to present, and to use in this chapter, is one pertaining specifically to polytechnics in general and to TWP in particular. It is the discourse of education as remedial. The equity policies promoted by government in the 1980s and subsequently, conceptualised the educationally underachieving as potential victims of discrimination as a group, rather than as being personally unworthy. It had become obvious that both women, and Maori and Pacific Islanders as groups, were not receiving the benefits of the equal opportunity discourses that Pakeha men had been able to receive (O'Neill, 1990). In an attempt to remedy this structural injustice, a discourse began to grow in

which groups were targeted for additional assistance in order to try and achieve a hoped-for equality of outcomes. As Middleton (1998:10) wrote, 'Within this discourse, schools were viewed as sites for effecting compensatory justice.' The work done at TWP to build the skills of Maori students (Signal, 1983 – see pages 92ff, this chapter) is an example of the ways this discourse of remediation was influential at TWP.

Throughout this section I have introduced and given brief examples of some policy discourses affecting New Zealand government policy in general, education at the national level, and polytechnic education in particular. The remaining two sections of this chapter consist of an historical exploration of the development of technical education followed by a similar exploration of the development of what is now The Waikato Polytechnic up until the end of the 1980s. In these two sections, the influence of the discourses described above will be seen.

THE DEVELOPMENT OF TECHNICAL EDUCATION IN NEW ZEALAND

Given the discourses I described as affecting government policy in New Zealand as a whole, how did technical education develop? As would seem compatible with a discourse of survival of the fittest and its commensurate emphasis on developing individuals only on the grounds of the dominant group's definitions of merit (Harker, 1990), those with practical inclinations were initially marginalised in New Zealand's formal education provision. When the 1877 Education Bill was introduced into Parliament, its promoter had stated that 'it is not intended to encourage children whose vocation is that of honest labour to waste in the higher schools time which might be better devoted to learning a trade.' (Bowen, in Harker, 1990:29).

Accordingly, while full time tertiary education was available at universities from the 1870s when Otago University was founded (Barber, 1989), for those not engaging in university study, further education happened at night schools when the labourers finished their day's work. This situation shows the influence both of the survival of the fittest discourse, and also, at the start of tertiary education in New Zealand, divided discourses of academic and technical

and vocational education. The academic knowledge of those who wielded the most economic power was available through full time study; the technical knowledge of those who did more manual work was available only in the evenings.

Throughout this study, where appropriate, I shall draw attention to the influence of significant 'actors' as specific intellectuals in contributing to existing discourses or in helping towards the changing of these, although given the breadth of discourses it is arguable how effective any given individual can be in significantly affecting them. In the development of technical education, several key government officials have, however, played an important role. One of these was George Hogben, Director of Education in the early 1900s. Hogben had a strong interest in the introduction of technical and vocational education into secondary schools. At that time, parents and secondary school authorities 'resisted obdurately all attempts to adapt the education system to [the] realities' of the 'inability of some secondary students to adapt to an academic curriculum' (Report of the Commission of Education in New Zealand, 1962:78). This illustrates my claim that academic discourses were valued above those of technical education – see also Beeby, 1992: McKenzie, 1990. Technical education did not begin at secondary school level until 1905, when, with Hogben's support, a technical day school was begun in Wellington 'which would be a stepping stone linking primary education with apprenticeship, or with further technical training of a more advanced nature' (Day, 1990:15). Prior to that, the curriculum at secondary schools had been purely academic, 'intended for an academic and professional elite' (Middleton, 1998:27).

But the promotion of discourses of academic education above those of technical and vocational education began to change in the mid 1930s, partly as a result of the influence of Progressive education thinking. The Progressive movement, which developed in Western education in the early 1900s, had influenced Hogben as Inspector-General of Education. This movement was strongly promoted in New Zealand when, in 1937,

> ...the Minister of Education (Peter Fraser) closed the schools for a week and urged all teachers to attend a conference to be held in the four main centres. Twenty thousand people heard an international delegation of educators, under the auspices of the New Education Fellowship (NEF), a

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British-based organisation, which promoted progressive educational ideas (May, 1992:83).

Here, again, the influence of a key person is obvious – Fraser was a Minister of the government. However, Middleton and May (1997) suggest that progressivism's impetus was maintained also through the work of key individuals in universities and teachers' colleges. Middleton and May's comment provides an example, therefore, of how teachers themselves can contribute to the formation of a new discourse – a critical element in my intervention at TWP.

Middleton (1995a:2) describes Progressivism

> as meaning that broad grouping of educational theories which view education as a route to self-determination in students and towards a society which is grounded in democratic principles. Progressive educators see pedagogies, which make space for students' own initiatives, questions and projects as best fostering those ends.

The influence in the U.S. of Dewey and the Progressive Education Association, and of Isaacs and the New Education Fellowship in Britain (May, 1992) ensured that, given appropriate top-down support, progressive educational ideas permeated classrooms both in New Zealand and elsewhere, although mainly at pre-secondary level.

How did the Progressive movement affect the development of technical education? Its chief impact was that no longer was technical education seen in quite the derogatory light that it had previously been. As the emphasis was on the needs of the individual and her/his best development, those children from *any* social class whose strengths were in technical rather than academic areas were encouraged to develop these. Technical education began to be recognised within mainstream education on a more equal footing with academic education.

This was borne out by changes to schooling structure and curricula. While technical and academic education occurred initially in separate schools, from the time of the first Labour Government in 1935 there was a move to teach both curricula in the same institution (Middleton, 1996a). While the technical schools had been 'hailed as a triumphant example of educational innovation' (Day, 1990:17) with visiting American educator Keppel praising them as world

leading institutions, their phasing out signalled a coming-of-age of technical education. Fertile ground for the development of a new concept was therefore being prepared, by both the Progressives and by economic demands for skilled workers. A discourse of educational opportunity was developing alongside that of survival of the fittest.

How influential can one person be in contributing to the development of a new discourse? This is a critical question for my study, as I have sought to contribute a theme of practitioner research to the discourse of our emerging research culture. While I recognise the potential limitations inherent in one person's impact (and hence have promoted a *collaborative* research approach which I have hoped will act as a catalyst for research culture development) I do believe that individuals can exercise their power as specific intellectuals in their own contexts to assist the development of discourses. The story below illustrates my point, with respect to the developing discourse of educational opportunity.

The discourse of educational opportunity was given a solid boost through the 'power of writing' (Foucault, 1977a:189) of C.E. Beeby, as Assistant Director in the Department of Education. He was requested to contribute to the 1938 Annual Report to Parliament of Fraser, then Minister of Education in New Zealand's first Labour Government. I shall quote from Beeby's account of this happening verbatim, even though it is lengthy. It shows how Department of Education officials were able to influence the direction of education policy, as their counterparts in the Ministry of Education and elsewhere do today. It also provides an excellent example of how their 'power of writing' can influence government direction in subsequent decades, as parts of this Report were still being quoted in the 1987 Treasury Briefing to the Incoming Government.

> At the beginning of 1939, Lambourne [Director of Ed] sent to Fraser the draft of the minister's annual report to Parliament for 1938. This had been written, as was the custom, by the department's statistical officer. [Fraser responded] 'This report has nothing to say, and I won't sign it. Send me a report that says something'....I wrote, out of my head, a page on [government's] objective for education as I imagined Fraser saw it..it's appropriate that it should appear in full in this book [Beeby's autobiography].
>
> "The Government's objective, broadly expressed, is that every person, whatever his level of academic ability, whether he be rich or poor, whether

he live in town or country, has a right, as a citizen, to a free education of the kind for which he is best fitted, and to the fullest extent of his powers. So far is this from being a mere pious platitude that the full acceptance of the principle will involve the reorientation of the education system. The structure of the New Zealand school system as originally laid down (and, indeed, of practically all the school systems of the world) was based on the principle of *selection*. An elementary education in the 3 Rs was given to all the population but, beyond that, schooling had to be either bought by the well-to-do or won, through scholarships, by the specially brilliant. Under such a system, post-primary education was a thing apart from primary education, and tended to be verbal and academic in nature. A definite penalty was placed on the children of the poor, especially on those who lived outside the main centres of population.

From the beginning of this century the rigour of this selective system has been progressively relaxed. NZ has moved far more rapidly in this respect than the countries of the Old World, and had, even before 1935, given a large measure of free education even at the higher levels. Yet the principle of selection for post-primary and higher education remained, and the present Government was the first to recognize explicitly that continued education is no longer a special privilege for the well-to-do or the academically able, but a right to be claimed by all who want it to the fullest extent that the State can provide. Important consequences follow from the acceptance of this principle. It is not enough to provide more places in schools of the older academic type that were devised originally for the education of the gifted few. Schools that are to cater for the whole population must offer courses that are as rich and varied as are the needs and abilities of the children who enter them: this means generous equipment, more and better-trained teachers, and some system of guidance to help pupils to select the schools and courses that will best cater for their abilities. It means also, if there is to be true equality of opportunity, that, by one method or another, the country child must be given access to the facilities from which he has always tended to be barred by the mere accident of location. Most important of all, perhaps, it means that the system of administrative control must be such that the whole school system is a unit within which there is free movement.

It is only against this historical background that the Government's policy in education can be fully understood. It was necessary to convert a school system, constructed originally on a basis of selection and privilege, to a truly democratic form where it can cater for the needs of the whole population over as long a period of their lives as is found possible and desirable. I would wish the achievements of the past year, as outlined in this report, to be seen against this background and to be judged according to their furtherance of the aims here discussed." (as cited in Beeby, 1992:124-125).

In this statement, accepted without amendment by Fraser and presented as

Government's policy on education, equality of opportunity was clearly espoused

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and was soon to become the new dominant discourse. Equality of opportunity, as Beeby's words above show, meant that students should have equal *access* to education and should receive appropriate education to develop to their full potential. Notions of education existing to benefit the already privileged were explicitly challenged in this emergent discourse. Criticisms based around the notion that equality of access does not equate to equality of outcomes, were not to challenge the discourse strongly until the 1980s.

How did other developments in New Zealand's political and economic environment assist in supporting this new discourse? The creators of the policy were of a generation who had survived one World War and a major Depression and were heading fast into a second World War. Social, political and economic pressures were gradually preparing people to accept equality of opportunity as an ideal (Barber, 1989). It was obvious that the previous discourse of survival of the fittest had, as Beeby points out, served its purpose. Many wanted democratic ideals, like those of the Progressives, upheld to resist the Nazi beliefs that contributed to the death and destruction of World War II. The concept of survival of the fittest was being threatened on a number of fronts, and sufficient people were ready for change for the new discourse to be accepted (Simon, 1994). It was against this philosophical backdrop that tertiary technical institutes were gradually brought into being.

THE CREATION OF TECHNICAL INSTITUTES

How, despite the marginalised status of technical education thus far described, did the developing discourse of equality of opportunity favour the promotion of technical education? I will outline the joint influences of technology, economics and key individuals and the contribution of these to the new discourse. Aspects of the 'survival of the fittest' discourse continued, however, in the way that the new policy initiatives operated at individual level and presumed that the provision of equitable *access* was sufficient to encourage the full development of the individual to his or her full potential. The idea that social inequalities had 'structural causes' was not yet being considered in formal government policy documents, with attempts to address structural inequity not being introduced until the 1980s. The discourses of individual development co-

existed relatively peacefully in this period of high employment alongside demands that education should meet nationally determined needs. Also, as the new discourse of equality of opportunity gained ascendancy, the ongoing discourses of academic and of technical and vocational education continued to interweave.

So far, I have discussed the history of technical education from its marginalised 'night school' status in the late nineteenth century through to its introduction at technical high schools, while the more 'normal' academic curriculum prevailed at the other high schools. This separate status remained at the beginning of the Second World War. There is little written about technical education during the War years, although a demand for technical skills developed following the War. This demand is reinforced in the following quotation. Beeby, then Director of Education, recommended in 1946 that

> ..[we] convert the technical high schools at Auckland, Wellington, Christchurch, Dunedin, and possibly Hamilton, Palmerston North and Invercargill into senior technical colleges that can meet the growing needs of industry for trained personnel. To enable this to be done, it will be necessary to have daylight training for apprentices and for young workers generally...This means that the post-primary schools will become multi-purpose schools catering for practical as well as for academic types of children. (Beeby, 1992:240-241).

Beeby's influence as a key government official is obvious again here and subsequently, as it was in Fraser's speech. His statement mirrored an expectation that schooling would meet the needs of the economy as well as the full development of individuals according to their own inclinations, which Fraser's speech emphasised, and which the Progressive movement promoted. This expectation was to become pronounced in the 1980s and 1990s, in the face of worldwide economic decline.

Nothing was done about the situation immediately. Beeby put this down to the feeling in the 1940s that there was no widespread demand for the institutional training of apprentices, and this feeling went on into the 1950s when he claimed there was no understanding by industry of what technicians were. He, a government official and an academic, had to push for the development of technical education when it might reasonably have been expected that the drive for this would come from those practising in the technical and vocational areas.

He illustrated the difficulties in an interview in May 1987:

> In those days the heads of industry had little more than a primary school education themselves...people thought a technician was a chap who came and fixed your hot water system or radio...we had to press and press...and then, by the grace of God, Sputnik went up (Beeby, in Day, 1990:28).

This happening provided impetus for the promotion of technical education in a way that suited Beeby's vision well. The launching of Sputnik in 1957, in a time of cold war, occasioned profound soul-searching in Western educational institutions as it brought home to educators that Russian children might be receiving a more extensive education in technology than the children of the West. I can remember the publication of a book called "What Ivan Knows that Johnny Doesn't" which emphasised this point. Sputnik 'was to give a dramatic boost to technical education at all levels in the democratic countries, even in New Zealand'(Beeby, 1992:244).

Some interesting developments with regard to the place of technical and university education occurred around this time, which demonstrate the conflicted nature of discourses – in this case the ongoing academic and technical and vocational debate. Ball (1990:2) described discourses that are in an 'antagonistic relationship to other discourses, other possibilities of meaning, other claims, rights and positions'. In 1956, immediately prior to the launching of Sputnik, and building on economic need for technical expertise, there had been moves in New Zealand to widen the technical training available in engineering, particularly with regard to the training of technicians. The Department of Education recommended that this should occur in universities, but still saw a place for other technician training to occur in the technical colleges.

In an attempt to clarify the location of various kinds of technical education provision, the Senate of the University of New Zealand (the co-ordinating body of what were then the University colleges) staged a full-scale debate on the subject in 1956. The Universities and the Department agreed that they saw no major problems in their respective approaches and 'agreed that, *covering the industry as a whole*, no hard line could be drawn between the responsibilities of our respective institutions' (Beeby, 1992:246, italics in

original). The result of the debate implies a degree of consensus that did not continue, however.

Attempts *have* been made to draw lines. In his (1975) Masters thesis on the development of the Waikato Technical Institute, university academic K. Stevens quoted W.L. Renwick, Director-General of Education:

> Technical institutes have narrower aims than universities: the university is concerned with education in a broad sense that encompasses the intellectual and social development of students; technical institutes 'are not concerned with education in a broader sense...they are the practical training arms of production' (Renwick, in Stevens, 1975:1960.)

Renwick's words here stated a clear academic purpose for universities against a practical, vocational one for technical institutes, reminiscent of the distinction between technical and academic education in New Zealand's early days. This differentiation existed at a point in New Zealand's history (i.e., the 1950s) when the economy was buoyant, when there was a high demand for education, both academic and vocational, and when there were considerably fewer tertiary providers than currently exist. Subsequent developments in all three areas challenge this antagonistic positioning of academic and vocational discourses, although resistance continues. For example, Auckland University Vice Chancellor Kit Carson stated in November, 1996, that "There is a qualitative difference between what a university does and what a polytechnic does" (in Hinchcliff, 1997:337).

Discussion over the importance and location of technical education continued during the 1950s. In another example of Ministerial influence, in 1958 Philip Skoglund - Minister of Education in the Holyoake National Government - called for a national conference on technical education. This was attended by all interested parties - schools, universities, employers, employees and the professions. It recommended the setting up of an advisory council for technical education, and left the Department free to go ahead with its plans for technical colleges. This plan was to split the functions of the existing technical colleges into two institutions - comprehensive post-primary schools and senior technical institutes, initially under their own principals but managed by the same board to ease the transition. This had happened in 1956 with Auckland Technical College and was seen to be successful.

In this way, the technical high schools which, 'for all their failings, served New Zealand well for six decades,' (Beeby, 1992:242) gradually disappeared. While Beeby may have felt that technical high schools had served New Zealand well, Day argued that popular perception, based, she said, to some extent on uninformed ignorance, was that the schools were 'dumps for the duds' (Day, 1990:31), a statement reminiscent of survival of the fittest perceptions. This move to change the provision of technical education, however, marked the start of technical institutes at a tertiary level in New Zealand.

In investigating the development of technical education at the national level in New Zealand, one is struck by the initiatives of Department of Education officials, sometimes against resistance from both the public and from industry. Hogben, Beeby and Renwick have, as I have shown, all played important roles in this development. As I go on to examine the development of The Waikato Polytechnic (the Waikato Technical Institute initially), however, the initiative of individuals at local level will become more obvious. These initiatives, whether by local 'actors' or by central government officials, provide good examples of how specific intellectuals, exercising their power in their own contexts, can aspire to influence educational development. They inspire me to continue my own work as a specific intellectual at TWP.

Auckland and Petone Technical Institutes were established in 1961 and 1962, respectively, with some 29 New Zealand Certificates being awarded in that year - a figure which was to grow by 1970 to 590 (Tonkin-Covell, 1993). They were initially set up under secondary school regulations but were made distinctive educational institutions by the Education Amendment Act 1963, which defined technical institutions as ones who were

> ...devoted either solely to the provision of 'technical and continuation education' or which provided mainly 'advanced technical education' (N.Z. Statutes, 1963:306).

This statement describes a clear expectation that the institutions would provide technical, rather than academic, education. The emphasis on this distinction supports the statement by Renwick quoted earlier, but seems at variance with the result of the debate between the Department of Education and the Senate of the University of New Zealand in 1956. This had stated that no hard line could be

drawn between the responsibilities of universities and technical education providers.

Unlike technical institutions in England and Australia, New Zealand technical institutes did not offer degrees at this point. Their work was oriented towards the development in students of an understanding of the scientific principles upon which their practical work was based (Day, 1992). The emphases on developing students' intellectual independence and on acting as a critic and conscience of society (in universities, quoted on pages 67ff) are notably absent from the discourses of technical and vocational education at this point. The latter emphasis is still not promoted in polytechnics at the end of the 1990s.

The ongoing development of technical institutes was given a boost in 1962. The Currie Commission was set up by Government

> ..to advise on the publicly-controlled system of primary, post-primary and technical education in relation to the present and future needs of the country (Report of the Commission of Education in New Zealand, 1962:1).

It included strong educational representation and consulted widely with Department of Education staff, the two teacher unions (New Zealand Educational Institute and Post-Primary Teachers' Association), boards and governing bodies of schools and members of the public (ibid., 2). It therefore considered the perspectives of a broad range of people interested in education, and attempted to include their opinions in its findings.

With regard to technical education, in order to remedy noted deficiencies the Commission recommended a vigorous programme of building and development. They wanted additional staffing; improved salaries and conditions of service; the setting up of a Committee to represent the various interests, and improved student amenities, especially workshops and libraries. They recommended the provision of up to two months' training for new staff before commencing teaching, plus ongoing inservice training; assistance with teaching preparation and textbooks, and the appointment of guidance teachers. Lastly but significantly, they recommended that attention be given to the technical training of girls (Report of the Commission of Education, 1962). Technical education

was therefore receiving solid official support in its earliest stages of existence. The technical institutes were recognised as separate entities by the Education Act 1964, and governed by the Technical Institute Regulations of 1968.

THE WAIKATO TECHNICAL INSTITUTE

How did the Waikato Technical Institute (WTI) come into existence, given authorisation for full time technical institutes to be created? So far I have looked at the development of technical education in New Zealand in general, through the speeches and writing of public servants and Parliamentary documents, and in the writing of interested and sometimes critical individual authors. I have argued that up to this point in the development of technical education, the official discourses have been shaped more by Government Acts and officials rather than being strongly influenced by technical educators and students themselves, or even by the industries which might benefit from quality technical education.

As I examine the development of WTI, however, the perspectives of these technical educators and managers, of industry and to a lesser extent of students, will be seen to influence the discourses of technical and vocational education at local level. I shall use the acronym WTI in this section up until the time that the institution was renamed The Waikato Polytechnic (TWP), in 1987. How did the foundation staff at WTI interpret the discourses of technical education?

When I wished to interview foundation staff still working in the institution at the commencement of 1994, there were no remaining female staff. Of my possible pool of 6 men, there were five who agreed to be interviewed. There was a uniformity of understanding of the discourses of technical education evident in their responses. Peter said, 'The early technical institutes had a very clear sense of mission, something they probably lost over the years...[it] was very clearly to train people for jobs'.

Similarly, Ron stated: 'It was here for teaching, which is what it did...its mission was to teach people, and to turn them out so that they can do a specific task, or a general task'. Bill noted that: 'There was a sort of great emphasis on serving the Waikato, I think; serving the needs of this area...the Polytech was

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seen as a place where courses were held; where commercial people came to learn a job, really...to become employable.' Harry commented: 'We were there to train apprentices..the general public probably looked on us as a place where apprentices went...it was Hamilton Technical High it originated from, and the Technical High School was definitely looked upon as being the place where tradespeople did their schooling.'

In the early days of the Institute, then, as Harry explained, it had evolved from being a technical high school where tradespeople did their training, to being a tertiary institution where vocational education took place. Apprentices were released from their employment either during the day or at night, to pick up in the institute the theoretical knowledge pertaining to their craft. The words of the foundation staff show that there are at this point clear discourses of practical, technical skill development evident.

Local educators may construct their own educational theories, but these are shaped, enabled and constrained by existing discourses. To what extent is this development both constrained and made possible by government policies, by local demands and by movements in educational theory? I shall present more of the interview data from foundation staff in briefly considering these questions. I shall further explore the tensions that have existed between the universities and the technical institutes since the inception of tertiary-located technical education, and consider how these tensions might have impacted on our current situation. I shall conclude the chapter at the point at which TWP was about to confront these tensions head on and start to offer the degrees that had previously been the domain of the universities.

First, then, the development of WTI itself. The institution came into being as the Waikato Technical Institute in 1967, growing out of the Hamilton Technical College. Tonkin-Covell, who wrote the history of TWP for its 25 year anniversary, explained:

> On Wednesday 19 July 1967, the Board of Governors of the Hamilton Technical College met as the constituted organ of another educational institution...Under the Chairman, Mr J.A. Wainscott, the Board of Governors now met in two sessions, the first as the Board of the Waikato Technical Institute, after which it would revert to its normal role as the governing body of the secondary school (Tonkin-Covell, 1993:5).

Tonkin-Covell's historical work thus described the initial governance of WTI – the practice that shaped its early days. This position was in keeping with government policy, mentioned earlier, of ensuring a smooth transition between the placement of technical education in secondary schools, and the increasing trend towards offering it at tertiary level. The first Principal of WTI was Ron Waddell, who had previously worked in the Department of Education. He was thus conveniently familiar with official thinking on technical education. There was initially a very close relationship between the new technical institutions and the Department of Education, without the intervention of the Education Boards that mediated between primary and secondary schools and the Department. Waddell's knowledge of the language and practices of the latter could therefore only be of value to the fledgling institution.

The Institute was originally managed by a Board of local representatives (later called the Council). The real power, though, was exercised by the Department through its discretionary power over the allocation of funding and its ability to approve courses. Technically, an institution could not offer courses without prior Departmental approval, although an example of resistance to this centralised control will be discussed at this chapter's end. A regime of power (Foucault, 1977a) was therefore operated by the Department both by its power of approval and its power of the purse. Further, the Department also appointed its own specialist staff with a brief of inspecting the institutions to ensure records were well kept and applications for funding were justified (Day 1990). Foucault explained how such examining practices made the monitoring of the institution by government possible, an explanation that helps understanding of the complexity of the exercise of power.

> The examination combines the techniques of an observing hierarchy and those of a normalizing judgement. It is a normalizing gaze, a surveillance that makes it possible to qualify, to classify and to punish (Foucault, 1977a:184).

Therefore, even as the institution examines, controls and normalises its students, it is itself examined, controlled and normalised by central Government in a variety of ways.

The new Waikato Technical Institute consisted initially of three teaching departments: Building and Allied Industries, Engineering and Science, and Commerce and General Studies. It opened with around 30 full time tutors plus part-timers, who were 'an enthusiastic, highly motivated group of people' (Tonkin-Covell, 1993:9), a comment which was to be made of staff frequently in the future. Its role was seen as producing 'adequately trained craftsmen, technicians and professional men and women' (Tonkin-Covell, 1993:6). Ron, one of the foundation staff I interviewed, described

> ...a very good environment and we found that all tutors and senior staff seemed to help each other and work together, and there wasn't that, any structure of them and us.

Bill described the early staff as

> ...a closely knit group...Ron Waddell, he was the principal at the start...he knew where he was going; he knew what he wanted, and he was interested in the staff; he knew everybody and he would come around, you'd sometimes find him walking into the middle of the classroom at 8 o'clock in the morning....
> *Me: When the students were there?*
> Yes, he'd walk in and just say, how are things? Everything all right? and walk out again.

The sense of closeness between the most senior levels of management and their staff was obviously appreciated by these grassroots tutors in the early days.

As part of its development, the new technical institute needed to establish its responsibilities vis-à-vis the university, which was also new, having been established in 1964. The establishment of relations between the two required them to identify which educational programmes would be taught by each. Despite the University Senate's comments in 1956 (quoted on page 77) that no hard lines would be drawn between the various providers of tertiary education, WTI was seen as distinct from a university or a teachers' college. Its aim was vocational training for farming, industry and commerce (Tonkin-Covell; 1993), whereas the university's role was, and still is according to some of the foundation staff, mainly academic.

For example, Ron said:

> I think that we shouldn't be giving degrees, personally...Can we do it better than the university? I don't think so.

This resistance was based on a sound sense of self-esteem as a trades professional. He elaborated:

> To me, as a trades person teaching trades, I think we are far more important than the university people. If you're going to build something, you can't build it with a piece of paper you've got and you can't built it with a theory you've got. You've got to have somebody with the practical experience.

Where there had been, in the past, a sense of second-class status expressed about technical education by some (Day, 1990; Beeby, 1992), the interview material does not reflect this, either at grassroots or managerial level. Rather, there is a solid appreciation of and pride in technical education's strength, and the spaces it occupies vis-à-vis the universities. For Ron, there was a clear demarcation between the roles of the two institutions.

Bill, too, said,

> I think research was seen as perhaps belonging to the universities. And I would say that that has probably been the case up until, what? A few years ago, anyway....As far as the general public are concerned, from what I pick up anyway, outside, I think that a large number of people think that degrees belong in university. That the Polytech is sort of, our place is to instil, to teach people about jobs and to get people into the workplace.

Harry confirmed this:

> I think we still feel that a degree was gained over on the hill over the river [i.e., at the university].

Joe, however, saw the two as having a symbiotic function.

> I could give you examples where we've had people who've, say, gone through the polytech...and then they've gone and got degrees, and then they've come back. Now, I can name you two or three people who I've had contact with who are really whizz. They had the hands on experience, plus the later high tech training, which made them really valuable people.

Both aspects are necessary, according to Joe, who elaborated:

> Now, you have someone who's been through the university who hasn't had that hands-on experience at all. And they have, well to my way of thinking they have trouble to relate with reality. You know? It's all sort of theoretical.

Joe's comments here show an appreciation of *both* polytechnic and university training, rather than promoting one at the expense of the other. Despite Joe's different perspective from Harry's and Bill's, his words still show a sense of separation between practical and academic approaches to education, boundaries which are becoming increasingly blurred in technical education in the 1990s.

At this early stage of WTI's development, however, Principal Ron Waddell was

> ...careful not to put the Institute in the light of competing with the fledgling Waikato University, although he did let slip an ultimate goal of issuing degrees even in these early times (Tonkin-Covell, 1993:13).

This goal was not to be realised until 1991 under Principal Peter Johnson. It helped relations between the two new institutions that each was represented on the other's Board/Council by their respective Principal and Vice-Chancellor. At this stage of their development, in an economy that was prosperous and with virtually full employment, there seemed to be room for both institutions to flourish and grow.

But different 'forms of knowledge' (McNay, 1992) have marked the development of universities and technical institutes, although there have been some overlaps. Alcorn (1993) pointed out that, while some vocational education has always taken place in New Zealand universities, this has tended to be in high status 'professions' such as law, medicine and theology, while technical institutes in their early days concentrated on vocational and general skills. This historical division of subjects offered between the universities and the technical institutions has interesting implications for the kinds of knowledge which each considers valuable, and continues to colour current thinking within the polytechnic about the place of degrees in the institution in the late 1990s.

Waikato Technical Institute grew at a very rapid rate. The growth rate was commented on by foundation staff members, particularly by Peter, who had been appointed as HOD Building but found his job quite diverse.

> The job I was employed to do, was to organise courses and programmes in the building area...but what was expected of me by the principal was a little different from that. Because of my background [he had been a quantity surveyor], I was expected to play a part in the site development..because they had no specialist people in those days.

A diffusion of role is apparent here. On top of that, 'as a head of department I taught 23 hours'. He commented that 'technical institutes had to be seen as having a clear identity and to do that they had to be big.' Bill recalled that the early days were

> ...shambolic...I think we had to do, what? Was it 34 hours? Contact hours at that time, and so you just went from one class to another...we just rushed from one thing to another, from one class to another.

Foucault has claimed that

> ...nothing can function as a mechanism of power if it is not exerted according to procedures, instruments, means, or objectives that can be valid in more or less coherent systems of knowledge (quoted in Ransom, 1997:24).

The technical institute at this stage was developing a 'system of knowledge', a place in which the discourses of technical education were promoted. A part of those discourses has been the emphasis on growth, identified in the quotations above. It has proved challenging to try to determine the procedures, instruments, means and objectives that have developed within the institution, and through which power is exercised, but this thesis demonstrates my attempts to do so. In this way, I show my understanding of the ways in which power 'circulates' and is exercised within and around the institution.

One other comment made by Peter pertained to the flexibility required of the early staff, in maintaining the growth required:

> On top of that, you were expected to be very versatile, so anything new that came in that didn't fit, you were expected to .. run around to look for new work, whether it was in the building area or not, I expect, so I ended up running the first ladies' hairdressing courses here.

A blurring of curriculum boundaries (Bernstein, 1971) within the Building Department is apparent here! Considering that Peter was then Head of a Building department, this insertion of ladies' Hairdressing as a course was very incongruous, and I said so in my interview with Peter. He agreed, but it was not the only anomaly. He continued:

> The first computer courses; I ran the very first computer course ever run at the poly, **personally** taught part of it, though I didn't know a lot about computers, I have to say; and managed to recruit part-time staff. Dental assistants; floristry; pottery; all were in the building department at that stage.

Peter later said he thought

> ....one of the strengths of Technical Institutes has been their responsiveness, their ability to tackle anything, their ability to develop new things very quickly.

This was despite a statement by the Ministerial Working Party on Continuing Education that

> The Department of Education's management style is highly centralized and interventionist...This inhibits the speed at which the institutes/colleges can respond to new situations, and it limits their options (Probine & Fargher, 1987:88).

Officially, it might be seen to limit their options. Working at local level, however, Peter and his staff had found their own creative ways around this inhibitory tendency of the Department.

The growth of WTI was such that by the end of 1969 it had achieved Grade 2 status (up to 800,000 student hours taught), and was upgraded to Grade 3 (up to 1,200,000 student hours taught) by early 1972 (Tonkin-Covell, 1993:20).

The Tangata Whenua

While the development of the institution is being considered, it is important to look at provision for a substantial sector of our students, namely the Maori. The land confiscations (raupatu) of the 1860s had had an extremely serious effect on the Tainui (local) tribe. They

> ...stripped the Tainui people of their economic base, condemning them to the lowest socioeconomic levels of New Zealand society. Mana [pride and prestige] was also lost with the land. The end result was the demoralisation of an entire people, and that demoralisation is reflected in the low school achievement of Tainui children today (Tainui Maori Trust Board Report, 1991:44).

This low school achievement was further reinforced through the discourse of Social Darwinism, discussed earlier in the chapter.

Given the overrepresentation of Maori in 'the lowest socioeconomic levels of New Zealand society' and their relegation to the 'manual streams' (Middleton, 1996a:23), the Technical Institute's role was to be extremely important. It has provided vocational and technical skills for people whose entry qualifications (or lack of these) did not permit them to access university education. 'Second chance' education has formed an important part of the institution's teaching, as has the possibility of recovering the endangered Maori language, through the Te Reo (Maori language) programmes offered by the Maori Studies department.

Since the opening of classes in 1968 there had been Maori students at WTI, with 14 Maori Carpentry and Joinery apprentices at the beginning, mostly under Maori Affairs Department schemes. Little provision was made, overtly, by the new technical institute for the Maori students who even then made up a sizeable proportion of its potential demographic base. In Stevens' 1975 thesis on WTI, despite a comprehensive demographic analysis in one chapter, Maori students - indeed, the wider Maori population - rated not a single mention. At this stage, Maori were very much relegated to the margins or rendered invisible in the formal records of the institution. Nor were issues such as whether the teaching methods and content offered were compatible with Maori ways of knowing and preferred learning approaches (Pere, 1982, 1997), prevalent in other educational research of that time (see, for example, the Currie Commission Report, 1962).

Given the generally low priority accorded to Maori needs nationally during the 60s and 70s, it is not surprising that non-Maori systems of knowledge remained the dominant offering of the Institute, moulding and dominating what counted as valid knowledge. Harker has argued that the schools then (and still) present 'a European school knowledge code' (Harker, 1990:39, drawing on

Bernstein, 1975). This historical analysis has made me determined to work on practices designed to ensure that the devaluing and ignoring of Maori knowledge in the past are not continued at TWP today. In this thesis I show how I have striven to include in our developing research culture an approach that is at least compatible with, rather than antithetical to, Maori ways of working. I want to ensure that our research culture is open enough to 'count' different ways of knowing and researching.

The 1970s

The Waikato Technical Institute continued to grow over the period 1971-1976. In 1974 the Education Department gave approval for Stage IV of the site development planning to go ahead, involving the construction of the Library and the current Administration block. Also during that year, Ron Waddell retired as WTI's first Principal, and was replaced by Dufty Wilson.

However, the economy's boom period was beginning to slow down and unemployment to rise. There was political pressure on technical institutes to offer courses to 'sop up' the growing numbers of unemployed and to 'train' them for jobs which were becoming increasingly difficult to find, particularly in the unskilled and semiskilled areas. Rapid technological changes, coupled with signals that New Zealand's previously taken-for-granted export privileges to the U.K. were at risk following the latter's joining of the E.E.C. (Barber, 1989), were changing the face of our employment and educational scenes. The institution adopted unorthodox ways of accommodating the varying pressures. They provided opportunities for WTI, but also challenges.

Ron commented negatively on these.

When we first started teaching, we only had apprentices and [New Zealand Certificate in Engineering] groups coming in. And that's it. And then, we found we got people coming in with short, fulltime courses, which were people who weren't employed, or were not apprentices; pre-apprentices and this ... sort of thing..instead of making it a teaching environment, then, it became a political game...The outcome was that some of those students, we did our best with them, but you'd find that in the first place, because they didn't have a job, they also didn't have the interest. Some of those people, as I say, were put on those courses politically.
Me: To absorb unemployment?

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Unemployment. To come in, to make up the numbers, rather than to come in because of the teaching.

Harry, like Ron, felt that the change in type of student occasioned by the latter had not been beneficial to staff or students.

> Up until the crash we were working with the same type of student...[after that] we were getting students who were so desperate to be employed, to be qualified at something, that they were taking, they were actually coming to the institute here and applying for three or four different courses, hoping that they'd be able to get onto one...I don't want to be too critical about the whole thing, because there were a lot of damned good students who came through, but there were some ratbags and there were lots of square pegs in round holes.

Joe commented that 'I don't think they work as hard as they did before; the motivation's not as much'. Peter summarised this period of the institute's life as

> ...what I call the garbage can years when anybody who couldn't get a place in a teacher's college or university and wanted tertiary education, came to the poly and we always provided for them. And this poly bears the mark, if you can call it that, to this day in that we have a very, very wide range of offerings, a lot of it picked up in those days.

The foundation staff's comments at this stage clearly identify the pressure of the 'creeping depression' (Barber, 1989:184), which was beginning to contribute to a discourse which is clearly established in the 1990s. In this discourse, people are considered to be unemployed because of personal or educational inadequacy rather than because there are insufficient jobs for all. Lauder described how this discourse developed out of the New Right arguments that state intervention had failed and that market forces should decide success or failure, both business and personal. 'Those who suffer the worst from this system are increasingly blamed for their own misfortunes' (Lauder, 1987:9). Barber, Professor of History at the University of Waikato, said of this period:

> The nineteenth century distinction between the 'deserving' and 'undeserving' poor was sharpened....The unemployed were labelled 'dole bludgers' (Barber, 1989:189).

Alongside this discourse of victim-blaming, however, there was a parallel and contradictory discourse of equity, including an emphasis on equality of outcomes, which affected educational policy and provision.

Back in the late 1970s, however, these discourses were only emergent rather than dominant. Peter Johnson, by then deputy principal, described a perspective on the unemployment which caused the desperation of students to enter *any* tertiary education course, and which caused the concern identified by his teaching peers, that was different from his colleagues'.

> To our surprise the unemployment actually benefited us, in a sense, in that there was a series of emergency programmes introduced, essentially seen as short term.

The Institute found the flexibility to respond quickly to government initiatives and provide these emergency programmes, thereby contributing to further growth. While recessions are generally considered bad for a country, in this case the recession constituted an opportunity for educational institutions to expand their range of programmes, responding to government initiatives. The situation was one that provided both challenge and opportunities, as the current degree situation does.

The 1980s

Earlier, I described WTI's lack of attention to the needs of Maori students, at least in the official records of the time. The unemployment situation led to attention being paid to this group, who were disproportionately affected by the downturn in employment opportunities because they were over-represented among the unskilled and semi-skilled workers who were being worst hit by the recession. For the first time, I was able to find evidence in published accounts, of the needs of Maori students receiving serious consideration.

A staff member, Louise Signal, analysed the effectiveness of a YPTP (Young Persons' Training Programme) course run by the Institute in 1982 along lines designed specifically to appeal to Maori youth. Signal quoted tutor John Kirton's words:

> It was conceived as a pre-employment course which was to emphasise areas such as 'maoritanga', identity, self image, confidence building, craft skills, group relationships and a variety of social experiences and skills (Kirton, in Signal, 1983:14).

Signal revealed that the six-week course was run for its first five weeks at WTI in a classroom, but, in a unique development, the final week was marae-based, held on traditional Maori grounds and using traditional Maori protocols. This was a specific attempt to 'frame' (Bernstein, 1975:50) education along lines that were compatible with Maori ways of learning, rather than expecting Maori students to adapt to Pakeha pedagogical methods. Frame, according to Bernstein, refers to the form of the *context* in which knowledge is transmitted and received. For the first time (that I could find in formal records) Maori ways of knowing were being reflected in the content and teaching methods at WTI. It worked well from the students' and tutors' perspectives.

> Its apparent success, determined informally by tutors from students' comments and tutors' observations, resulted in three marae-based courses run in the first half of 1982 and approval for three further courses (Signal, 1983:14).

As Signal's work suggests, the 1980s were a time of diversity in the range of courses that had traditionally been offered by the Institute. For example, Nursing courses had been introduced in 1978. The traditional trades courses had continued, but a burgeoning Transition Department developed, in response to government initiatives aimed at providing ongoing education for young people who had been unsuccessful in obtaining work on leaving high school. The transition courses represented the constraints and possibilities that the 'remedial' discourse of attempting to develop equity of outcomes for disadvantaged groups offered within WTI. On the one hand, they provided 'business' for the technical institutions. On the other, there was criticism of these programmes by those who discerned the political expediency involved in them (e.g. see Catherwood, 1985).

This criticism arose from a recognition that there was little prospect of jobs at the end of 'job preparation' courses. Signal, analysing the marae-based course at WTI commented:

> There is substantial evidence to show that there are unlikely to be jobs for these students. Three months after the third marae-based YPTP course had finished, none of the 19 students who completed the course were in permanent unsubsidized work. In July 1982 4,536 people were registered unemployed in the Waikato, of these 2,002 were under 20...Those at high risk of unemployment are Maori teenagers with no academic qualifications whom the marae-based YPTP course is attempting to make 'job ready'. Thus the aim of the course is inappropriate in the light of the present unemployment trends (Signal, 1983:67-8).

Although the impact of high unemployment had contributed to WTI's development during the 1980s via the expansion of transition courses and the setting up of a Transition Department, there were other areas of expansion as well. Departments of Secretarial and Agriculture were set up, and right at the end of 1989 a department of Maori Studies (Tonkin-Covell, 1993), which began operating in early 1990.

But the environment in which WTI's development and growth had occurred since 1967 was about to undergo profound change. Following the Hawke Report (1988), the Department of Education was disbanded in 1989 to be replaced by a Ministry of Education which was intended to be 'a lean centre, with the decision making and authority of schools and other institutions devolved to local level' (Jury 1995:15). One reason for this was identified by Peter, reflecting, in the quotation below, on the changes that occurred in education at this time. It demonstrates the contestation over central versus local control of education which was promoted at least partly by New Right attempts to reduce government intervention, and was espoused in the Picot Report (1988) and the Education Amendment Act (1990).

> The motivation behind the Education Amendment Act was, I think, an acceptance of the philosophy that decisions are best made at the workplace. I think there was a genuine commitment to that....I think Roger Douglas [Minister of Finance] and Co....had reservations about legislation by government power...they wanted to reduce the influence of government. Generally, I think, they wanted that. More freedom to the individual.

This statement is compatible with the New Rightist individual responsibility discourse that I have argued was beginning to impact on education around the country.

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However, the aim of increased freedom to the individual and at local level was in danger of being subverted by the civil service, according to Peter.

> I think what we now have is a realisation, at least by some politicians, that the regrettable thing is that once you let people have their head, they don't always do what the government wants them to do....One must also never underestimate the power of the central bureaucracy, the Public Service. The Department of Education was wound down, but most of those people didn't lose their jobs; most of the ones that mattered simply ended up in other government QANGOs[8] - the ETSA [Education Training and Support Agency], the NZQA [New Zealand Qualifications Authority], the residual Ministry of Education. And deep down in those people is, in any large-scale central bureaucracy, is a desire to control.

Those who had exercised power through the Department of Education were still exercising power through the new bodies.

Some of the new bodies set up, and the policies and regulations under which they operate, are definitely designed to control, to observe, to normalise. Ransom suggested:

> If members of a group are to be trained to do something, one way to do it is to establish standards that will act as performance goals for each individual (Ransom, 1997:47).

These standards can then be closely scrutinised and measured. The 'micropractices' of NZQA, such as its prescription of specific units of work described in elements and performance criteria, is a way of setting performance goals for each individual. But the same tactic can be used with groups. The Education Review Office, the government monitoring body for education, is one such constituted group that controls standards in primary and secondary schools through its surveillance role (Thrupp, 1997). Drawing on Foucault again, Ransom described how 'a new interpretation - a new knowledge - leads to new institutions, new structures of power, and new justifications for them' (Ransom, 1997:87). These structures of power are applied to the polytechnic sector through the requirement to issue Statements of Objectives against which institutions' performance is monitored yearly.

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[8] QANGO: a quasi-autonomous non-governmental organisation.

Peter described the controlling functions of government as exercised via the NZQA, arguing further that despite the rhetoric of local control, government remains intent on normalisation.

> NZQA for example is saying, "But we must have a consistent qualifications framework". "We must" - what they're saying is we must have standardisation. And standardisation…you've got a form of centralisation in a way…If you're all going to do the same thing, someone's going to have to make you all do the same thing.

It is worth pausing briefly to ponder on Peter's statement here about educators being made to all do the same thing, at a point when the polytechnic system was moving from direct control by the Department of Education, to a theoretically more autonomous position. Even in the days when, according to official policy, polytechnics were supposed to seek Department approval before introducing any new courses, staff found their own ways of circumventing this. They devised their own forms of resistance, rather than seeing themselves as powerless pawns in a political and economic game. I commented earlier about government exercising 'the power of the purse' through the Department of Education. Peter said that

> I still think, overwhelmingly, the changing role of the polytechnic has been externally dominated by, particularly by government. Their ability, quite simply, their ability to turn on or turn off the funding has had a heavy influence. Until, well, until 1990 again, that auspicious year, every single course at this poly had to be approved by the Department of Education. All those of significance, anyway.

However, he subsequently went on to explain how both grass roots staff and management still found spaces in which to achieve their own purposes. Peter identified this from his management perspective:

> Polys became, including this one, became very astute at getting round what we were supposed to do….The classic example's catering....the old Department of Education had the authority to direct what was done....In practice, the thing was slightly different because all sorts of things developed surreptitiously..as I say, the catering one's one example. We started up in a very trivial, unassuming way, claiming that we weren't doing catering when we were.....And then it became so big it got its own momentum.

At this point approval was officially given to run the course, as the staff had demonstrated a need locally and it was part of the brief of polytechnics to provide for local educational needs. The method of establishing this programme, however, was quite contrary to the theoretical centralised control and approval process. There are therefore spaces for resistance by management and staff locally, to exercise power.

By the end of the 1980s TWP, renamed as part of a national name change from technical institutes to polytechnics in 1987 in recognition of expanding roles, was entering a period of unprecedented change. The growth which it had experienced in its earlier days was slowing down; the traditional role of polytechnic education, being that of the provision of vocational and technical education, was being opened up to include the possibility of offering degrees. This would expand the discourse of academia which I show in the next chapter already existed to some extent alongside those of vocational and technical education. It was this possibility which led to TWP's need for a research culture, and which provoked me into commencing my doctoral study.

CONCLUSION:

In this chapter, I have discussed a range of discursive influences which have affected the development of technical education in New Zealand in general and of polytechnics in particular. I have argued that these discourses have developed in response to particular social, economic and political pressures and that key individuals have been significant in either representing or contributing to the development of these discourses. The quotations from foundation staff members have provided evidence of the appropriateness and significance of the discursive situations I have presented, to our context. In the following chapter I shall consider the ongoing development of TWP, in the period 1990 – 1996, as degrees were introduced into the institution. This development was to profoundly change the face of polytechnic education.

CHAPTER FOUR: THE WAIKATO POLYTECHNIC IN THE 1990s

INTRODUCTION:

Given the historical grounding of technical education in non-academic discourses, how did an academic discourse become more powerful in affecting development in New Zealand polytechnics? In this chapter I continue to show how I understand the contemporary context of technical education in New Zealand, and that of TWP in particular. In chapters 1 and 3 I indicated that the NZQA has had a powerful shaping and controlling effect upon the curriculum processes and qualifications granting systems within TWP. I indicated that the 1990 Education Amendment Act had formalised the establishment of the Authority, and had also formalised Hawke's recommendation that polytechnics be able to grant degrees. But the Act brought other micropractices of power into effect at TWP than these - micropractices that have heightened our awareness of an academic discourse within the institution and required our conformity to other 'regimes of truth' than those directly affecting curricula and credentialling. Foucault described a 'regime of truth' as the way that truth is 'linked in a circular relation with systems of power which produce and sustain it, and to effects of power which it induces and which extend it' (Foucault, 1980b:133).

In this chapter, I shall examine some of the effects of these micropractices of power on the structures of the polytechnic, particularly those pertaining to research, academic approval and quality assurance issues. I shall then explore the ways that, building on the structural changes and in response to the influence of changing discourses around polytechnic education, the five degrees that had been introduced into the institution during the period under study came to be offered. Archival records of the institution and memoranda between senior staff members will be used in the first section of the chapter, while interview data from Heads of Department (HODs) predominate in the latter section, together with further archival records that illustrate the progress of degree applications.

What the chapter will show is that, despite the apparently different discourses of academic and of technical and vocational education discussed in the previous chapter, aspects of an academic discourse had already been

influencing TWP's development, with some small research initiatives being under way in the late 1980s and with other elements of academic systems of knowledge being introduced. The incursion of this discourse of academia into technical education has not always been welcome. As far back as 1974 there had been concerns within the Department of Education that the part-time courses which technical institutes offered 'would inevitably set technical education on to an academic path' which should be resisted (Tonkin-Covell, 1993:31). Discourses are complex and inter-related, and frequently involve conflict, as these quotations and this chapter will reveal.

STRUCTURAL CHANGES

One of the requirements of academia revolves around involvement in research. In this section, I shall firstly indicate how the profile of research was raised in the institution, before going on to explain about the formalising of the various Boards and Committees required by the 1990 Education Amendment Act. Prior to the Act, the Polytechnic had neither an Academic Board nor a formal Research Committee. An ad hoc research group, taking its incentive from *Learning for Life 2* (Department of Education:1989) which mentioned the possibility of polytechnics being able to grant degrees, had been meeting sporadically to discuss research issues. Those involved in this group, convened by Dr Paul Judd, HOD Science, included Alison Young, HOD Information Technology; John Richards, HOD Electrical; Paul Wells, HOD Business Studies, and Wendy Von Lanthen, HOD Nursing. All these departments had staff engaged in some form of formal or informal research; all except Electrical have subsequently offered degrees. I argue in this thesis that informal research (an outcome of critically reflective practice) was also occurring throughout the institution's history, but it is with the formally recognised research that this section is concerned.

The ad hoc nature of the group convened by Judd is indicative of the autonomy and flexibility which the institution, at this stage of its development, permitted. The group wrote reports for the CEO informing him of what was being done in research in the areas represented in the group. I have not, unfortunately, been able to locate any of these reports. However Dr Judd gave

me access to a memo dated 16 October 1991 from Peter Johnson, CEO, to Judd. Johnson was forwarding a memo from the Association of Polytechnics in New Zealand (APNZ, the group that co-ordinates academic management issues among polytechnics) written by Bill Grote, then Academic Policy Officer for APNZ. The aim of the Grote memo was to stimulate research in polytechnics; Johnson had written on the memo by way of a note to Judd: 'Perhaps the time has come to revive the Research Committee.' As Judd noted in a subsequent memo to me, 'The dates and messages show that Peter did not know we were still active.'

What is fascinating in this sequence is what it shows about the profile of research activity within the polytechnic at the time. A high-powered group (all Heads of Department) had been meeting to discuss comparatively recent (1989, *Learning for Life*) initiatives which they perceived as potentially being able to provide funding for the research *which was already taking place* in a small way in some of their departments. This group had been meeting without the active involvement of the Principal. The immediate thrust to stimulate research in polytechnics had come from the Ministry of Research, Science and Technology, acting in response to Government moves, such as those indicated in *Learning for Life.* The implementation of the ideas contained in this policy-announcing document were made possible under the Education Amendment Act. This situation shows local, individual responses to a central government indication that research should occur in educational institutions more broadly, not just in the universities. How did research gain a formal place, then, at TWP?

The Research Committee

The 1990 Act was responsible for changes to the academic structure of the polytechnic, in terms of the introduction of an Academic Board and a formally constituted Research Committee. I shall consider the research issue first. The Act made it possible for polytechnics to offer degrees, and required staff in institutions delivering higher qualifications to 'engage in research'. The definition of what was to constitute research engagement was spelled out by the 1993 NZQA publication, "The Approval and Accreditation of Degrees and Related Qualifications" as follows:

3. The teaching staff involved in the course:

...(b) demonstrate significant and verifiable involvement in research, which is to be understood as:

- fundamental and/or applied research
- professional consultancy
- professional practice
- scholarship
- the creation of original artistic works
- development
- research and development

(c) have significant and verifiable experience and/or expertise in teaching, and in the supervision of research (1993:12, 13).

This is a broad definition of research. I mentioned briefly in Chapter One (page 25) the question of whether reflective practice of the type indicated by the foundation staff members in my interviews with them, could count as research. As can be seen from the NZQA definition, the 'professional practice' and 'development' criteria would allow practitioner research to count as valid research. However, as far as the formal recognition of research in the institution is concerned, this is normally done via the Research Register (which was set up in 1993). Practitioner and developmental research of the kind that the foundation staff practised is not normally recorded in the Research Register. Therefore in terms of its contribution to the formal research culture, it does not 'count' as research – it is not standardised, scrutinised or controlled. It is not part of the 'public spectacle' (Foucault, 1977a) of research at TWP – in fact, it can be quite difficult to find out where and how it is occurring. Despite its informality, I argue that the inquiring, improving attitude which reflective practice fosters could be construed as setting the scene for the conduct of more formalised research.

The research criteria in the NZQA definition occasioned some debate within our institution. The ad hoc research committee had already been operating when Peter Johnson's October 1991 memo was received. Because of the interest that was being focussed on research both within TWP and nationally through the Education Amendment Act, it was decided to terminate that committee. Paul Judd's memo to the Academic Board (Minutes dated 13/10/92, Agenda Item 7) showed why this was done.

The General Academic Regulations provide for a Research Committee. I have written to Eugene [Crotty, then Academic Director] suggesting it is time to activate it. There is no point to resuscitating the Ad Hoc Research Committee. The members were all but impossible to get to meetings and the official committee should get under way now.

Judd had earlier provided a paper on "Some Possible Functions of a Research Committee" which had been tabled at the ad hoc Research Committee, (Minutes dated 25 October 1991.) This was provided as a discussion document, and other papers and reports in Judd's hands were made available to the new Chairperson. He also made suggestions about funding which I will include here as the issues he raises have been critical in my own research, and affected the development of the research culture at the Polytechnic (see Crotty, 1992). In his memo Judd suggested that

> Departments should take responsibility for finding funds from their own resources or by application to external bodies...Research costs ought to be attributed to Departments so that they are counted in the cost per EFTS [a funding mechanism; Equivalent Full Time Student]. Research could be a very expensive activity in terms of staff replacement and should not be a general Polytechnic overhead which obscures the true cost of running a Department.

This was a highly strategic suggestion by Judd, designed to avoid the Foucaldian surveillance and central control of research that, I am aware from discussion with him, frustrated both him and members of his staff subsequently. This frustration arose out of the control of research funds exerted later by the Research Committee, via its 'power of the purse'. The situation may be common; in their 1997 paper, Beverland and Bretherton noted that at UNITEC research funds had been devolved to faculty level as central funding was seen to hinder research culture development.

The next memo to which I had access was one from Eileen Chambers to Peter Johnson in response to his request for ideas on the establishment of a Research Committee. Chambers had been Acting Head of Faculty during Eugene Crotty's study year in the U.K in 1992. Her memo was tabled in the Academic Board Minutes of 13/10/92 as paper AB92/30. Chambers suggested that the Committee should be called a Research and Ethics Committee; that it should be a subcommittee of the Academic Board; that the appointment of

members should reflect gender and equity considerations; that it should reflect the mix of programmes offered in the Polytechnic. She suggested a terms of reference list [not available to me]; and made the suggestion that $50,000 'would be a nice round sum to start a contestable Research fund'. In the event, they were allocated $10,000 – (Research Committee Minutes, 27 January 1993). Chambers was subsequently to be appointed Research Committee Chair on the retirement of the previous Chair, Eugene Crotty.

In Paper AB92/32, prepared for the Academic Board meeting of 24 November 1992, Peter Johnson agreed with an Academic Board recommendation of 13 October than an interim Research Committee should be formed. He outlined the membership, some of whom, including my own nomination as staff representative, required ratification by the Academic Board. The Paper was dated 17 November 1992, and was confirmed by the Academic Board meeting of 24 November 1992. I was, therefore, privileged to be a member of the new Research Committee, which held its inaugural meeting on 2 December 1992. Its subsequent actions in the establishment of our research culture will be considered in Chapter 5.

In the preceding discussion, I mentioned Judd's suggestion about the funding of research, and also Crotty's 1992 visit to the U.K., the purpose of which was specifically to investigate the establishment of research cultures in institutions where this activity had previously not been the norm. Before going on to discuss the establishment of the Academic Board, which I have referred to above as needing to confirm appointments to the Research Committee, I wish to present two of the barriers to the conduct of research that were included in Crotty's report on his trip. These suggestions will be addressed with specific relevance to TWP's research culture, in chapters 5 and 6.

> Under the heading "Barriers to growth in research" he identified
> ...internal funding limitations and lack of a critical mass to initiate and maintain research momentum, the absence of a strategy for research and the current dominance of universities in obtaining research grants from major funding agencies (Crotty, 1992:6).

Crotty identifies here four aspects of research discourses – those of internal and external funding support, of targeted research strategies and of large-scale involvement of staff in the research process. Before looking at the funding issue,

I want to highlight Crotty's identification of 'lack of a critical mass to initiate and maintain research momentum' as an important point here. It indicates that the practitioner 'research' which I have shown was occurring, and which in my experience is typical of the attitude of most teachers within the institution, was not construed as research formally.

This type of informal research seems to be more typical of technical and vocational practices than of those of academia. While reflective practice is common at universities also (see Hall, 1997; Moses & Ramsden, 1992; November, 1996; Woodhouse, 1997) I have not found any examples of university academics specifically claiming it as a form of research, although some of the foundation staff have done so (see Chapter 5, pages 142 and 143). However, Woodhouse, Director of the Universities' Academic Audit Unit, noted that the qualities shown by reflection practitioners 'have many of the characteristics of research' (Woodhouse, 1997:362). University-trained polytechnic educators, such as Crotty, do not necessarily regard reflective practice as research either, although I have argued for its identification as informal research. When I discussed his comments above with Crotty, who holds a Masters degree, to determine his perceptions of research, he described some of the ad hoc development that was occurring as 'tinkering' not research in the formal sense. Whether reflective practice 'counts' as research in polytechnics is therefore a contested part of our research discourse.

Crotty's observations quoted above were admittedly based on U.K. experiences. But 84.6% of TWP staff, too, identified ability to obtain funding as a major barrier to growth in research, when they responded to a TWP-wide survey (Auaki report, 1993). Funding issues will be looked at in more depth in Chapters 5 and 6, but it is important to note here that the funding issue was identified as a barrier to growth in research right at the start of the establishment of a formal research culture. It is one with which the Research Committee, whose development I am investigating here, had to grapple from its inception.

The Academic Board

The Academic Board is the other major group that was constituted in response to the legislative requirements of the Education Amendment Act of 1990. The institution had previously had formal programme monitoring

processes that it was (officially) required to use in presenting new courses to the Department of Education for approval. However, as Johnson's comment at the end of the previous chapter showed and Tonkin-Covell (1993:29) also noted, while 'the Department held the purse strings (very directly in the first two years), it did not have the resources to police the institutes'. Accordingly, courses had been able to be introduced that subverted Departmental efforts at control (Tonkin-Covell, 1993).

The normalising influence of the 1990 Education Amendment Act changed all that. TWP had to restructure the formal programme monitoring processes of the institution that had previously existed. A sub-committee convened in 1990 by Bruce Birnie (Deputy Principal), had presented a proposal on setting up an Academic Board, which makes its origins clear. The proposal quotes the Education Amendment Bill No. 3, under Section 179, Clause 2:

The Council of an institution shall establish an academic board consisting of members of the staff and students of the institution to advise the Council on matters relating to courses of study, or training, or awards, and other academic matters, and to exercise powers delegated to that board by the Council or the Chief Executive of that institution.

The responsibilities of this Board were further spelled out in Clause 4:

Without limiting the generality of subsection (1) of this section, the Council of an institution shall not make any decision or statute in respect of any academic matter referred to in subsection (2) of this section unless it has requested the advice of the academic board and considered any advice given by the academic board. (Proposal dated 6 July, 1990).

The controlling and normalising potential of the Academic Board on the polytechnics' activities was therefore considerable. The Academic Board held its first meeting on 26 March 1991.

As the proposal pointed out, prior to 1990 'the opportunity to formally consider new programmes has occurred during an annual submission of new course approvals to the (old) Department of Education (this exercise was always initiated by the Department).' It was further noted that because the Department of Education had (theoretically) fairly tight control over what was and was not acceptable, there had never been a formal requirement for Council to approve new developments, though the Principal had always advised Council of these. It

may be that the previous situation, in which the Principal could *advise*, rather than seek approval, had enabled Peter Johnson to implement some of the novel developments that I discussed in the previous chapter. But the restructuring required by the Education Amendment Act abolished that freedom. New developments were now formally required to be listed in the Corporate Plan, as Birnie's proposal went on to show.

> The advent of Charters and Corporate Plans (supposedly giving more autonomy to institutions) has meant that new programmes/courses will be listed in the Corporate Plan and ratified by Council.

This situation provides an interesting example of dual discourses. On the one hand, compatible with government's rhetoric on devolving decision-making to the local area, the Board would comprise the institution's own staff and students. On the other, central control was maintained via a Foucauldian panoptic gaze. This operated through the institution's requirements to specify new courses in the Corporate Plan (now termed Annual Statements of Objectives). These Statements of Objectives are required to be tabled in Parliament annually. Running catering courses in advance of formal approval would no longer be an option.

Allied to this more intense scrutiny, a Quality Assurance Committee (QAC) had been constituted late the previous year (1990). Its role was to oversee the practical aspects of teaching and assessing programmes. This development was a TWP initiative rather than a legal requirement of government, although it developed from a recognition of increasing demands for accountability. Hinchcliff (1997:152), CEO at Auckland Institute of Technology (AIT), described one of the roles of NZQA as being that of 'auditing the quality of the [educational institution's] systems' as he described how AIT was attempting to demonstrate its ability to 'prove' that quality education was being delivered in his institution. Humphries (1997:7), however, warned that 'once committed to the ways of working implied in the "management of quality", employees themselves provide the information necessary for their control', a statement that clearly illustrates the Foucauldian notions of surveillance and governmentality inherent in the quality management discourse.

What these developments show is the conflict between a rhetoric of local autonomy alongside a shaping and controlling of local activity through the setting up of these formal Boards and Committees. The slight degree of cynicism expressed in the comment in Birnie's (1990) proposal, '*supposedly* giving more autonomy to institutions', was later to be spelled out by Peter Johnson in his Report on the period 21 October to 16 November 1994, to Council. It is worth investigating at this point as it well illustrates the discourses of technical education as instruments of government policy. It also shows a tension between the polytechnic's ongoing legal requirement to respond to equity discourses in its charter but also to conform to those of changing nationally-determined needs. Johnson's Report stated:

> 3.1 It is clear that the government is intent on directing polytechnics to develop along the lines which it prefers. It is hard to fault this approach, but there is an inevitable conflict created between the expectations and needs of the communities which the Polytechnic serves - as expressed in its charter, mission statement and strategic plan objectives - and the directions of central government. It would, in my view, be more honest if the government was to state unequivocally that we are an agency of government and, as such, expected to follow its directions. The present situation leaves the Polytechnic to defend itself against accusations that it is not meeting its charter obligations, whilst enabling the Government to deny any responsibility.

The tension between the government's stated object of institutional autonomy in the Education Amendment Act and the Polytechnic's requirement to meet the needs of its local community as stated in charter and corporate plans, and also to meet the dictates of its political and economic masters, the government, is plain. In Part XIV of the Act, this Object was stated as follows:

> 160. **Object** - the object of the provisions of this Act relating to institutions is to give them as much independence and freedom to make academic, operational, and management decisions as is consistent with the nature of the services they provide, the efficient use of national resources, the national interest, and the demands of accountability (Education Amendment Act, 1990, No. 60, page 848).

These examples of official policy statements clearly show the extent to which, despite a rhetoric of providing institutions with more autonomy, close conformity to government policy is still required. The schools remain the

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instruments of the state, as Johnson suggested. Goodwin, analysing similar developments in Australia, put the situation thus: 'The freedom of self-management operates paradoxically as a technology of control, rendering schools more effectively and efficiently governed' (Goodwin, 1996:69). The question which teachers in such a situation must face is how, and to what extent, they can act creatively or subversively in the best interests of their students and themselves in pursuing broader aims of education, such as developing each individual to her/his full potential. I am arguing that action research provides one possible tool to assist teachers in their answering of this question, that it builds on the reflective practice which staff already exhibit, and that this approach has contributed positively to the development of our research culture in the new degree-granting environment.

THE INTRODUCTION OF DEGREES

Discourses, as it has already been suggested, provide both constraints and possibilities. Examples of some of the constraints to which the institution was subjected by the Education Amendment Act have been considered in examining the new structures required within the institution. But the Act also provided possibilities, and it is to the most significant of these from our perspective, the possibility of polytechnics offering degrees, that I wish to turn now. Having had this possibility opened up and having staff who were keen to take advantage of it, TWP needed both to develop degrees, and to establish, develop and maintain a research culture.

How this has been done in our context shows how the actions of individual enthusiasts – specific intellectuals - have shaped the culture. As Foucault points out, individuals are affected by power but are also its vehicles (1977a) which suggests that 'precisely because individuals are part of the power mechanism of the disciplines, they are in a better position to challenge it' (Ransom, 1997:36). An examination of the ways in which degrees were introduced to TWP provides a good example of the 'challenges' and initiatives of individuals - in this case four HODs - in ensuring that *their* beliefs about degrees and research were recognised. The account of this degree development again reflects contested discourses of academic and of vocational and technical

knowledge; of equity issues. While the material in the remainder of the chapter draws heavily on interviews with these four HODs, subsequent chapters of the thesis (Chapter 5 particularly) provide additional supporting material to substantiate their claims.

Prior to presenting the chronological development of the five degrees offered at TWP between 1991 and 1996, I shall present a table showing polytechnic-wide staff reaction to the place of research in the Polytechnic. Degree introduction would require staff to be engaged in research; what was their perception of the place of this? The table below reveals resistance from some but support from others towards an academic discourse of research becoming established within the institution. Data are drawn from the research questions in the Auaki, a polytechnic-wide survey (1993). The independent analysers of this, received questionnaire replies from 281 staff, which included 146 tutorial staff, 80 allied staff, 15 management staff and 40 who did not indicate their designation.

Table 1: Staff reactions to research (Auaki, 1993)

Research Questions Asked:	strongly disagree	disagree	uncertain	agree	strongly agree	no answer
33. Research activities should have a high profile in TWP	14 (5.0%)	32 (11.4%)	62 (22.1%)	99 (35.2%)	57 (20.3%)	17 (6.0%)
34. All of TWP departments should engage in Research activities	20 (7.1%)	42 (14.9%)	48 (17.1%)	106 (37.7%)	46 16.4%)	19 (6.8%)
35. All teaching staff should be actively involved in Research activities	23 (8.2%)	62 (22.1%)	70 (24.9%)	73 (26.0%)	35 (12.5%)	18 (6.4%)
36. Departmental budgets should include a specific function (sic) allocation for Research activities	6 (2.1%)	23 (8.2%)	32 (11.4%)	119 (42.3%)	84 (29.9%)	17 (6.0%)

The responses in this table indicate a strongly divided attitude among the staff, in 1993, about the place of research in the institution. Only 38.5% thought all teaching staff should be actively involved in research; 38.5% felt research activities should not necessarily have a high profile in the institution; 54.1% felt all TWP departments should be engaged in research. These figures are indicative of considerable reservation by some staff about the place of research. Interestingly, a high 70.3% felt their departmental budgets should have funding specifically targeted to research activities. This percentage shows that while

some staff may not have wanted to engage in research themselves, they were happy that the institution provided support for those wishing to engage in research activity. What the results also show is that many staff both tolerated and supported the academic discourse of research becoming part of TWP's activities.

In the next section, the development of each of the five degrees is discussed. Earlier, I claimed that TWP's functioning demonstrates the closed codes and strong classification and framing outlined in Bernstein's (1971) paper. The degree development demonstrates this particularly clearly. Where, at a university, the selection of at least some low-level papers from outside one's major discipline is encouraged, this has never been the case with TWP's degrees, which have predominantly demonstrated a 'fortress-like'[9] mentality. This has not been challenged until the late 1990s (Wells, 1997) and cross-degree selection was still uncommon in early 1999.

Business Studies

The first department to seek degree granting status was the Business Studies department. It was already offering a four year accountancy programme which was recognised (by the New Zealand Society of Accountants) as being *equivalent* to a University degree, although as Paul Wells, then HOD, noted, the programme lacked the parity and esteem of a degree. This situation demonstrates that although the knowledge promoted in the existing polytechnic Diploma was compatible with academic systems of knowledge in terms of level, in terms of the credentialling processes of universities it did not rate as highly. A clear distinction between academic and technical and vocational discourses in the matter of credentials, is evident in this disparagement, although as the New Zealand Society of Accountants' recognition shows, not in the level of the knowledge itself.

Wells drew on experience in the U.K., referring to the Council for National Academic Awards (CNAA:1984), in our interview. He explained that the offering of diplomas in the U.K., which were considered equivalent to

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[9] See Academic Board Minutes, quoted on page 120-121.

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degrees but lacked status compared with those from universities, led to his decision to work towards the introduction of degrees at TWP:

> What we were giving was the opportunity for our graduates to have parity and esteem in terms of the qualifications they got; they were recognised as being the same as a degree by a professional registration body. So that was my key motivation.

Wells may have been highly motivated to want a degree in his department; as the quotation below reveals, senior TWP management were not as enthusiastic as he:

> I did my TRL [technical refresher leave - an opportunity to work back in industry] and had four months in the UK at the beginning of 1989, came back and in my graduation address announced my vision was to see a degree in business - shock and horror around B Block [which is where the senior managers' offices are located].

Of his staff of around 30, though, only four of Wells' staff felt that TWP was not the place for a degree. The lack of resistance from the remaining 26 shows a high acceptance of a feature of academic discourse (degree granting) within what was then strongly a vocational and technical institution. When the degree was eventually introduced in 1992, Wells was quite happy for these staff to teach on other programmes; he did not pressure them over their resistance to the degree.

As the earlier comments from the foundation staff also demonstrated, Wells conceptualised the resistance as reflective of the prevailing vocational and technical discourses: 'My feeling was that they felt we were here to produce graduates with vocational qualifications,' rather than from fear of change, which I had asked him about. He didn't see fear of change as the chief cause of the resistance, as 'all of them changed by the time we were about a year out from making the application' except one who had left. There appeared to be good overall support for the introduction of this academic qualification into the polytechnic, not just support from the staff. The Department's Advisory Committee[10] also pledged its support.

They fully endorsed it because they couldn't see, a lot of those were accountants and couldn't see why people out there all got a degree and they didn't.

At this point Wells acquainted me with the Principal's resistance to the introduction of degrees, which very much surprised me.

> Peter went and spoke to a Rotary meeting..
> *Me: In favour of it [the Degree?]*
> No, he said he didn't believe there was a place for degrees in polytechnics and the Chairman of my Advisory Committee belonged to that Rotary Club and rang me up and said what the hell is going on in your institution?

When he was approving this excerpt from the chapter, Wells stressed that the reason for this reaction is that if TWP did not offer a degree in accounting (as other polytechnics were proposing), students at TWP would miss out. The Advisory Committee felt that the programme was already at degree level and should receive this award. Wells tried to co-ordinate a meeting between the Chairman of the Advisory Committee and the Principal, but this did not occur. What did occur, however, was a meeting between the Principal and the staff of the Business Studies department. Wells recalled:

> Peter got the message loud and clear of the staff endorsement...I said, how can you deny our students the opportunity to have a degree? I said, you are preserving the domain of the university and therefore perpetuating their elitism and reputation.

A clash of discourses is evident here. Johnson, having a Masters degree but also being a quantity surveyor and polytechnic tutor before he was Principal, must have understood both discourses but held to the view that degrees belonged in universities. Wells noted that this opposition to degrees was held by other senior staff, also. Pat Irving, then deputy principal, holding a Bachelor's degree and membership in the Association of Chartered Accountants,

> ...was really supportive..she said I see where you are coming from, I won't get in your way, but I don't believe that polytechs are the places for degrees.

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[10] A Committee comprised of representatives of present and past students, industry representatives, staff and outside educators – see Academic Regulations, page 10, dated 21/10/97).

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The Business Studies HOD, and his staff at grassroots level were therefore able to act as specific intellectuals within their own contexts, able to influence the direction the institution took on the issuing of degrees. It is to Peter Johnson's credit that despite his initial resistance he did not block the degree to the extent he could have done. It was recommended for approval by Council at a special meeting of the Academic Board on 28 May, 1991, being approved by NZQA as noted in the Quality Assurance Committee (QAC) Minutes of 11 November 1991

> ...subject to three conditions being met within two years. This will require the Department to develop a research base, library resources to be enhanced and the appointment of staff with the appropriate qualifications.

In Chapter 3, I identified that high academic qualifications were part of the requirements of academia. High academic qualifications have not traditionally been required in polytechnics; what have been needed are appropriate trade qualifications and especially, substantial practical experience. Wells later told me that his staff were so committed to the requirements of degree teaching that 16 subsequently completed Masters degrees over the next seven years. However, several of our senior managers did not hold Masters degrees when I commenced this study in late 1992. Historically, the regimes of truth in technical education have valued practical over 'paper' qualifications predominantly.

What other influences affected the introduction of the Bachelor of Business Studies degree? The Polytechnic's statutory requirement to 'meet the needs of the local community', stated in our Charter, was one such influence, as was the pressure of competition opened up as part of the neo-liberal market forces thinking which is evident in aspects of the 1990 Education Amendment Act. (An example is that of polytechnics being able to offer degrees in competition with universities!)

Wells explained how the Society of Accountants, which 'had been through rocky patches of membership,' had had a discussion on a degree pre-requisite for membership as far back as 1961. While some members obtained their 'ticket' through a university degree, many had the polytechnic Diploma that also took four years to acquire. There was overseas pressure to have degrees as

the pre-requisite for membership of professional accounting bodies, and this affected the New Zealand organisation, as Wells indicated.

> When the *Learning for Life* reports were produced and it was indicated that degrees were possible, there was considerable discussion between the Society and polytechnics, and what are you people going to do because this will actually finally solve our problem, we can have a degree pre-requisite now and the polys were all saying, not all of them but most of them were saying, well we will go to a degree. And of course that created a problem that well if they all go, even if you were a little reluctant you had no option.
> *Me: So there is some outside pressure coming in there?*
> Yes, there was; from the Society of Accountants and other providers. There were going to be distinct problems for the institution...all of those providers knew that if the others all went ahead and they didn't in terms of offering a degree they were going to lose out.

The constraints and possibilities of a discourse of competition are well illustrated here. While the polytechnic itself was enabled to compete for degree candidates with the universities, providing possibilities, it was also constrained by the recognition that it would most likely lose students to other polytechnics if it chose not to offer a degree.

How common was the academic discourse of degree acceptance becoming within TWP following the introduction of the Business Studies qualification? Wells commented on the reactions of certain other HODs. This is perhaps a good place to look at the introduction of the next degree. He said,

> The message they left me with quite strongly was well we weren't particularly excited or interested but if you've got it then sure as hell you aren't going to be the only one.

(Perhaps not surprisingly, this reason was not among those stated by other HODs I interviewed, as an impetus for the introduction of degrees in their areas!)

Information Technology

Alison Young, HOD of the Information Technology department, was the next to submit a proposal to offer a degree. Her memo to the Academic Board was dated 28 February 1992. As with the Business Studies degree, pressure from industry but also from students was indicated. Young identified the reasons

for this degree proposal in her memo, relating her application to demand for a more practical qualification than she saw being provided in universities:

> This programme meets a demand, from both industry and students, for a business computing oriented degree *as opposed to* the programmes currently offered by New Zealand universities. It allows for multiple entry and exit points and will exist alongside the existing Certificate/Advanced Certificate and National Diploma in Business Computing. We envisage course approval and accreditation documentation being completed in draft form by May 1992 (emphasis mine).

Young's statement indicates a vocationally-oriented discourse affecting the development of this degree, oppositionally positioned against the academic discourses of the university. The last statement in Young's application proved a little optimistic; the degree development struck problems, among them the issue of staff credentials. In the Minutes of the QAC, 10 August 1992, point 3.0, it is noted:

> The qualifications of staff were questioned. It was noted that few staff have qualifications beyond the degree level. It was suggested that NZQA guidelines stress experience *and/or* qualifications [italics mine]. Experience is therefore important. Experience was validated by QAC members but it cannot take the place of qualifications.

This statement supports my earlier contention that practical experience has been valued in the discourses of vocational and technical education, and highlights the debate being stirred up by the expansion of academic discourses within the institution. There has been ongoing tension resulting from the situation in which teaching based on experience was considered adequate in the pre-degree polytechnic. However the situation has now changed, and 'paper qualifications', usually in the form of degrees, are now required in order for staff to teach on degree programmes. This has been the cause of considerable anxiety to staff in the institution, as my story about the interview with Joan, which launched me on this study, showed.

The Academic Board, exercising its monitoring and controlling function, did not recommend the forwarding of Information Technology's degree to NZQA until 4 May 1993 (Minutes). It then had to go to Council for approval, as

specified in Clauses 2 and 4 of Section 179 of the Education Amendment Act. In the Council Minutes of 27 July 1993, it was noted that

> It was agreed that Head of the Department of Information Technology, Alison Young, be invited to the next meeting of council to talk about the proposed Bachelor of Information Technology Degree.

Then, in the Council Minutes of 23 November that year,

> Mr Johnson advised that the Degree programme for the Bachelor of Information Technology had been approved, but the Polytechnic was still awaiting official advice from the NZQA.

Finally, the Principal noted in Council Minutes of 14 December 1993 that the department had been approved and accredited to offer a Bachelor of Information Technology.

In my interview with her in November of 1996, Young spelled out in more depth her understanding of the reasons for the degree's introduction. In response to my question about where the thrust for the degree had come from, she replied:

> The thrust came from three distinct places. The staff, the students and our local Advisory Committee, that's over ten industry people.

As with the Business Studies department, the Information Technology department was already running a degree level programme, in this case three years building on a seventh form year (this statement indicates that students were accepted on the programme only after having completed 13 years in the primary and secondary school system, or equivalent experience). As Young expressed it, 'We weren't moving *up* to a degree, we were moving *across* to a degree and that is an important thing.' Again, this comment reveals a perception that the knowledge being promoted on the existing programme was compatible with academic systems of knowledge; she was arguing that only the terminology and credentials issues were different.

> Young emphasised the students' pressure to offer a degree, as they had identified that their work level and the length of their programme was equivalent to that offered at university so 'shouldn't this be a degree?' Their feeling was reinforced by the Advisory Committee, saying

'You are already teaching at this level, your students are very very good, so why haven't they got a degree, an internationally portable qualification, rather than a national diploma?'

Evident here, as with the Business Studies degree, is the influence of overseas perceptions in the comment about international portability. Given the extent to which New Zealanders, especially young New Zealanders, are inclined to travel, this argument is potent and will be seen to have been influential with the Media Arts degree also.

Did Young find senior management instrumental in either introducing or supporting a degree in her department, contrary to Wells' experience? When I queried Young about the involvement of more senior management, her comment was, 'The thrust never came from them at all.' As with the Business Studies department degree, the Information Technology degree, according to Young, was resisted initially by senior management. She perceived that they felt the degree was being introduced because of pressure from staff, rather than from students and industry. Young, however, felt, as I indicated above, that the pressures were tripartite and fairly equal. Nevertheless, she recognised the high degree of staff support.

> 90% of them [the staff] were fairly enthusiastic. I have had a couple who have said, one who said I don't believe polytechs should teach degrees. This is a place for technicians and we should be teaching technicians, and we have been teaching technicians for the last 20 years and they make very good citizens. We should be teaching technicians for the next 20 years.

Here, again, differing perceptions regarding the place of degrees in polytechnics are evident, a common situation in New Zealand polytechnics (see Codling, 1997). Interestingly, as with Business Studies staff, a very high level of support for the expansion of academic practices within a polytechnic is expressed here, and I asked Young about the source of the resistance expressed by the couple of staff opposing the introduction of the degree. Her reply indicated an awareness of possible elitism that did not arise in the other HOD interviews. Young indicated that one staff member was very honest about his feelings that teaching at degree level was beyond his scope, while another was similarly overt about not supporting the degree concept at all.

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In an attempt to pro-actively resist the development of an elitist culture within the department, Young decided to encourage all her staff teaching on the degree, to teach across other programmes also.

> ...no staff member will teach exclusively in the degree. That was to break down the elitism of the degree, because our diploma students are as good as our degree students; they just don't have the breadth. But technically they are as good.

Young's comments reflect the discursive positioning of staff within the institution vis-à-vis a binary opposition of 'academic' and 'technical and vocational' discourses. As the degree development discussion so far illustrates, an academic discourse was already operational within the institution as far as the level of knowledge being promoted on many of the programmes was concerned. But the academic terminology of degrees, and the requirement to engage in research, confronted some staff with the increasing incursion of these discourses alongside those of technical and vocational education, and obviously contributed to the resistance expressed by some staff.

Their concern is not restricted to TWP. Sylvester, a Staff Developer at Manukau Polytechnic, had indicated that

> [A further] theme [to emerge from interviews of senior management staff at Manukau] related to the possibility of a dual culture developing. Lecturers in the degree programme may be working under a different set of conditions of service from staff teaching on other programmes and concern was expressed that an elitist group may result (Sylvester, 1993:22-23).

Also, parity of esteem across staff within polytechnics, regardless of qualifications, has in the past been considered a strength (Fargher 1985) and its possible erosion worried some staff. Tensions are usually apparent when discourses seem to conflict.

Young's concluding comments emphasised her perception that the department *must* move into the degree, reinforcing her previous comment about international pressure to do so. A clear academic discourse of the need for high qualifications is evident in her thinking, which recognises that the technical and vocational discourses, in her area at least, are in decline.

I think it is really wrong to say we have been teaching technicians for 20 years and we will carry on teaching them...If you look at international trends, and we *must* look at international trends, one of our philosophies of our degree is that we are training people for the global market...and international trends are for higher and higher qualifications. ...The trend is for more education and the trend is for degrees as the entry point to a profession. So we cannot lag behind that because we have been doing such a good job for the last 20 years.

Both the degrees I have discussed so far have been presented as separate developments, the result of each individual department's (relatively isolated) work. Considering overlaps between the curricula taught by Business Studies and Information Technology (e.g. business communication skills, computer use) this isolation seems incongruous. Some of their staff even teach on each other's programmes. Perhaps the failure to collaborate arose from a sense of competition for scarce resources? Wells' concluding comment (page 114) suggested a possibly tongue-in-cheek sense of competition between departments as being part of the reason why subsequent degrees were sought. Why were collaborative degrees not mooted for these first two accredited programmes? To understand this, Bernstein's schema is useful.

Bernstein's concept of classification (referring to the kinds of relationship existing between the contents of a curriculum) would seem to imply that if weak boundaries had pertained in the early 1990s at TWP, there could have been the possibility of a combined degree application submitted by Business Studies and Information Technology. I checked with Wells, HOD at the time of the degree's implementation, and he confirmed that no such proposal was suggested at the time. This situation is typical of what Bernstein suggested happens when boundaries are strong, when there is a collection knowledge code (tightly specified curriculum processes and content) rather than an integrated one ('where subjects are subordinate to some relational idea, which is the main focus of the educational enterprise' - Harker, 1984:259).

Wells has, however, subsequently formally recommended an alignment of the two degrees that would achieve the same purpose. In his 'Curriculum Development Contract' recommending the alignment of the Bachelors of Business Studies and Information Technology Wells (1997) suggested that 'There is also the potential to rationalise the relationship between these courses

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[certain courses in the B. Business Studies and B. Information Technology] and similar courses in the Bachelor of Media Arts at the same time.' The recommendations in Wells' Report reveal an openness to the possibility of at least common courses, if not the alignment of whole degrees. This would indicate a change in classification strength from strong boundaries operating at the beginning of the 1990s to weaker ones operating towards the close of the decade. Aspects of Wells' recommendations have subsequently been put in place, and others are scheduled to be actioned in 1999.

Media Arts

As the Information Technology degree was being developed, a further degree proposal was put to the Academic Board at its meeting on 3 March 1992, from the General Studies department. Unlike the previous two degrees, this application did try to link to existing programmes outside of General Studies. It proposed to develop a Communication Studies degree in consultation with other departments, including Information Technology, Business Studies and Design departments. Unfortunately, it was to be unsuccessful in the form originally suggested.

General Studies had been teaching communication skills to students across polytechnic departments for many years, a practice compatible with Bernsteinian weak boundaries and integrated codes, although it was the only department besides Education Services (where my unit was based) to have such broad cross-polytechnic responsibilities. (There was some collaboration between Science and Nursing over the teaching of mathematics, but nothing as cross-departmental as the communications teaching). The development of this degree was proposed to fit in with NZQA's

> ...preference for interdisciplinary "umbrella" degrees rather than "fortress" degrees; a belief that principles should be general and broad-based, and that ... communications theory provides an integrating theory base for the related disciplines of organisation, mass, business and interpersonal communication (Academic Board Minutes, 3/3/92, point 2.4).

Subsequent to this initial application for degree approval, however, the General Studies department was restructured as the Department of Design and Communication, with some sectors moving across into a new Community and Continuing Education department – see organisational chart, Chapter 2, page 36. This restructuring obviously slowed down the development of the degree.

I interviewed Desna Jury, then Head of School, who was Head of the Department of Design when the degree was first mooted. Jury was quoted in the Minutes of the Academic Board, 30 March 1993, where the restructured Department of Design and Communication proposed offering one degree with several alternative 'majors' – a situation that indicates weak boundaries between curriculum contents and that would have made a lot of sense with the previous two degrees approved.

> D. Jury stated that the Bachelor in Communication and Bachelor in Design may be combined to become a Bachelor of Media Arts.

In the Quality Assurance Committee Minutes of 28 May 1993, a Diploma in Media Arts, Communication and Music was approved, with the note that 'This Diploma is to be incorporated into a degree (Bachelor of Media Arts) over the next 2 years.'

Whereas the degrees in Business Studies and Information Technology received strong impetus from their HODs - Jury commented in our interview that 'he [Paul Wells] had the vision and could see that's what needed to happen' - in her case,

> We weren't that convinced that degree qualifications were entirely what was required..I suppose we became convinced as we got the thing together and we realised we were pitching it to degree level.

This lack of enthusiasm at senior managerial level for degrees was not uncommon; in the Auaki (major institutional self-study) of 1993 two managers are quoted as saying "Stop aspiring to be a university" (Auaki, 1993:no page number). The parallel with Young's and Wells' thinking, however, came with the belief that Design tutors were already teaching at degree level and doing so, well. Again, belief that an academic 'level of knowledge' was already being

taught at the polytechnic is evident here. Interestingly, Jury commented on other aspects of academic discourse that were not then apparent at TWP:

> We always thought we taught to equivalent levels in lots of areas and so the meaning of the degree and all the trappings and ramifications in terms of ceremonies and institutional culture and all those aspects have never really been dealt with here. People have argued about them and resisted them but in terms of level, we always thought we were teaching to a higher level anyway.

Discourses of competition and the influence of overseas pressures were expressed in Jury's interview, as they had been with Wells' and Young's.

> Students started to say to us they wanted to study at overseas institutions but they couldn't go over there because it was much more common for degrees to be offered outside.
> *Me: It was a pre-requisite?*
> Yes, so we had internal pressure from our own students developing but all the competition had converted so we thought we have to do it.

Combined here are the students' need for a degree that was seen as a portable qualification internationally, and the element of competition for the polytechnic.

> Everyone else had converted to degrees, the people that we thought were our competition...so we were surrounded by all the competition in the visual arts being converted to degrees.
> *Me: Was there a fear of you being left behind?*
> There definitely was. We knew that students would be - students might still come here; we would still get our students, but they wouldn't get jobs because the baseline in getting jobs would become a degree.

No reference was made by Jury to industry pressures, beyond those felt by the students.

However, in response to my query during our interview, Jury commented on pressure from the Ministry of Education with regard to the introduction of degrees and their subsequent monitoring.   Her comments support the perception that permitting polytechnics to offer degrees was a conscious attempt by Ministry and government officials to provide competition to the universities.

> There is clearly Ministry intent and I think it is also fair to say that we are all aware of that.

Me: Tell me a bit more about the intent.

Well, they made policy changes, we knew that, but they have given us those rights and it seems to me that all the systems are set up in our favour. For example, I have been on accreditation panels in other institutions and it is quite hard to miss out on accreditation. The Vice Chancellors' Committee knew this, and that is why they are so resistant to it. So in my view all of the policies and the way it is set up through the New Zealand Qualifications Authority - I mean, this is a personal opinion - but it seems to me that the structures and the mechanisms indicated underlying intent that there will be change and that we will give competition.

This encouragement to competition was definitely indicated in government policy documents and reports from 1987 onwards.

While I had recognised this intention through my perusal of official policy documents and academic critiques of these, I was surprised at aspects of Jury's comments above, which seemed to me to imply that polytechnic degrees could be approved on less rigorous standards than those of universities. She vehemently denied this.

There is no way that a university ever has to match the kinds of processes and quality assurance mechanisms that we do, in my view. And I know about university experiences and I know about my own experiences at university, and I just know ... I have sat on a Masters accreditation at AIT and I know that the mechanisms that they have been required to put in place, and the training that they will give their staff, will be far beyond that which is delivered at Masters level at most universities in New Zealand. So I feel absolutely comfortable about the fact that it is rigorous but it is weighted in our favour.

This perception is not just Jury's. Hinchcliff, CEO at Auckland Technical Institute for many years, made the same comment, reflecting on his experience of such accrediting panels. 'Each panel has had at least two university representatives and often they have commented that it is fortunate universities have not had to endure such rigorous examination' (Hinchcliff:1997:152).

As I had done with Young and Wells, I checked with Jury the degree to which she perceived that senior management had been supportive of the change to degree granting in her department.

I would say we had resistance within our organisation from our Executive to do degrees. I mean, to some extent we still have.

Jury's comments reinforce a perception that at senior management level the discourses of vocational and technical education still prevailed over those of academia, although HOD comments have revealed that both they and the bulk of their staff saw things differently.

> The culture was actually anti-degree. They were forced into the Business Studies degree because there were no other options [or, as Wells' comments showed, the polytechnic would have lost its accountancy courses] and they had such a squeeze on the timeframe that they had to take the decision. I don't think they could afford to think too hard about doing it. So there was a set perspective on that, but then when the other degrees came along, like the Information Technology degree - it endured a very tortuous path. I think that was the next one.

The difficulties that the Information Technology degree experienced can be seen from the time that elapsed since its first formal application (February 1992) until its final approval by the institution (November 1993). In response to a query about staff support for the degree, Jury replied

> In the visual arts I wouldn't put it in those terms of for or against. It was, more that all the staff knew that to take this step and make those decisions meant they would have to upgrade their own qualifications....in communication that was no problem because most of the people had Masters degrees. But in the visual arts nearly everybody needed to work very hard; they all had Bachelors degrees but Masters degrees in the visual arts haven't been available in this country.

This issue of staff being required to upgrade their credentials in order to teach on degree programmes, was to cause problems in the development of a research culture, discussed further in Chapter 5 – the Research Committee was nervous about funding 'qualifications upgrades'.

In the meantime, despite their initial skepticism about introducing a degree, Jury and her staff put forward a proposal that attracted commendation. The Quality Assurance Committee Minutes of 14 February 1995 noted that

> Eugene [Crotty] asked that Desna and Lisa [Grocott] convey to the people involved in the development of the Degree, the Committee's commendation for their efforts to date in this massive undertaking.

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In its Minutes of 6 April 1995 the Committee recommended that the Degree in Media Arts be approved by the Academic Board so that it could be forwarded to NZQA for approval and accreditation. In the Principal's Report to Council covering the period 22 September to 24 October 1995 it was noted that the Bachelor of Media Arts degree had had its NZQA accreditation panel visit at the end of September. Unofficial approval for the three year degree had been received, with the Report of 23 February to 21 March 1996 noting that NZQA had approved the Bachelor of Media Arts degree. Despite its initial cross-departmental emphasis, however, this degree remains one that is accessed only by students from the Departments of Communications and Media Arts (separated from being one department in 1998).

Nursing and Midwifery

With three degrees having already been approved by 1996, how widespread was acceptance of 'academic' discourse within the Polytechnic? Two more degrees were under negotiation. Simultaneously with the development of the degree in Media Arts, degrees were being developed in Nursing, and in Midwifery. Strong pressure for the introduction of these degrees was evident from industry and competition from other polytechnics. Rose McEldowney, HOD Nursing and Health Studies, explained that programmes for other health professionals such as those in occupational therapy, physiotherapy, pharmacy and counselling had gone to degree level in the late 1980s. Therefore, 'nursing and midwifery really needed to sit alongside their colleagues in the health profession at the same level otherwise we would be disadvantaged.'

Much of my interview with McEldowney revolved around issues of whose ways of knowing will be recognised in the changing discourses of nursing and midwifery practice. She mentioned a unique perspective, different from the pragmatic arguments of industry and student pressure, academic equivalencies, and competition with other institutions that the previous HODs had mentioned. This was the philosophical basis for the upgrading of nursing qualifications:

> We are talking about credentialling but it is also about development of power, stronger professional identity and the extended scope of practice for the expanded role of nurses that we have got now.

McEldowney stated that nurses and midwives today need more in-depth and complex knowledge than in the past. This is because, under the Nurses' Amendment Act, 1990, midwives could practice autonomously outside the jurisdiction of the medical practitioners, and legislation to permit nurses to prescribe autonomously was being mooted. Our discussion also raised the issue of resistance from the established medical profession, one part of 'industry' as far as this department is concerned, based on differing systems of knowledge. According to McEldowney (see also Papps and Olssen, 1997) independent midwives are

> ...a threat because the knowledge has developed in another way. Women are reclaiming their rights and so therefore they are not calling the doctor, who misses out on the medical services benefit which was a nice little number. There is no doubt about it that they got money for nothing.

McEldowney indicated that the doctors had resisted the Bachelor of Midwifery degree more than the Nursing degree 'because we [i.e. nurses who are not midwives] stand outside of them. They are more resistant to midwifery because it actually involves them quite closely.' I asked whether the midwives' threat to doctors was on purely economic grounds, rather than professional. 'It was both, it is power of knowledge *and* economic.' Doctor resistance resulted in responses such as those McEldowney described later:

> The doctors use scare tactics and say if you have a midwife you know you could lose your baby, you should come under me – "I know everything." It does happen, and that is where it is scary. But those are the sort of games that they are into. The midwives have to stand firm so our programme is there to support them to become autonomous and be able to handle those sorts of things.

Considering the threat to established maternity/obstetric interests which the degree in Midwifery posed, it is perhaps not surprising that there were external delays to the approval of TWP's Midwifery degree. It was first mooted in February, 1994, along with the Bachelor of Nursing, and approved by TWP's Academic Board in its Minutes of 8 March 1994. Council Minutes of 28 June 1994 noted that NZQA would be visiting the Polytechnic from 28 June to 1 July

for the accreditation of the degrees in Nursing and Midwifery. However in its next Minutes, 26 July 1994,

> Mr Peart [Chair] advised that he had just received a letter from the NZ College of Midwives, dated 26 July 1994, expressing concern over the proposal to defer the Bachelor in Midwifery to 1996. A letter was also received from the Associate Minister of Health.

No reason is noted in the Minutes for this deferral. The next relevant comment is from the Council Minutes of 23 August 1994.

> Resolved: That the Bachelor of Midwifery be added to the bottom of the priority list of new programmes/courses for 1995 in the objectives in the Polytechnic's 1995-6 strategic plan, and that the polytechnic bid for an extra 18 EFTS to accommodate this programme.

Subsequent comment from the Principal in the Council Minutes of 27 September 1994 may throw light on the possible reason for the deferral.

> The Ministry of Education had advised that they would not be able to provide EFTS funding for the B. Midwifery programme in 1995. At the present time three [later corrected by McEldowney, who said two] polytechnics in New Zealand are allowed to run Midwifery Degree programmes as part of a pilot programme. This pilot programme is due to be reviewed in 1995 by the Minister of Health. Mr Ritchie expressed concern that if the Minister of Health and the Minister of Education are making decisions about where Midwifery degrees are to be that this Polytechnic does not miss out. Mr Johnson said that he would be protesting the decision and endeavouring to have the Degree reinstated by the Ministry [McEldowney later corrected this: should have read 'approved by the Minister of Health']. Members agreed that if the Principal does not succeed in his endeavour then the Emergency Committee will meet and decide on what further actions will be taken.

There are a variety of discursive influences expressed in this comment. Apparent is the extent to which, despite their rhetoric of local autonomy, the Ministry was still controlling what local polytechnics could do. Also apparent is concern about the loss of student enrolments to competing polytechnics, which were favoured by the Ministry through being part of the pilot programmes. Less obvious, but hinted at, is a tussle between the Ministries of Education and Health over the location of Midwifery training. McEldowney commented on dispute between these two Ministries later in the interview. She indicated that while the

Ministry of Health supported the strong bicultural emphasis in Nursing and Midwifery programmes (see Murchie & Spoonley, 1995), the Ministry of Education resisted this. It is impossible to tell from the literature available, but if McEldowney's identification of medical resistance is accurate, then competing systems of knowledge are also involved in this whole debate over curriculum content, programme location, and credentialling.

This speculation is given weight when one considers that whereas the Bachelor of Nursing, prepared by the same group and with the same resource availability that the Bachelor in Midwifery offered (though obviously staffing might be different), was approved at the end of 1994, the Bachelor of Midwifery was not approved to run at TWP until later in 1995.[11] The difficulties experienced are perhaps not surprising considering the extensive analysis of historical practices surrounding childbirth and midwifery in New Zealand, carried out by Elaine Papps as an M. Ed dissertation and subsequently written up by her supervisor, Mark Olssen, and herself in 1997 using a Foucauldian analysis. They claim that:

> What is really at issue in the regulation of midwifery and childbirth practices is a *struggle for the control of childbirth*. The key players in this struggle are midwives, medical practitioners, nurses, women, men and various officials of the state apparatus (Papps & Olssen, 1997:17).

The Waikato Polytechnic's experience in the introduction of the Midwifery degree, therefore, is not surprising in the light of the contestation surrounding this area of knowledge.

It might sound from the preceding discussion as though most of the resistance to the Midwifery degree, at least, was external. But not all nursing and health studies staff within the Polytechnic itself welcomed the introduction of degrees. The staff of this department exhibited by far the highest level of resistance of the four departments surveyed for this study. Where Business Studies and Information Technology staff had been overwhelmingly in favour of degree introduction, and Media Arts staff had supported it while some expressed

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[11] McEldowney clarified this statement. She said that both degrees were approved by NZQA in 1994, but commencement of the Bachelor of Midwifery was deferred until the Ministry of Health extended its approval from the two existing 'pilot' programmes at Otago and AIT. This approval

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concern over the credentials upgrades required, Nursing and Health Studies staff were almost equally divided over the issue. McEldowney indicated that she as HOD was prepared to 'coast' on degree introduction initially, saying

> I came here and knew that Waikato wanted to move to that, so I said we are not going to do anything for at least a year. We will sit and wait and see what happens.

McEldowney recognised that her staff 'were nowhere near ready to lead into a degree programme I didn't think, and that was another reason why I waited.' She also waited because there were then two polytechnics who had had four year nursing degrees approved, while Otago Polytechnic had opted for a three year one. UNITEC was approved for a three year degree the year after Otago, and at that point McEldowney surveyed her peers at these four institutions, all of whom recommended going for a three year degree.

The Ministry ultimately restricted options, using its power of the purse, and deciding the matter on economic rather than pedagogical grounds. 'The Ministry very quickly caught on to it and said if you can do it in three then it will be three thank you.' McEldowney conceptualised 'New Right' discourse as driving the decisions.

> I think they are just totally economically driven....Fundamentally, it is an economically driven system and we know where that is coming from. Look at the New Right ideology and Treasury etc - it was all predicted anyway.

While McEldowney was supportive of the introduction of degrees once a three year degree was possible, her staff were not so positive.

> *Me: You have over 40 staff here; what proportion of the staff were actively anti degrees?*
> Well, it comes out in various ways so it is hard to tell really. A lot of people have moved....I suppose you might say about half, at the time.
> *Me: Gee, that much!*
> In various ways, resisting the changes that were going on, wanting to go back.

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was contingent on a review of these programmes. Once this was complete, the Minister gave her approval for the Bachelor of Midwifery to run at TWP also.

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Me: Thinking that you were buying into credentialling, or fear of a new environment?

The fear of change, and that is one of the critical things.

This fear of change is identified in the literature on changing a research culture (Chapters 5 and 6) and is the first time an HOD had identified this specifically as a problem for staff.

However, there was one area of resistance that Young's and McEldowney's staff both expressed, and that was remaining wedded to purely technical and vocational discourses when developments indicated that others were called for. In the same way that Young indicated that the good work done for the last 20 years was insufficient reason to limit future directions, McEldowney refused to accept resistance to change as a reason not to engage in degree study, from either staff or students.

> "We are quite happy here and we know what we are doing"...[but] the world has moved on. Whether you like it or not we all have reactions to it. It is a very complex situation, so the knowledge level is more complex and that is why we think, you know, it really has to be at a higher level in order to prepare yourself for the future. And we know that nurses are going to be the health professionals of the future.

Like Jury, McEldowney indicated the need for her staff to upgrade their qualifications for the new environment, but at their own pace. While recognising the normalising credentialling requirements incumbent on staff teaching on degree programmes, McEldowney tried to soften the impact of this requirement, at least in terms of time pressures.

> In some departments the HODs said to the staff, you must have your own undergraduate degrees finished by this time. Well, I haven't actually pushed people beyond what they want to do. I have left it to a certain extent, and they have chosen for themselves when they finish. Because there is no doubt about it; you can't teach in a programme unless you have got your own undergraduate degree out of the way and are thinking in another way.

Credentialling as an example of the intrusion of academic discourse was becoming, without a doubt, a feature of the polytechnic's life for both staff and students. McEldowney herself enrolled in doctoral study in 1996, having to do

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this work on top of her job as HOD of a very large department, although for 1999 she sought and received unpaid leave of absence to continue her studies in Wellington. Faced with the decision to offer degrees, the polytechnic was going to need to decide whether or how to support credentials upgrades as part of its developing research culture. This was to prove highly contested territory.

While student pressure does not seem to be a factor in the introduction of degrees from McEldowney's perspective - unlike with the other three degrees I have considered - McEldowney quoted students as warm in their praise of the degree now it is in place.

> It is an exciting programme and the students, it was really good yesterday [when the NZQA panel visited] because the students told NZQA that they found it a very exciting dynamic programme, that they really thought that what they were learning was absolutely amazing, it blew them away. And that is justified, because it *is* an amazing programme.

I would have liked to check McEldowney's perception of the students' reactions from the NZQA monitor's report, in which such feedback is noted. However I am not permitted to access these reports for reasons of commercial sensitivity (see page 55, Chapter 2).

In my interviews with the other three HODs I had asked about their perception of senior management support for the degree programmes. McEldowney's opinion corroborated theirs – she felt that the executive was not in favour of degrees in general. She attributed this to the largely trades-oriented background of the executive staff, a not unreasonable attribution given the comments of grass-roots trades tutors about degrees in polytechnics (see foundation staff interviews). 'Resistance came from a mindset that polytechnics were about vocational training, not giving degrees'.

Both degrees were eventually approved. At this point, McEldowney indicated that there *was* reasonably substantial support received subsequently from within the institution. 'In 1995 we were given $20,000 to support degree development' which enabled the Department to buy a curriculum from Otago Polytechnic in order to prevent a proliferation of different Nursing degrees around the country. McEldowney indicated, too, that because of rapid work, lecture theatres were made ready in time for degree teaching to commence. So

once the initial internal resistance was overcome, support for the Nursing and Midwifery degrees was forthcoming.

CONCLUSION

What effect have the policies of the 1990s had on The Waikato Polytechnic and its staff? As this chapter has demonstrated, government requirements have imposed a variety of normalising and scrutinising functions on the organisation. We now have an Academic Board, a Research Committee and a Quality Assurance Committee which control, scrutinise and specify how programmes are offered at TWP. But local and individual initiative has also been apparent in our changing context, through the actions of specific intellectuals such as Judd and the HODs of the degree-granting departments described in this chapter. Our first five degrees have formed the case study material for this chapter, although degrees in Sports Science and in Music Performance have since been approved (outside the period under study).

The discourses of academic and of technical and vocational education are becoming increasingly inter-related in the 1990s. My analysis of how degrees came to be introduced at TWP has shown that discourses of academia already existed in terms of the level of material taught, if not in the more esoteric practices of formally-advertised research and of the language of credentials granted. Hinchcliff observed that the same inter-relationship is affecting universities in the 1990s also:

> Interestingly, because New Zealand universities have sought to maximise their numbers to achieve the economies of scale, they have increased their roll by providing more programmes, which are required by students. Increasingly, these are in the vocational areas. As a consequence, as suggested earlier, Massey University has been referred to by at least one traditional academic as New Zealand's 'biggest polytechnic' because so many of their programmes are vocational, integrating theory and practice for future professionals (Hinchcliff, 1997:346 – 7).

Perhaps what the 1990s developments have suggested is that the historical emphases on academic discourse at universities and on technical and vocational discourse at polytechnics are becoming increasingly blurred.

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I have demonstrated in the past two chapters how I have striven to understand my context, in which I, as a specific intellectual, have introduced a form of research that I contend combines the research discourses of academia with the practical teaching discourses of technical and vocational education. The introduction of degrees into our institution made mandatory for many of our staff involvement in the research that had previously been the practice of a very few staff members. In the next two chapters I demonstrate how I have explored the work of others, as well as my own work, in helping to establish a research culture where one has previously been minimal.

"Within organisations, norms and expectations develop that make the exercise of power accepted and expected. Investigation into the development of such normalising discourses is central to Foucauldian inspired research into the institutionalisation of power" (Kearins, 1997:6).

INTRODUCTION

This chapter investigates how the institutionalisation of power with regard to research has developed at TWP and elsewhere. Research cultures are not 'born', they are 'made'. It is a foolish gardener who throws seeds into an unprepared soil, provides no nutrients, and trusts that the resultant plant will grow strong, healthy and well shaped. A research culture is like the plant. The plant needs to be compatible with the soil and location into which it is planted; the soil into which it is planted needs to be well tilled and fertilised; during its formative stages it may need to be staked and pruned; it will need regular watering. The previous two chapters have described the 'soil and location'; this chapter and the next seek to examine the tilling, fertilising, staking, pruning and watering necessary for a healthy research culture to flourish. My second research question, therefore, asks: "How can an institution such as ours, faced with the requirement to engage in research, develop a research culture?"

I had been working in the institution for six years by the time we were legally required to develop a research culture. My position as a staff developer provided me with the space legitimately to work in the area of developing research skills. My appointment as a staff representative on the Research Committee meant that I was well placed to observe the initial development of our research culture, and to contribute to that.

My thinking early on was coloured by the tenets of critical pedagogy. McWilliam identified as fundamental to this approach a conviction that 'schooling for self and social empowerment is ethically prior to a mastery of technical skills'. She claimed that it operates from a social justice agenda which challenges 'liberal democratic emphases on individualism and the autonomy of rational conscious selves whose actions and decisions originate with themselves' (McWilliam, 1994:57). This approach is obviously antithetical to one in which the discourses of education are reduced to producing certain kinds of individuals

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needed by a country's economy. Rather, it emphasises the development of each individual's potential as a way of transforming society, rather than for the selfish ends McWilliam identified in the liberal tradition. Initially, then, this critical pedagogy felt appropriate to me as a motivator for my work in introducing a potentially emancipatory research approach as part of our developing research culture.

However as she moved from a critical perspective to a feminist post-positivist one in her own work as a teacher educator, McWilliam's writing, among other work I have studied (e.g. Ellsworth, 1989; Fraser, 1989; Lather, 1991; Luke & Gore, 1992; Middleton, 1993) challenged me to reconsider possibilities. Where critical approaches 'try to find a site outside the domain of power from which to attack its effects and excesses', the writing of the above women and of Foucault directed me to an examination of 'the structural flaws and unexpected crevices within a particular power-knowledge dynamic'(Ransom, 1997:25). In other words, rather than seeing power as something imposed by external bodies and individuals that attempt to coerce people in oppressive ways which should be resisted, a Foucauldian perspective leads one to analyse the *workings* of power and how one is complicit in the systems in which power operates. Such an analysis can yield possibilities for action, 'flaws and crevices' in power-knowledge dynamics which give room for specific intellectuals to work self-critically in order to improve practice in their own contexts. This shift in perspective was more appropriate for me, given my complicity in the systems I was critiqueing.

Further, Foucault 'shows institutions executing social norms through means of exclusion and internment. Employed systematically, such means inculcate norms which facilitate control. They, and the disciplines which support them, are instruments of power' (Kearins, 1997:10). In this chapter, I want to investigate whose knowledge is included and whose excluded in the developing discourses of research at TWP; who benefits, and who is disadvantaged by this inclusion and exclusion. How have such 'instruments of power' been developed and exercised at TWP? And what part have I played in this development?

The questions that this chapter will consider emerge from a more varied theoretical perspective, therefore, than I held at the commencement of the study.

Building on the historical analysis of the development of our polytechnic in Chapters 3 and 4, I shall consider what *is* a research culture? As Harvey (1997:182) puts it, 'Any discussion on building a research culture in the New Zealand polytechnics needs to acknowledge where we have come from and how vast the change in culture is from less than ten, perhaps as few as five years ago' (see also Beverland & Bretherton, 1997). That acknowledgement was given in the previous two chapters – 'identifying the soil' for the new research 'plant'. This chapter moves forward to consider how TWP actually went about the planting and watering process; it uses internal records, the writing of TWP staff and of other investigators of research culture in New Zealand and elsewhere to illuminate the story. I draw particularly heavily on the work of Robin Hill, research leader for the Business Studies department at TWP, since he has also written extensively about our research culture.

Who determines what will constitute appropriate research in a given institution, and what power do they use in this determination? What knowledges are included, excluded, overlooked, repressed and marginalised by these definitions of appropriate research? How/can individuals working in institutions use their own power to ensure that the developing research culture represents *their* values, *their* interests, *their* ways of knowing? Finally, what strategies can an institution like ours use in assisting the development of a research culture? Foucault's power/knowledge concepts were of critical importance in this investigation.

THE POWER OF DEFINITION

There is a huge literature, particularly within the disciplines of sociology and anthropology, devoted to investigating culture and the ways that culture shapes, supports and constrains people's thinking. A more limited investigation of culture is appropriate here, since it is research cultures that this thesis investigates, not the sum of ways in which culture impinges on everyday lives. With this restriction in mind, a useful general definition is that provided by Kilmann (1991:48). Culture, said Kilmann, is comprised of 'shared values, beliefs, expectations, attitudes, assumptions and norms'. Beverland and Bretherton, quoting Schein (1992), said, 'Culture can best be described as

'values in action' and is embodied by the whole organisation, not just a few key individuals' (1997:5). A research culture, then, may be described as shared values, beliefs, attitudes and norms affecting the carrying out of research tasks in an institution such as ours. Hill, quoting Robbins, Waters-Marsh, Cacciope and Millet (1994), described a research culture as 'a common perception about research held by the organisation's members; a system of shared meaning about research' (Hill, 1997:1).

Culture is expressed through practices and statements - through the way people act and the way they express themselves. Polk, working from a nursing background, examined the components essential to the development of a research culture and concluded that these are (1) knowledge, (2) values, beliefs and norms and (3) material artefacts. Hill, drawing on Polk's work, explained:

> The knowledge comes in the form of individual research skills and experience. The values and norms become embedded in concepts of motivation and support. The material artefacts constitute the facilities and tools for research (Hill, 1993:4).

Polk described the steps she took to introduce a research culture within a clinical setting

> ...as occurring in three phases: a "birthing phase" involving orientation and the introduction of research tools, a "bonding phase" when each unit developed their research agenda, and finally, a "stabilisation phase" when rewards and sanctions were established (quoted in Bazeley, 1994:122; see also Polk, 1989).

Polk's use of language is interesting here; she deliberately used analogies that would resonate with nurses in her work. Like me, she was attempting to build from the known and familiar and to link that to the emergent research requirements. Her attempt is similar to my linking of research with existing discourses of reflective practice in teaching (see also Hill, 1997).

A research culture within an institution, then, may be summarised as the knowledge about research topics and processes which are sanctioned as appropriate; the values, beliefs, attitudes and norms which surround the research process within the institution; and the various material ways in which the institution supports or denies support to its researching individuals and groups. Some institutions about whose research cultures I have read attempt to specify

knowledge of research via a power of definition, initially. My evidence for this statement was the receipt from six other polytechnics of early research policies, and analysis of these policies (work carried out for the Research Committee, 1992, but not formally published). TWP was no exception. Values, beliefs and norms tend to exist already within the institution. That is why Polk attempted to link her terminology in introducing a research culture among nurses, to language and ways of understanding with which they were already familiar. It is why I have attempted to link research to existing teaching strategies. As Harvey (1997:191) recommended, 'research enhancing activities should work from where staff are, not where they ought to be in an ideal world.'

New values, beliefs and norms about research develop as individuals and groups attempt to carry out research projects and to 'push the boundaries' of what the institution has previously approved. My attempt to use action research to transcend the strong boundaries (Bernstein, 1975) of departmental knowledges is one such attempt to 'push the boundaries' at TWP. While Wells' (1997) work to realign the two degrees of different departments is an example of working towards weaker boundaries also, it is fair to say that TWP is still dominated by strong boundaries overall – curriculum contents are tightly prescribed, particularly since the introduction of Unit Standards in the NZQA Framework. There is less rigidity in the framing – the way subjects are taught. Tutors in such diverse areas as Office Technology and Agriculture, for example, have adopted 'accelerated learning' strategies such as the use of music to facilitate learning (e.g. Gardner, 1983) following their attendance at the PDU's course on accelerating learning.

Theory and history

To develop and nurture a research culture, the power of definition is a critical issue. Tripp (1995:2) commented that definition 'is precisely the process used by academics to exclude teachers from participation in the generation of knowledge about their own profession'. However, 'because definitions are dangerous does not mean that we should never use them; rather that we should be cautious in their construction and use.' As the location and soil for a new plant needs to be compatible with the nature of that plant, so the kinds of research knowledge recognised in formal definitions of research need to be

compatible with the historical development and ways of knowing and practising of the institution (Codling, 1997; Hill, 1997). That is why it is crucial to understand these ways of knowing and practising, the discourses of vocational and technical education and the increasing academic discourse affecting a polytechnic, when one is working to help develop its research culture. My awareness of some of the ways that Maori have been disadvantaged in the education system in the past (Ferguson, 1991; 1992) meant that I was particularly interested in working for inclusive, not exclusive, definitions of research at TWP. Decisions on research definition are a power/knowledge issue.

In his analysis of the workings of power and knowledge, Foucault conceptualised these two concepts as linked, but not causally. He described knowledge and power as interrelated and unable to be separated; suggesting that there is no power relation without a correlated field of knowledge. Knowledge, likewise, presupposes and constitutes power relations (Foucault, 1980b). But within this linkage there are possibilities. Ransom remarked that:

> ..instead of describing an omnipotent form of power with an unbreakable hold on our subjective states, the "power-knowledge" sign marks a kind of weakness in the construction of modern power. An unnoticed consequence of Foucault's observations on the relation between knowledge and power is the *increased importance of knowledge* [italics mine]. If power and knowledge are intertwined, it follows that one way to understand power - potentially to destabilize it or change its focus - is to take a firm hold on the knowledge that is right there at the center of its operations (Ransom, 1997:23).

It follows from this observation by Ransom that the aspect of culture which Polk and Hill noted - that of knowledge - is of critical importance in the application of Foucault's theory to our context at TWP. Accordingly, the definitions of research that the institution adopted were to prove vital in providing me with a way of 'changing the focus' of power within the institution.

There were real possibilities for exercising my power at a time when the culture was nascent, when 'official' ways of knowing which could be repressive of those of practising teachers, had not yet become established. I needed to ensure that definitions were adopted which made space also for 'other' ways of knowing, other knowledges than the traditional natural scientific, positivist one which had dominated the type of formal research carried out in the institution

prior to the introduction of degrees (see, for example, Kirman, 1989), to be valued.

My position as staff representative on the Research Committee, the body charged with definition of appropriate research knowledge, enabled me to exercise power in this situation. One of the 'other ways of knowing' which I wanted to make space for was the experience and wisdom of practising teachers. As Kincheloe (1991) has argued, much of the research that has been done 'on' teachers has been based on the principles of natural science (positivism – see Chapter 2, page 40) in ways which have disempowered teachers and overlooked their experience as practitioners. I wanted to avoid this disempowerment in my institution, by ensuring that research into teaching *practice* was considered as appropriate, and valued as much as research into *content* areas.

An examination of a case study of how positivism has sometimes disempowered others may help to illustrate my argument here. Its underlying principles were described by Papps and Olssen, speaking of the natural science methods of medical research and training, (1997:139) as follows.

> Such a view of knowledge perceives science as the search for objective facts or context-free laws which exist in the world independently of the observer and account for patterns of all world phenomena. Knowledge gained as a result of scientific endeavour is, therefore, seen to be essentially value-free and neutral as regards the issues of power and control.

The dominance of this discourse in what counts as acceptable knowledge in the discourses of health led to the situation described by Papps and Olssen in which men (predominantly), trained in the traditions of the natural sciences, were able to take over the roles previously held by practising women midwives. They were able to change - through the use of a model of medical intervention - into a 'health problem', a midwifery discourse which was previously influenced mainly by women, assisting other women with a natural bodily function.

The midwives were disempowered because 'official' ways of knowing were developed, and legal sanctions gained for these, which ran counter to practitioners' ways of knowing. The authors described this discourse change as resulting from 'a series of incompatibilities deep within the structure of an enlightenment culture' concerning such questions as 'who should control

knowledge' and around 'incompatibilities which centre ultimately on the ability of a society to tolerate different approaches to knowledge and different structures of control'(ibid., 138).

I wanted to avoid such unnecessary incompatibilities emerging in our research culture development, and encourage tolerance of different approaches to knowledge and different structures of control – a diversity of discourses within our research culture. The ways of knowing of teachers, demonstrated through reflective practice, needed to be officially recognised as valid research knowledge, in order to avoid the disempowerment that the midwives faced. This could be done by ensuring that the methods of the natural sciences, requiring what Dorothy Smith (1987, quoted in Middleton, 1993:17) referred to as "the suppression of the personal", were not the only form of research knowledge and practice that our organisation approved. As should be clear by the end of this study, my belief is that effective teaching relies on reflexivity and self-critique, not on objectivity and the suppression of personal reflection. Openness to other 'ways of knowing' (Belenky et al, 1986) would also position TWP's research culture to accept and value Maori research methods.

Lather has argued that 'To put into categories is an act of power' (1991:125). I want to collapse the categories, to resist the dichotomous thinking that would position research and teaching as being different. It was important, therefore, that broad definitions of research be adopted within the institution that allowed for *both* reflexive and positivist methods of research to be carried out. There is obviously a place for both. Positivist methods had dominated the little research done in the institution prior to the introduction of degrees (appropriately, being mainly carried out in the Science department). The reflective practice and experimental development work done elsewhere were frequently not identified by the institution or the research practitioners themselves, as research. If they did identify it as research, as two foundation staff members did, they did not publicise it.

Interviews conducted with the foundation staff revealed the conflicted nature of attitudes to research in a teaching institution among this group of men. Ron saw teaching and research as separate activities:

> If you've got a project that you want to research, well then you should divorce yourself from [your] job for twelve months, two years, to do that research.
>
> *Me: so you can't see the two going simultaneously, even with a lower teaching load?*
>
> Not really....I think where our research comes from, is from industry.

However Joe, in the same department as Ron, identified his own reflective practice as research, answering in response to my question about research being done at TWP:

> When I do something, I think well, if I can improve on that...and I keep hammering at it.

Joe is one of our 'secret' researchers, who shares a lot with me about what he researches but is reluctant to put his work in the public domain. His explanation for this reticence was:

> Well, when does the research finish?..... I've never got it to the stage where I'm happy with it.

Joe's ad hoc research had produced a very innovative piece of safety equipment that his doctor tried to encourage him to publicise.

> I showed it to my doctor, he was absolutely thrilled, he bought a couple. He said, you should put that in the medical journal. I'm sure it would take off.

The conflicted perceptions of what research is and the degree to which it has been carried out at TWP were duplicated in my interviews with Bill and Harry, both in the same department (which is different from Ron and Joe's).

> Bill: I don't think that any of the tutors, not in our area, felt that research was part of our mission, really...I don't think we're sort of into research at all. There are research organisations which are funded for that purpose; we don't have to do that.

Harry, however, perceived his own work as a form of research, as had Joe.

> I can remember one particular day when we were preparing for a third year class coming in, and in the space of about, well, we decided, X and I decided that the project we were going to give these guys …had been there for quite a while, and in the space of about eight hours we created a

pretty new project...Carrington [another polytechnic] thought that was marvellous.

Harry's example is one of the research and development approach to which reflective practice contributes. That he identified this work as research is important; in this case, unlike in Joe's situation, Harry and his co-tutor had publicised their work at another polytechnic. The words of these foundation staff show the degree of confusion prevalent in the institution at the time of interview (1994) about what research might be. It is not surprising, then, that definitions of research in the early days of the Research Committee were contested terrain.

The process at TWP

Having considered briefly some issues related to the importance of definition in the development of a research culture, I now investigate how TWP approached the task. The Research Committee determined as part of its role that it should clarify what constitutes research at TWP. Its first attempts to decide on a definition for research were arduous. Initially, the Committee decided on the research definition of NZQA, quoted at the beginning of Chapter 4 (page 100). This was the definition adopted by TWP in April, 1993 (Research Committee Minutes, 8 April, 1993). This definition provides for the reflective practice that is common among many teaching staff at TWP, to be construed as research. It is also broad enough for specifically Maori ways of researching, such as whakawhanaungatanga (Bishop, 1996a – see glossary) to 'count'. It was advertised to staff via the Research Committee's publication "Insight", which is issued to all staff. In "Insight 93/1" the definition was spelled out.

> NZQA identifies the following as legitimate research activities within its broad definition of research which is: "Activities which foster the spirit of enquiry, the concern for ideas and their application, the confidence to investigate and solve problems, and the recognition of the advancing nature of knowledge and practice."

While the NZQA constitutes a constraining, monitoring and normalising force in many aspects of the polytechnic's daily functioning, in its provision of this broad definition it created possibilities for many different kinds of knowledges to be

recognised as legitimate research processes, reflective practice and whakawhanaungatanga among them.

Over time, our institution has amended this definition. Between July, 1993 and November, 1995, attempts were made to consider alternative research definitions, most notably that of the U.K. Committee for National Academic Awards (Research Committee Minutes of 20 July, 1993 and 20 October, 1993; Report from Research Committee to Academic Board, November 1995). Eventually the NZQA indigenous definition was confirmed as the accepted one, and its principles reduced to a statement outlining its applications at TWP. The definition in use in 1998 was printed in GAA (General Academic Accreditation document) 9/42/96, the guidelines for accessing research funding. It reads:

> Research at The Waikato Polytechnic is defined as a systematic process of collecting and analysing information, the outcome of which is the creation of new knowledge, application or understanding.
> **The character of polytechnic research**: Research at The Waikato Polytechnic will:
> * be open to peer critique and validation by the wider research community and complement the academic reputation and strategic direction of TWP.
>
> Research at The Waikato Polytechnic is expected to:
> * assist staff employed by TWP to maintain currency in their field of knowledge;
> * contribute either directly or indirectly to the identification and improvement of best practice in teaching and learning at TWP;
> * be applied to stakeholder activity (students, staff and the wider community).

I had argued for broad definitions that made space for reflective practice, and research based on these principles, to be acceptable forms of research at TWP, based on my historical analysis and personal observation of these strengths in the teaching and allied staff. The definition above places a strong emphasis on 'improvement of best practice in teaching and learning' and application of research to student activity. The Research Committee had, therefore, exercised its power of definition in ways that made it possible for reflective practice to be considered as part of acceptable research knowledge within the institution.

This decision was important for a number of reasons. Firstly, it enabled the recognition of local and regional forms of knowledge that could not be suppressed or transcended by official sanctioning of only 'objective', 'neutral'

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forms of research methodology. Smart commented, with reference to the suppression of midwifery knowledge, that

> The disqualification of local and regional forms of knowledge has been achieved through 'the existence of a particular politico-economic regime of the production of truth' (Smart, 1985:68 quoted in Papps & Olssen, 1997:39).

The acceptance of a broad definition which enabled teachers to investigate their own work and have this recognised as 'official' research therefore circumvented any possibility that 'the production of truth' validated only forms of research knowledge which excluded the practitioner from involvement in researching his/her own practice. The kind of disempowerment that the midwives faced has therefore been averted while this definition remains in place.

Secondly, and importantly for me as a staff developer, acceptance of a broad definition recognising reflective practice meant that teachers could be encouraged legitimately to learn research skills by extending the skills which were already familiar to many of them. TWP's definition makes just such a provision, including as it does research that can 'contribute either directly or indirectly to the identification and improvement of best practice in teaching and learning at TWP'. Improving practice in teaching and learning is a vital part of the staff developer's role, thus providing sound official backing for my action research intervention.

Thirdly, the provision of a definition that accepts reflective practice as a form of research means that teachers who had previously 'done research in the cracks', so to speak - carried out reflective practice, pondered on their work, implemented improvements to their teaching for the benefit of their students - can have this work identified as research. With some additional formality in their practice, they may then be able to access the material artefacts of a research culture to support this work instead of having to squeeze it in on top of a full teaching load.

There is a caveat to the above current definition, however, as far as research *culture* is concerned. This is that it requires research at TWP to be characterised by submission to peer and wider research community scrutiny and validation – an institutional monitoring and surveillance process (Foucault,

1977a). Most reflective practice does not receive such publication. It tends to be restricted to the individual's own classroom practice and is rarely disseminated, particularly institution-wide. A culture develops through the sharing of values, norms and beliefs; of knowledge and of material artefacts. If research development benefits only the individual teacher, it cannot contribute to shared cultural development. Therefore, while I argue that reflective practice *does* constitute a form of research and one that our institution recognises under its current definition of research, it does not contribute in any powerful way to the development of the *culture* of research within the institution. It does, however, provide an excellent basis from which to develop research skills that can then be shared.

Who speaks, and who is silenced?

It was the Research Committee at TWP, of which I was a member at the time, which approved our research definition. Committee representation is, therefore, a way for individuals and groups to exercise power within an institution in determining whose knowledge will be recognised or excluded from the discourses of 'research'. In Foucauldian terms, the Committee acts as a standard-setting, normalising agency of the institution vis-à-vis research. It may or may not scrutinise research carried out, depending on whether this research is within or across departments. Currently, only research carried out across departments, thought to be particularly sensitive, or requiring Committee funding, is referred for scrutiny and approval. The Committee exerts a panoptic gaze across the institution (Harvey, 1997), recording in the Research Register the work which staff and departments submit as having been carried out by themselves or their members. Some staff choose not to submit their work, either out of indifference, lack of time or as a resistance strategy (see Chapter 6, page 191, and Hill, 1997).

This Committee attempts to be broad-based, so that a cross-section of Polytechnic staff and interests is represented. The Committee represents management, staff (both allied and tutorial) and the Academic Board of the institution. There is a good balance of men and women, and of people trained in both the natural and the social sciences. In my time on the Committee, I saw the

Chairperson's role as critical in maintaining balance and ensuring that all voices on the Committee are heard fairly.

Conspicuously absent during my time on the Committee, and subsequently, has been any substantial Maori representation. In November, 1998, I interviewed Maori Studies HOD Hera White to investigate possible reasons for this, and for the minimal formally recorded involvement of Maori Studies staff in research activities. She informed me that while a member of her staff had attended a couple of meetings, these had tended to be at times incompatible with that person's teaching commitments. Tangata whenua views on what might constitute appropriate research knowledge and practice have, therefore, been minimal, despite a Charter commitment to respecting 'the partnership intent of the Treaty of Waitangi' (TWP Charter, Goals, 1991-95:4). Considering the growing importance of Maori perspectives in education, both in terms of increased political awareness by both Maori and Pakeha of past injustices, and in terms of the demographic projections for Maori growth in TWP's catchment area, our research culture is impoverished by the lack of Maori input. We risk approving policies, processes and ways of knowing that silence, repress or exclude Maori.

In their analysis of ways in which the knowledge of midwives came to be silenced, repressed and excluded, Papps and Olssen (1997) identified Foucauldian mechanisms of regulation, normalisation, and utilisation of regimes of data. They mentioned complicity by members of the medical fraternity, including other women, as politico-economic tools that ensured medical dominance of the natural processes of birthing. They described consciously espoused processes, arguments and laws that were used to exclude the midwives who had previously assisted women with their children's births. I do not identify the lack of Maori voices in the development of TWP's research culture in any such deliberate way. Rather, I believe it results from a complex mix of cultural imperialism - with Pakeha not recognising the disinviting nature (Purkey & Novak, 1996) of TWP's administrative and Committee processes for Maori - and both practical and political pressures within the Maori Studies department. Whatever the reasons, the result is that Maori voices have not been clearly heard in the development of our research culture. In my discussion with HOD Hera

White, we investigated possible reasons for this silencing of Maori voices. Prior to publication, I presented the results as reported on these pages to Hera for approval or change. She wished to change nothing I have written here.

One reason for Maori non-involvement is that despite invitations to Maori staff to attend a range of Committees within the institution, representation has been slight to non-existent owing to demands on the department to develop teaching resources in Te Reo [the Maori language]. The Maori Studies department is at the forefront of language teaching in New Zealand, using the Te Ataarangi (full immersion) method, and cannot easily access teaching resources and strategies which non-Maori teachers largely take for granted. Therefore staff frequently spend non-teaching time meeting the learning needs of their students rather than the administrative demands of the institution.

Secondly, there is a political perception by some that Maori attendance at meetings may be a token Pakeha way of 'proving' that Maori opinions have been considered. The word 'Maori' itself means 'common' in the sense of a common colour and racial characteristics. Poata-Smith (1996:39) describes it as 'essentially a contrived term...it covers not only significant cultural differences at both inter-hapu and inter-iwi [see glossary] level…but also significant internal political variation'. There are considerable differences between tribes, as Poata-Smith's comment shows, and representation on a committee by someone from Ngati Kahungunu, an East Coast tribe, may not be perceived as representing the opinions of Tainui, the local Waikato tribe. There is, therefore, no such thing as 'the Maori' perspective, any more than there is 'the Pakeha' perspective. There are a range of perspectives, with Maori being sensitive that while they may represent opinions of some of their particular tribe, there is no way they can represent 'Maori'. To be asked to be 'the Maori' representative on a Committee, therefore, can result in individuals being put in an invidious position.

There may also be misunderstandings about the flexibility of the Research Committee with regard to the types of research that it will approve. The Committee, at my request, funded a visit to TWP in 1997 by Russell Bishop, a Maori researcher from the University of Otago (at that time), who was visiting Hamilton, and his co-researcher Ted Glynn, from the University of Waikato. I had read about Bishop's concept of whakawhanaungatanga (a Maori research

process) and wanted it discussed at TWP. I felt that the institution needed to consider Maori research methods alongside the more traditional ones that were being discussed. Durie (1992:1) has argued that while much traditional research 'may well have served the researchers' ends admirably, [it has served] those of Maori not at all', while Smith (1992, quoted in Clark, 1998) contended that there is a deep distrust and suspicion of researchers by Maori. There is good reason, then, to ensure that Maori ways of researching are developed as part of our research culture, considering the institution's stated commitment to meeting the needs of the tangata whenua in our Charter.

Also, it seemed to me that there were similarities between this method and action research, in the emphases on collaboration and joint responsibility for research. Bishop described the process thus:

> ...Rather than researcher-determined criteria for participation as a research process, whakawhanaungatanga uses Maori cultural practices, such as those found in hui [gatherings], to set the pattern for research (Bishop, 1996b:152).

A large contingent of Maori staff and students attended this presentation, at the end of which several students spoke of their delight in realising that the processes they used could be construed as legitimate research. This same sense of delight has been expressed by action research course participants, a point I shall discuss in Chapter 8.

The point I wish to make is that an institution ostensibly provides access for a wide range of its staff to be represented in its decision-making bodies - in this case, on the Committee responsible for defining what constitutes legitimate research knowledge and practices. But it may need to look more closely at whether there are outside pressures, or its own Committee processes, which exclude groups from participating in the decision-making process. This is a rather covert and probably unintentional way of excluding the knowledge of such groups from the developing research culture. I consider it significant that little published research writing is available from Maori in the polytechnic context. Almost all the published Maori researchers are located in universities (e.g. Bishop, 1995; Durie, 1992; Irwin, 1992; Mutu, 1996; Smith, 1990; Smith & Smith, 1990; Vercoe, 1995, 1997; Walker, 1990.) In the developing discourses of research in polytechnics, a regime of truth (Foucault, 1980b:131) needs to be

developed which makes space for tangata whenua input, however that can be assisted to emerge. This regime of truth needs to be developed in genuine consultation with Maori staff within the institution in order that their voices do not continue to be overlooked, silenced, repressed or excluded, however inadvertently this happens.

The Research Committee has supported initiatives formally to ensure that Maori research needs find fuller expression within the discourses of research at TWP. Its sponsoring of Bishop and Glynn's visit in 1997 was one example of this support. At the beginning of 1998, Terry Barnett, Chair of the Committee, requested a group to be convened to consider the drafting of protocols that would assist people conducting research in areas relating to Maori knowledge, artefacts and people. This group consisted of Chair Hera White, HOD Maori Studies; Maori members of the Library, of the Community and Continuing Education, Design and Communication, and Nursing and Health Studies Departments, plus Research Committee Executive Officer Dr Patsy Paxton and me, both Pakeha. The group worked throughout 1998 and produced a Report (White et al, 1998), approved with commendation by the Academic Forum (all HODs and other key management personnel) at the end of 1998, and the Academic Board in early 1999. This shows that action *is* being taken at institutional level to redress the problem identified earlier of inadequate representation by Maori with regard to research. This action stands in stark contrast to the marginalisation of Maori earlier in TWP's history.

STRATEGIES FOR ENCOURAGING A RESEARCH CULTURE

Has TWP's experience in developing the power/knowledge issue of definition, of how (and whose) knowledge is recognised and (whose) excluded, been a common one? What other attempts have been made to set up research cultures where these have not previously been part of an institution's normal discourse? The work so far in this chapter has sought to explain why certain types of knowledge are considered appropriate in our research culture and how they have come to be approved. It has considered external influences (such as NZQA's 'power of definition' with regard to research) and local attempts to devise appropriate and workable definitions within which our research culture

can grow. It has referred to the need to provide a research 'soil' within which the perspectives of teachers can be represented, and within which Maori perspectives can be recognised and supported. Polk and Hill both discussed 'material artefacts' that assist the development of research cultures. It is to these that I wish to turn next. These artefacts are the practical ways in which the institution supports research development, within the context of its shared attitudes, values, beliefs and norms.

At the start of this study there was only a fledgling literature on research culture development in New Zealand polytechnics. However this literature was significantly boosted in 1997 through the convening of a Conference, held at UNITEC in Auckland, entitled "Research and the New Tomorrow." At this conference a range of papers was presented, many of which I have referred to throughout this study. To give some comparison with the New Zealand work, I shall also refer to the work of several Australian and U.K. writers who have considered ways in which institutions in times of transition may assist the development of a research culture. In the discussion below, I draw attention to the findings of thirteen of the most relevant of those studies, indicating the number of authors whose work recommended specific strategies for developing a healthy research culture. As a way of summarising this work graphically, Table 2 appears in Appendix C. This does not claim to be quantitative work; it is merely a device for showing in a concise form the results discussed below.

In the final column of Table 2 in Appendix C, I have summarised strategies that I have observed at TWP over the years of this study. Where I have put question marks, this indicates inconsistent or complex application within/across the polytechnic. In addition, the development and application of policies strategy is complex in that the institution *has* consistently worked on developing policies; however, as my own story will reveal in the following chapter, these have not always been consistently applied.

The thirteen studies I present here suggest that the most commonly recommended strategies across all three countries are those of sharing and discussing research with colleagues; participating in research-related seminars; and the expectation of and support for research by management (eight studies). The development of research skills by Staff Developers, the availability of

funding for research, and the encouragement of qualifications upgrading were mentioned in seven studies, while provision of adequate time allowance for research and the delivering of conference papers and gaining of publications records were mentioned in six studies. I shall now present ways in which TWP sought to introduce some of these strategies into the institution as a way of developing our research culture, using aspects of the studies quoted above as supporting evidence.

Preparing the ground

In 1992, TWP sent one of its senior staff, Head of Faculty Eugene Crotty, to the U.K. for a year to investigate how research cultures might be developed. Crotty's (1992) report contained a list of suggestions for building a research culture, based on his observation of some recent U.K. experiences. The Staff College in Bath at which he worked interviewed staff at 12 different Colleges of Further and Higher Education and one College which had been redesignated as a University. Crotty noted that

> ...all institutions in the sample gave strong support to the development of higher qualifications by staff members. Fees assistance, class contact remission and the provision of limited research assistance were some of the options used (Crotty, 1992:8).

These suggestions arose in response to an invitation to staff to give their views on what were the essential actions needed to build a strong research culture. I have quoted only the suggestions that were made by more than 50% of the respondents. Suggestions made by the U.K. staff, in descending order of priority, were:

a. Pump prime/kickstart funding for research projects (69.23%)
b. Develop research teams and networks (53.85%)
c. Support/encourage enthusiasts, the successful (53.85%)
d. Engage in collaboration (sic) co-operative research initiatives (53.85%)
e. Integrate research with Staff Development - exchanges, secondments, bursaries, workshops (53.85%) (Crotty, 1992:12).

Crotty concluded that

> Building research into conditions of employment or giving staff significant class contact remission to undertake research can of course be

a divisive influence on institutional traditions and values. So commitment to a research ethos and development of a research culture must be unequivocal in those areas where policy makers consider it to be strategically appropriate (Crotty, 1992:16).

This comment was perceptive and based on Crotty's analysis of the existing discourses of technical and vocational education in the polytechnic. Many of Crotty's suggestions were subsequently incorporated into TWP's strategies for encouraging our research culture.

In a different New Zealand polytechnic, Buckeridge, a UNITEC (previously named Carrington Polytechnic) professor, compared research at polytechnics historically with that at universities, concluding that:

..there was no real *theme*. Any research reputation a technical institute may have had was essentially based on individuals. Further, there was no team approach to research, this because
- there was no internal research funding available
- there was no time allocation for research
- there was no staff recruitment policy that would discriminate in favour of active researchers (Buckeridge, 1997:2).

From my experience of working in a New Zealand polytechnic for over 14 years, UNITEC's experience would not be abnormal. It was certainly typical of TWP's situation prior to the 1990s. A 1998 discussion with Science HOD Dr Paul Judd revealed similar concerns. The ground for growing research in polytechnics, therefore, has been hard and ill prepared.

In his paper, Buckeridge suggested that special attention be given to the reasons why one should embark on a research programme in polytechnics. Chambers, who chaired the Research Committee at TWP from 1995 - 1997, suggested one such reason. Hers was a strategic argument designed to use the New Right emphasis on managerialism and accountability, to gain support for research within the institution, particularly from senior management level. She argued that one reason to engage in research was to help support the quality focus of the institution.

Much of the Research has an applied focus which reflects the vocational nature of Polytechnic programmes...Undertaking Research with the support of the organisation is seen as a way in which staff can participate in and contribute to the quality focus (Chambers, 1995:45).

Chambers aligned the traditional focus of the polytechnic (that of teaching, as did Buckeridge) with the kinds of research which she perceived would be done there. In this way, she sought to combine discourses of teaching strength, the historical ground of polytechnic work, with newly emerging discourses of managerialism and accountability.

Chambers' argument is a good example of the constraints and possibilities which discourses can offer, and how a specific intellectual can use these discourses to achieve desired ends. Her dissertation was written in the context of an analysis of strategic directions for the polytechnic in the future. Research development was one such strategic direction she identified. Her approach of coupling research with the increased demand for quality, and quality assurance processes, is a strategy for encouraging management and teaching staff to prioritise research in an environment where this has not been the norm.

In Chapter One I identified concerns which had been expressed to me by some teaching staff, that researchers would assume a status above that of teachers in the changing institution. This concern resulted in resistance to the introduction of degrees into some departments by certain staff, as HOD interviews showed. The concern is one of the reasons why I have chosen to promote a research process that builds on teaching skills and links the two rather than seeing them as incompatible and conflicting tasks. Buckeridge also identified the feelings of threat experienced by traditional teachers within polytechnics, faced with influxes of highly academically qualified staff, taken on to contribute to the research culture (Buckeridge, 1997:7.) Buckeridge's suggestion was that both elements should be integrated within a department, ensuring that individuals in both sectors (a dichotomy between degree and non-degree teachers is evident here) 'gain a clear understanding of their individual importance'(ibid., 7). In this way, he sought to prepare the ground for new varieties of 'plant' to grow.

Feeding and watering the plant

What other strategies did Buckeridge suggest as a way of integrating teaching and research, based on his experience at UNITEC? He listed end-of-year workshops in which staff, working off campus in what was hoped to be a

non-threatening environment, were invited 'to personally contribute to the design and development of a departmental research culture' (ibid., 7). TWP has utilised a similar approach, at institution-wide level. The Research Committee regularly (each semester) hosts seminars in which staff are encouraged to share both completed research and research-in-progress. Lunch is provided, and the occasions constitute an opportunity for *any* interested staff to hear of the work of others. This strategy of shared seminars provides an example of an attempt to expose staff to the content knowledge and research processes of other departments. It could be read, in Bernstein's terms, as an attempt to weaken boundaries, thus contributing to 'shared values, beliefs, norms and attitudes' which can help to form a collective, rather than a purely departmental, research culture.

An interesting case study of attempted encouragement of this type of collective research culture within a faculty at TWP was described by Hill (1997). He wrote of his attempt to build a common research culture within the departments of Business Studies, Information Technology, Hospitality and Tourism Studies and Office Technology, starting with a research 'retreat'. Incongruously, the best support came from the latter two departments in which research was not required as they do not yet offer degrees!

The plant can be watered through the provision of adequate research funding, and interest in research by senior management. The Research Committee provided funding to my department for replacement staffing for me ($3,500 in 1994 and $5,000 in 1995). This theoretically enabled me to be released for one day a week for part of 1994 and all of 1995 in order to carry out the initial reading and research interviewing for this study, although in reality it was hard to find people to pick up my specific responsibilities. This meant that I felt free to be absent for one day a week, but in practice did almost all of the work that I had previously done, only in four days. I am aware from informal discussion with other recipients of Research Committee funding that my experience is not novel. The situation reveals the difficulty that teaching staff face when attempting to undertake specific research projects without being timetabled out of previous teaching responsibilities. The situation must be

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equally irritating for managers, faced with wanting to encourage new researchers but also recognising the difficulty of finding replacement staffing for them.

Our experience is not unique – other polytechnics trying to create degree cultures have made similar discoveries. Sylvester, working as a staff developer and later Head of Department at Manukau Polytechnic in Auckland, studied the change to teaching degree programmes and the effect this had had on staff at her institution. She identified resource provision as critical, noting that 'the creation of a climate which is conducive to change and which fosters the development of staff [is also] the responsibility of those in the Directorate' (Sylvester, 1993:95).

Sylvester's promotion of top-level interest was backed up strongly by Phillips. Phillips was a U.K. visiting scholar at the University of Queensland, Australia, and visited New Zealand in 1992 at the request of FORTE (Forum On Regional Tertiary Education). This was a northern North Island co-operative, now defunct, funded by the University of Waikato and several local polytechnics to provide joint staff development offerings, among other roles. Phillips spoke to a group of interested polytechnic staff at a day's seminar entitled 'Developing a Research Culture' at Waiariki Polytechnic, Rotorua, on May 7 1992. In her concluding comments, she

> ...reiterated the absolute importance of top-level commitment to supporting staff undertaking research. She indicated that an effective research climate could not be developed without that, and hoped that the absence of top-level management [which she had been expecting] at the day's session did not indicate their lack of commitment to research (Phillips, 1992: transcription of taped seminar session).

It may seem a truism to state that top-level commitment is necessary and that adequate financial and other resources should be provided in order to promote research culture growth. But the fact that both New Zealand polytechnic and Australian higher education researchers have identified this provision as necessary (see, for instance, the work of Bazeley, 1994; Beverland & Bretherton, 1997; Mahoney, 1994; Moses & Ramsden, 1991 – quoted in Moses & Ramsden 1992), is indication that there are deficiencies in this area – see Hill, 1997, for a TWP-specific analysis. Such deficiencies are hardly surprising given the demands on senior management and on budgets with the introduction of degrees. In the Australian tertiary system many institutions faced

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forcible amalgamation within two years as a result of the 1988 Dawkins White Paper, a government move which disbanded the Advanced Education sector. It forced the former Colleges of Advanced Education into the existing university system or into new mergers with universities. Non-university New Zealand institutions have only been able to offer degrees freely since 1990. The changes wrought to the tertiary sector in both countries have therefore been immense, and it is not surprising that slippage has occurred in the availability or accessibility of financial and other practical support, and in senior management's perceived interest in research.

At TWP, for instance, engaging in degree teaching and the commensurate research requirements has led senior management and our Council to commit over six million dollars to the rebuilding of the Library and upgrading of library resources. Alongside the resource development, the institution has had to develop new committees, policies and procedures to comply with requirements under the 1990 Education Amendment Act. It is small wonder, therefore, that some 'material artefacts' - adequate research funding and enthusiastic senior management involvement - necessary to develop and sustain a research culture have frequently lagged behind the enthusiasm and initiative of staff responding to the imperative to engage in research.

This is where Foucault's concept of capillarity - of the operation of power 'at the lowest extremities of the social body in everyday social practices' (Fraser, 1989:18) - and of the complex nature of power, is useful. Rather than construing senior management as oppressive users of power that only they hold, and use to block access to resources from grassroots researchers, Foucault's theory admits of other possibilities. Foucault described power as:

> ...not an institution, and not a structure; neither is it a certain strength we are endowed with; it is the name that one attributes to a complex strategical situation in a particular society (in Appleby et al, 1996:434).

Once power is so described, it can be seen that counter-strategies can be developed. My 'intervention' into our research culture is designed as an attempt to create 'bridge discourses and [to open] new hybrid publics and arenas of struggle'(Fraser, 1989:11) as I use my multiple positioning within TWP to help develop the research culture. I am teacher, researcher, staff developer, doctoral student, and have been staff representative on the decision-making body of the

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institution vis-à-vis research, and latterly on the Academic Board, as well as a member of the Working Party on Maori Protocols for Research and that on Assessment in Te Reo Maori, during my work for this study. Indeed, I work as a specific intellectual trying to 'knit separate discourses together', as Fraser expressed it.

> Fraser elaborated on Foucault's concept of power as follows.

> Foucault enables us to understand power very broadly, and yet very finely, as anchored in the multiplicity of what he called "micropractices", the social practices that constitute everyday life in modern societies. This positive conception of power has the general but unmistakable implication of a call for a "politics of everyday life"(Fraser, 1989:18).

There are a range of 'micropractices' through which individuals, and the institution, have sought to knit together the separate discourses of teaching and research, and thus to water and nurture the research culture of the polytechnic. The most frequently identified practical restriction to the conduct of research in our polytechnics is that of time (Buckeridge, 1997; Hill, 1993; Piggot, 1993; Sylvester, 1993). But there are micropractices that have been used in New Zealand polytechnics to circumvent this difficulty of time and to support staff conducting research.

One has been the action of those HODs who have permitted their staff to carry out research-based professional development (P.D.) which went beyond their ten days' allocation of P.D. time in 'duty hours' (the time in which staff are expected to be working, but are not actually in front of classes). Another is the strategy of designating as legitimate research within departments, work which the department wishes to have done anyway, thereby ensuring both that the work is carried out and that the staff member gets credit in time, academic credentials or a publication record for it. Some HODs re-arrange teaching workloads so that some staff carry a heavier load in one semester in exchange for a light load in a semester in which they wish to carry out research; some permit staff to work 'glide time' to assist them with the conduct or completion of research.

My own strategy for assisting staff to access time for research was that of designating research skills courses as part of a compulsory certification process, thus making a virtue (the learning of research skills pertinent to improving teaching) out of a necessity required under employment conditions. These

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microbpractices are ways in which individuals and their HODs can ensure that research gets done *within* existing resource constraints, and are sometimes in addition to the lowered teaching hours which staff engaged in degree teaching are supposed to attract in order to provide research time.

One difficulty which may be deduced from the micropractices described above is that the 'politics of everyday life' in a polytechnic in transition from being an almost exclusively teaching institution to being one in which research is valued, reveal that research may still largely be construed as a peripheral activity (Codling, 1997; Harvey, 1997; Wood, 1994a). Despite the commitment of the institution to resourcing research along with teaching duties for degree teachers, the micropractices of everyday life still reveal a preoccupation with teaching first and foremost, both by grassroots staff and by management in many cases. This is evidenced by the number of researchers who, despite obtaining funding from the Research Committee to carry out their projects, fail to complete within the specified timeframe because of teaching commitments. In an interview I conducted with her in October, 1998, Dr Patsy Paxton, Executive Officer for the Committee, estimated this number at between 30 – 40% of applicants per annum.

Considering our history, this is not surprising. Considering the reservations still expressed about degree granting within polytechnics, it is even less surprising. But devious ways of 'cribbing time' from the institution in order to carry out research, while being effective in enabling the research to continue, run the risk of leaving research positioned as a marginal activity. They can undermine the establishment of a healthy research culture even while attempting to support it. Discourses of commitment and loyalty (the willingness to carry out research as required, alongside teaching) compete against discourses of research professionalism (ensuring that such research is properly, i.e. formally, supported) in this situation. Additionally, staff carrying out research are sometimes perceived to be neglecting their teaching responsibilities – see Hill, 1997. My own experience, documented in the next chapter, provides evidence of these competing discourses. Contradictions and paradoxes exist which are not easily resolvable.

The micropractices described above apply to resources - the material artefacts of the research culture. But there have been micropractices developed

in New Zealand polytechnics specifically to assist in the development of shared values, attitudes and norms also. Wood's work at Otago Polytechnic was important in this regard. Wood worked as a research mentor who pursued a motivational approach in research culture development, as did Hill in his paper on developing a research culture within TWP (Hill, 1993 - a working paper).

Wood noted the tentativeness and fear of engaging in research that I had identified also at TWP. The fear, she described as 'wonderdread'(Wood, 1994c) - a kind of approach/avoidance behaviour which psychologists have also noted. This behaviour may arise from the challenge to one's identity that Harvey (1997:184) also noted: 'Some people don't feel confident in engaging in research. It confronts the very person that they believe themselves to be'. In an institution like TWP, exhibiting the collection codes that Bernstein claimed lead to strong and rigid professional identities, the wonderdread that Wood identified can certainly manifest as a reluctance or tentativeness about engaging in research. This observed tentativeness led to a micropractice that Wood described as 'liminality'. In this practice, Wood conducted 'corridor consultancy' in non-formal situations such as the staff cafeteria and hallways. These consultancies

> ..allow the person to test out their ideas before committing them to formal scrutiny. By discussing them in a corridor they are giving spatial expression to their new, transitional status, and to the tentative nature of their ideas (Wood, 1994a: 351).

Feelings of unsureness are to be expected in a changing environment where the teaching on which staff have previously prided themselves has had to change to accommodate the new skills of research. Similarities have been perceived between the work of Wood, and that noted by Moses and Ramsden in Australia. One of their respondents said that one of the great fears resulting from the forced amalgamation into universities was that teaching skills would be denigrated or lost in the new environment (Moses & Ramsden, 1992; see also Harvey, 1997). Where research cultures are being developed, then, the importance of developing shared values, attitudes and norms within the institution needs support just as much as the practical, financial and resource-based needs do.

CONCLUSION

Wood's work attempted formally to develop shared understandings of what research is and how it might be conducted in an environment where staff feel tentative and unsure about moving into research. Where the research is well supported - the ground has been well prepared; the plant is compatible with the soil and well located, and its early development receives appropriate nourishment - a healthy research culture can develop. Inevitably, in institutions breaking new ground and among individuals engaging in non-traditional activities in such institutions, mistakes and misunderstandings occur which can stunt the growth of the culture (Codling, 1997; Hill, 1997), or lead the institution to decide on radical pruning.

Gee, Hull and Lankshear described the difficulty of encouraging a research culture in the light of the threat to identity that changing discourses within institutions can pose.

> The conflict, then, is not just that I am uncomfortable engaging in a new practice – much as a new activity might involve using new muscles. Rather, the conflict is between *who* I am summoned to be in this new Discourse...and *who* I am in other Discourses that overtly conflict with – and sometimes have historically contested with – this new Discourse (Gee, Hull & Lankshear, 1996:12, quoted in Harvey, 1997:185).

My contention is that helping staff to see teaching and research as symbiotic, not antithetical, by encouraging them to research the teaching that is integral with their current identities, is a way to subvert the conflict identified by Gee, Hull and Lankshear. The discourses of research may be new; the discourses of teaching are familiar. Action research is a way to minimise the conflict of identity that staff face, and to facilitate the development of a healthy research culture.

This chapter has analysed the ways in which power and knowledge have been intertwined at TWP in the earliest development of our research culture. I considered the power of definition that the Research Committee used in shaping our culture, building from an initial acceptance of NZQA's definition and latterly amending this to include the peer scrutiny and external critique expressed in our current definition. It is this inclusion which renders problematic the

interpretation of reflective practice as a form of research within TWP, since reflective practice tends to be a largely private activity. As part of its development of our research culture, the institution has developed its awareness of some of the ways in which Maori knowledge has been under-represented within the emerging discourses of research, and examples have been provided of ways in which it attempts to remedy this lack.

In the latter part of the chapter, research from other New Zealand polytechnics has been compared with that of Australian (predominantly) and a couple of U.K. studies into research culture development, to determine what strategies have proved effective here and elsewhere in developing a healthy research culture. Questions of threat to individual identity in the changing environment have been raised, and action research suggested as a way of minimising these feelings of threat. In the next chapter, barriers to the development of a healthy research culture will be considered. In this consideration I shall draw extensively on my own experience as a specific intellectual at TWP – one who can 'speak about its structure of domination without claiming more than his or her due' (Poster, 1989:37).

BARRIERS TO A RESEARCH CULTURE
"We make the road by walking"
(Bell, Gaventa & Peters, 1990).

INTRODUCTION

One of the problems enthusiasts face is that of keeping their balance. It's a bit as I imagine acrobats on a high wire must feel. Occasionally you get the wobbles. It might only take a little bit of unexpected wind, looking the wrong way at the wrong time, getting tired, being heckled or experiencing real or imagined shaking of your stabilising platforms. You can start to feel perilously placed, and very vulnerable. New researchers in an institution where research is not the norm can feel very much the same way. I speak from experience.

New researchers in an institution in transition may, therefore, be very unbalanced people at times. I include myself well and truly in this description, as I have rewritten this chapter many times. I have had to revisit the feelings of despair, hopelessness, paranoia and devaluation I can now identify, and sometimes did whilst actually experiencing them. With the benefit of hindsight, I wonder about my sense of balance at the time. However, as I have discussed my experience of being a new researcher at TWP with other new researchers there, my perceptions and reactions seem relatively common.

This chapter analyses the more negative facets of being a new researcher in an institution in transition. Having considered the development of research cultures elsewhere, I believe there are common problems that can occur when research cultures are being developed. My hope is that, rather than being a chapter of complaints, the analysis presented here will benefit later researchers in my own institution, and possibly elsewhere. Therefore, some suggestions arising from my research and experience, described in this chapter, appear in Appendix C.

What I shall be investigating now, drawing on local and overseas experience, are barriers to the development of a healthy research culture. My own voice will be heard extensively throughout the chapter. This exploration will further examine the question, "How can an institution such as ours, faced with the requirement to engage in research, develop a research culture?" When I commenced my doctoral journey I knew that it would be over largely uncharted

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terrain. As Bell, Gaventa and Peters (1990) titled their book, 'We make the road by walking.' There was a very sketchy track on which to walk when I commenced, and I have stubbed my toes on a fair few rocks in the process. It has been my hope that my steps, and those of fellow staff members undertaking research in this novel environment for the polytechnic, will gradually form a broad and smoother road for later researchers to tread.

My work in this thesis attempts to develop such a road in two ways. Firstly, my experience of undertaking doctoral study was an intentional move, enabling me to present an appropriate role model for other staff who are required to engage in research; enabling me to acquire supervision skills by 'osmosis' and observation of my own experience; and enabling me to investigate ways of getting work published in a variety of contexts. Secondly, the thesis itself aims to identify ways in which both institutions and specific intellectuals can help and hinder the development of research cultures in New Zealand polytechnics where such cultures have not been the norm. This chapter investigates the hindrances.

A PERSONAL VIEW

To introduce my analysis of the barriers to research culture development which have been identified by some writers, I want to start with something of my own PhD experience, which will illustrate much of this chapter. Prior to the passing of the 1990 Education Amendment Act which gave polytechnics the power to offer degrees and required them, if they did so, to engage in research, the practice of carrying out research had been almost exclusively that of the universities. For the polytechnics that offer degrees, then, a discourse of researching is now required which is new to them, though very familiar to the universities.

Not only institutions but individuals are shaped by this discursive development. In my job in staff development, I must now encourage the development of research skills that were not required before. These skills include effective use of library and internet resources to facilitate research; investigating appropriate research approaches and analytical tools; researching, writing and submitting research proposals; writing research reports; establishing

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and maintaining supportive networks amongst researchers; accessing funding; and supervising student research.

Discourses are composed of 'practices that systematically form the objects of which they speak' (Foucault, 1974, quoted in Barrett, 1991:130) and which determine 'what can be said and thought, but also ..who can speak, when and with what authority'(Ball, 1990:2). I have used my role as a staff developer to help influence our research discourse through engaging in doctoral study. This study aimed both to enable me to gain experientially the research skills I perceived that *I* would need in order to best assist staff, and also to encourage expression of the knowledge of teachers in our developing research discourse, as they investigate their own practice. In this way I have tried to ensure that a range of research methods are included in our developing research discourse.

The importance of definition as a power/knowledge tool, discussed in the previous chapter, has emerged in a potent way for me as it has affected the way I have been able to undertake this research study. My work was perceived initially by my work supervisors, and by the Research Committee at the polytechnic, as an issue of personal choice in credentials upgrading. It was not initially considered to be a legitimate part of my job, although the Committee's position on this changed in 1996. The potential of my work to contribute positively to the development of our research culture seemed to be largely disregarded.

This perception has constituted a real barrier to my ability to access time and funding to carry out my work. 'Foucault argues that what counts as true knowledge is ostensibly defined by the individual, but what is permitted to count is defined by discourse' (Parker, 1989:61). My experience is a good example of this statement. I have perceived my work as a necessary action in the development of our research culture – 'true knowledge', from my perspective. However, faced with the possible burgeoning of costs if research done as part of credentials upgrading was permitted to 'count' as research deserving of support by the Polytechnic, the Research Committee chose to read the situation otherwise, using their power/knowledge position to tighten the criteria progressively.

There has therefore been, for me, a conflict between definition by the individual and definition as 'institutionalised' by emergent discourses

surrounding research, within the institution. This has been the nub of my problem, and has resulted in many of the issues I have perceived as barriers to my work. It may also affect what I choose to define as barriers to research culture development more generally, because it has been at times a painful experience. However, it *is* my experience as an early researcher within the institution, and highlights issues that may need closer investigation in organisations trying to eliminate barriers to the development of a healthy research culture.

My 'Initial Request for Research Approval to Undertake Doctoral Study at The Waikato Polytechnic', dated 26 January 1993 and presented to the Research Committee, made my thinking plain:

> In response to growing needs within The Waikato Polytechnic for staff to become au fait with research themselves, and with the requirements for supervising students undertaking research, I wish to extend my skills in research. To my mind experiential learning is a good way both to extend my own skills and to undertake research into the introduction and extension of research activities here, so by submitting myself to further research supervision via a Ph.D I will be able better to assist staff in their own research and student supervision....I have the approval of Christine Scott, my Director, and Peter Johnson, Principal, with both of whom I have discussed my plans for Ph.D work.

The Committee accepted this request at its meeting on 27 January 1993 and invited me to submit a formal proposal when this was ready, 'bearing in mind the discussion that had taken place' with regard to my request. This discussion is not minuted, but through analysis of the later months' Minutes and activity, it had to do with the issue of staff doing research in working time. That this discussion occurred so early in my doctoral journey is clear indication that, at that time, research was not seen as a 'normal' part of a polytechnic staff member's work.

I wish to spend some time analysing this issue here, as it has proved to be the single most important barrier, for both other staff and myself, to the carrying out of research within the institution that my research for this doctorate has revealed. It is a clearly identifiable example of Lather's earlier-quoted argument that 'to put into categories is an act of power' (1991:125). This categorisation enables the institution to exercise power over what research it will and will not support, based on one aspect of the motivation for commencing the research, rather than its relevance or appropriateness to the institution's research goals.

Earlier in the study I described the polytechnic in Bernstein's terms as dominated largely by collection codes, in that departments, apart from in the very early days of our history, have tended to be autonomous with tight content areas and strong boundaries. The position of my unit needs a brief elaboration here. The Professional Development Unit (PDU) was, until 1998, situated in a largely non-teaching department, that of Education Services, although all the PDU members are senior academic staff. The department also contained Library, Health Services, Audio-Visual, Counselling, Chaplaincy and Tertiary Study Skills staff. Our unit is one of the few examples of an integrated code at TWP, in that we teach generic skills (teacher training) and have responsibilities to provide such training across all teaching departments at the polytechnic. Like other staff, members of the PDU are required to undertake appropriate tutor training as part of our conditions of service; I gained my Certificate in Adult and Tertiary Education in 1993.

As academic staff members, we are entitled to the same leave (including 10 days' professional development - P.D.- leave) as other full time teaching staff. Academic staff normally determine, with HOD approval, how their P.D. will be used. Because of our teacher training responsibilities, however, the Director of our Department, Chris Scott, has always been generous in her interpretation of what constitutes P.D. work as there is frequently a grey area over this and what might be considered equally validly to be requirements of the job, as far as the PDU are concerned. We do not currently teach on degree programmes so therefore we are not *required* to upgrade our credentials. All of us currently hold first degrees, and most of us also have Masterates. This elaboration of our position is necessary in order to explain what happened in my situation.

In the Research Committee Minutes of 8 July 1993, it was noted that 'The issue of Staff release time and reduction of staff/student ratios to allow for tutors to carry out research was discussed'. No decisions were recorded; this comment followed approval for the forwarding of an application to the Lottery Science Grant fund by a departmental group, after which it was noted that

> ...funding for staff to come from Dept [X] and to be outlined in departmental Management Plan. There was some discussion and it was agreed that the issue of departmental funds to support research is not within Research Committee's brief.

Again, this is an example of the contested nature of research development in our institution. There has been an ongoing debate within the institution about the best location of funding for research. Earlier, I quoted Paul Judd (Chapter 4, page 102), our HOD Science, who believed that funding should be located within departments, not considered to be a central overhead. The next mention of the issue of staff time is in the Minutes of 26 August 1993.

> Pip advised that she had University approval to undertake this particular research and would be using her discretionary and holiday time. It is acknowledged that it is up to the HOD/Director to ascertain whether extra time could be granted. The Committee wished Pip well in her Research.

My commitment to using discretionary and holiday time was intended as a gesture of good faith, a recognition that I, as well as the institution, would benefit from the conduct of this research. I hoped that the institution would be able to match my commitment. Unfortunately for me, the Director did not feel able to grant more than 5 days' additional time (on top of the 10 days of P.D. leave which all tutors are entitled to). She manages a large department and believes in an equitable division of time and resources. The extra time was available only in 1993. It was not available subsequently, partly because I managed to get Research Committee support for part of 1994 and 1995. Excerpts from the log I kept throughout my doctoral study show the 1993 debate and the feelings that accompanied it.

> 7.7.93: There is not a lot of support built into the system for folk doing what I am doing. It is partly for this reason that I want to embark on my doctorate, and in action research. Because of the commitment of action research to bring about change, I am hopeful that ultimately more support will be forthcoming for future staff as well as for myself. If it is too late for me, so be it. I will have to stay afloat as best I can.
> 2.8.93: Today I put in my PhD. proposal! [This was to the University.]
> 8.8.93: Chris and I talked about my doctorate and what support I can expect from her, and basically it's my ten days P.D. plus five days...When I went away and thought about it I got quite cross.

My comment here makes plain my misapprehension that approval to proceed with a project the size of a doctorate would imply any substantial practical support, beyond the normal professional development time. With hindsight, perhaps I was lucky to get the five extra days. I recognise and, to

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some extent support, this equitable approach. The Director has always argued that she treats her staff similarly regardless of whether they are allied (non-teaching) or tutorial, and that to extend to me any form of substantial support would mean she would have to do so for other staff also. Departments are funded according to EFTS (Equivalent Full Time Students) enrolments. Our department, being predominantly non-teaching, attracted few EFTS. This obviously affected the Director's ability to apply funds flexibly, compared with HODs in departments earning large EFTS funds. A Ph.D is, however, a major undertaking, and an unusual one in our context. It goes way beyond the sort of activities normally carried out by staff in their ten days of professional development time, so my positioning in a predominantly non-teaching department worked against me.

Unfortunately the issue of inequity *across* departments has been part of the problem in establishing a research culture. Sources of funding are complex. Some departments are perceived to be relatively 'rich' and able to make available to their staff time and fees rebates for credentials upgrading which are not available to staff in 'poorer' departments. There is also a differential funding mechanism that enables some departments (e.g. Science) to receive a higher rate of funding per EFT than others (e.g. Mechanical and Construction). Although the differential funding is a complicating factor, there is a perception from some staff at the polytechnic that departments which can teach large numbers of students in a lecture-type situation are 'richer', certainly able to permit more flexibility in staff workloads, than those who need to have smaller class sizes. Their staff are able to earn substantial funding by putting large numbers of students in front of one tutor, thus reducing the class contact hours required of staff across the department, even counting the follow-up tutorial work.

For safety reasons, most of the trades areas have small class sizes. Therefore many staff in those departments regularly teach the full 24 hours class contact per week which can be required under current conditions of service. This is also relatively common in the Information Technology Department (which offers a degree) because of the intensive nature of computer education. Large numbers in one class are not feasible. The disparity caused by the class contact hours system which enables some staff to have considerably less class contact

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than others, therefore more time to carry out research if their HODs support that, has caused considerable dissatisfaction within the institution. The discrepancy obviously means that some HODs are better able to permit staff to do research in 'duty'(i.e. non-contact) time than are others.

The effects of the Director's decision on my thinking can be seen in the log excerpt below:

> 12/11/93: [Team discussing workloads:] I had research listed down with areas for development, but Chris shifted it back under teaching in general. The upshot is that it still doesn't attract a time allocation and I honestly don't think she still, after all my work, sees it as a significant area for development. It is such a drag having to convince her of something that seems so self-evident to me.

> 26.11.93: I realised that [my response to an incident with a fellow staff member] was rather an over-reaction. I guess it is just tied up with feeling I am out on a limb there from time to time, with the struggle to get support for my research and all.

The paragraph above is one that shows that from time to time I *was* aware of being unbalanced! My problem was that I construed the research as a legitimate extension of my staff development role, given the research demands which were being placed on the institution, and that I could therefore reasonably carry out some of this work in duty hours. I thought the Principal's and my Director's approval to proceed signified their agreement with this interpretation. Discussion with Chris Scott in December 1998 has shown that this was a complicated situation. She felt that Peter Johnson's approval for me to proceed also implied some degree of resourcing commitment from him, but this was not forthcoming. Accordingly, she could not extend the financial or time support that she would have wished to. But the situation, and my reading of it, was the cause of much of my angst.

I felt I needed a day per week *on top of* using my professional development, discretionary and most of my annual leave, in order to keep a project the size of a doctorate going, alongside a full time job. When it became clear that my department would not provide time, I had to try to get replacement staffing for my one day per week, from the Research Committee's funds. It is worth noting here, while I was fighting for funding for one day per week, that

Estelle Phillips, the Visiting Scholar from the University of Queensland who presented a Research seminar in 1992, does not recommend this as a way to engage in research. Phillips has also co-written a book entitled "How to Get a PhD" (Phillips & Pugh, 1994). She commented in her seminar that

> ..the only real way to succeed in doing research part-time is to have a "chunk" of time in which to do it. Ideally this would be a week every five weeks, though it is possible to do it one day a week.

Commenting from their perspective as lecturers in a New Zealand polytechnic, Beverland and Bretherton (1997:4) also reinforced the need for 'people to take off long blocks of time as PDL (professional development leave) to do research'. Phillips did warn, however, that

> ..in doing it this way [i.e. one day per week] staff run the risk of spending the first couple of hours trying to catch up on where they were the previous day, which is inefficient (Phillips, 1992: taped seminar notes).

I have to agree with Phillips here. The issue is further complicated if one does not have access to a 'dedicated space' at home, and equipment and notes have to be ferreted out and organised prior to the commencement of research work. Several women writers (Hood, 1990; Middleton, 1993; Woolf, 1976) have commented on the benefits of having what Woolf terms 'a room of her own' if a person is to be a writer. The luxury when my daughter went flatting towards the beginning of 1997, leaving me a bedroom which I could leave littered with books, notes, disks and other research paraphernalia as I wrote up the thesis, was indescribable. Unfortunately for the thesis work, she returned home after several months!

Having faced difficulties in trying to negotiate time for the research with my Director, I was to face similar problems with the Research Committee. I did not anticipate or agree with the argument, raised by a senior manager in the Committee discussion while I was a member, that my doctoral work should be seen purely as a private good. There is obviously an element of private good there, in that the degree is 'owned' by the individual; but also in an environment where credentialling is becoming important, the degree acquisition assists the institution's credibility (see Beverland & Bretherton, 1997; Crotty, 1992; Phillips, 1992). This is the case even if it is gained in an area without direct

benefit to the institution. I believed my research area *would* directly benefit the institution, in that I could help the institution develop strategies to promote a healthy research culture; I believed that my gaining of the degree would enhance the credibility of the institution as well as my own credibility. I did not, and still do not, believe that a Ph.D is necessarily a purely private good. As I have explained, the example I set to others in the institution, and also the results of my research, were designed to be of benefit to others besides myself.

The institution, however, seemed to be guided by the narrow economic argument that it would support research leading to qualifications only for those absolutely required by the institution's strategic directions to gain these. That is, only for those who had to teach on degrees but who lacked the requisite qualifications (such as Joan). To be fair, with hindsight management's options were constrained by increasing pressure to meet other commitments, such as their building programme. My perception of management's thinking is supported by a memo from Deputy Principal Bruce Birnie to me, dated 7 October 1992. Birnie stated:

> As an initial reaction to your specific request [for approval to proceed with my Ph.D and seeking indications of possible support], my personal view is that in terms of priorities for upgrading of qualifications, preference is likely to be given to staff who are required to meet minimum standards for degree accreditation. This will mean for some, completing a bachelor or masters degree, and therefore support for Ph.D study could well be low on the priority list. While encouraging your initiative, I cannot give you any assurance that staffing or financial support will be given if you proceed to enrol for Ph.D study.

 (I took this memo literally as Birnie's personal view; therefore my hope that Peter Johnson and my Director would provide practical support for the Ph.D was not completely unrealistic). Broader discourses of public benefit deriving from my study, such as my developing the ability as a staff developer to lead and support staff engaging in research, or the actual results of my own study (i.e. this thesis, outlining ways of supporting and encouraging staff wishing to engage in research) were discounted by defining my work as a private good.

That such powers of definition are employed in an educational institution during times of transition and economic stricture is not surprising. I have described how neo-liberal thinking is affecting New Zealand's educational

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milieu. Gerald Grace argued for the perception of education as a public good despite Treasury's 'attempt to discredit' such a perception (Grace, 1990:27). He described how Treasury had used 'left wing' educational research against the left to show that equity aims were not being met and that significant sectors of New Zealand students were being disadvantaged. Treasury's argument was that this research showed that the 'needs of the marketplace', in this case the students, were therefore not being appropriately met by the education system. In this argument, Treasury sought to define education as a commodity, not a public good. Once defined as a commodity, education can be analysed like any other commodity in the marketplace in terms of its benefits to the individual. Grace concluded that

> the Treasury position on education as defined in *Government Management Vol. II* represents a strong bid to establish a new hegemony in educational discourse and policy. It represents a challenge to existing conceptions of education as a public good (Grace, 1990:30).

Faced with the market forces arguments being promoted by both Treasury and commercial interests (e.g. via the Business Round Table's various commissioned reports such as *Reforming Tertiary Education in New Zealand*, 1988) it is not surprising that economic arguments were applied to the availability of funding within our institution (Gordon, 1997; Peters, 1997). This discourse, coupled with restricted funding availability, led to the attempt by some members of the Research Committee to exclude from the accessing of funding, any research which could be construed as a private, rather than a public, good. A key informant, who wishes to remain nameless, stressed that this perception of research as a private good, was a minority opinion within the committee. However, it was espoused by a senior management representative. What I am describing at this point is how I have worked from my position as a specific intellectual within my institution to

> ..analyse a regime of practices - practices being understood here as places where what is said and what is done, rules imposed and reasons given, the planned and the taken for granted meet and interconnect (Foucault, 1991:75).

The discourses of public and private good were certainly meeting and interconnecting, quite violently from my perspective. This situation, again, shows how issues of definition and categorisation act as vehicles for power to operate in a context such as ours - how defining and categorising can be either a support or a barrier. *I*, as a staff developer, saw the development of TWP's research culture as needing to include research on teaching and the improvement of teaching; *the organisation* through its senior staff and the Committee in its initial discussion, saw the matter as 'Pip getting a Ph.D'. Phillips recognised, but rebutted, this argument as follows:

> It could be argued that [staff undertaking university study] are just doing their own staff development - their own personal development - and that's true, hopefully they are. But they are going to be of enormous value to the polytechnic provided the polytechnic treats them well enough that they stay once they are able to go off and do other things on their own (Phillips, 1992, taped seminar notes).

Perceptions that qualifications upgrading benefit the institution in its development of a research culture were reinforced by Crotty, in his 1992 study of 12 U.K. Higher Education institutions seeking to build a research culture. He wrote, 'How research is staffed and supported is an important factor in the development of an effective research culture. All institutions in the sample gave strong support to the development of higher qualifications by staff members' (Crotty, 1992:8). For these institutions, higher qualifications among their staff were seen as positive contributions to the research culture, hence the support. Of the Australian, U.K. and New Zealand studies I have found on development research cultures, over half have supported qualifications upgrades as a way of developing a research culture.

This was not my experience at TWP. I had suggested dropping salary to a .8 at one point, which would have meant losing a day's pay per week, to give me the day I needed. This was not ultimately economically viable for my family, however. Phillips' comment on this suggestion was:

> I think that's absolutely appalling...My reaction is one of absolute horror and I think that surely they're not going to pay you less because you're taking time to do that (Phillips, 1992, op. cit.)

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She went on to explain that in her home country of England, the policy was for staff to receive full salary while studying, but to pay their own expenses. These were subsequently reimbursed in full on the successful completion of their course of study (Phillips, 1992: taped seminar notes). This comment supports Crotty's observations also. One thing I learned through this experience, which I found very painful, is that the parameters under which the research is to be carried out should be clearly specified at the outset and agreed to by all parties.

What seemed to be occurring at TWP were contested power/knowledge issues around research. In my case, the issue was a contest over notions of research as a personal, rather than a public, good. My perspective was that the work needed doing - the institution was being required, through its decision to offer degrees, to develop a research culture, which it currently lacked. On that ground, I believed my work was deserving of some support - a public, institutional good. The institution's senior staff, however, were taking an instrumental view of the situation and locating the work in the area of my own professional development. To be fair, they were having to consider possible 'spin-offs' should other staff come up with similar requests which the institution might find it difficult to resource. They represented the work as a personal good. This issue was to emerge later in the development of the Committee's guidelines.

Having looked at some of the problems that proved to be barriers for me in our research culture, as a novice researcher in an institution in transition, therefore, I shall now move on to look more widely at other researchers' experiences, interspersing the stories of these studies with ongoing experience at TWP. The most relevant of these studies are discussed below (and, as with Table 2 from the previous chapter, presented in graphical summarised form in Appendix C).

OTHER EXPERIENCES

I analysed fourteen studies in looking at the experiences of other researchers. Of these studies, the most significant issues discussed as barriers to the development of a research culture were tension between roles of researcher and teacher (nine studies); insufficient resources – computers, funding, technical support, library, rooms (eight studies); concerns about insufficient time to do

research (seven studies); anxiety about research publicity, peer scrutiny, changes in the culture (six studies); not having a background in research (six studies); lack of senior management support (five studies). Examples of these issues, both from the studies cited above and from experiences at TWP, form the content of the rest of this chapter.

The first issue identified as a barrier to research culture development in the studies cited is that of tension between the roles of research and teaching in the new environment. A discussion of the threat to personal and professional identity that the introduction of a discourse of research can induce in staff at teaching institutions was presented in the previous chapter (see also Harvey, 1997; Hill, 1997). The stresses induced by anxiety over heavy teaching and research workloads can leave staff with the feeling that their identity is shaky, that they no longer fit comfortably in an institution where teaching has previously been the norm. Those who choose to try to develop dual roles can easily feel marginalised.

Douglas (1966), in a book analysing systems change in organisations, described this difficulty. Douglas argued that people who cross the boundaries of any imposed social structure (such as the teaching/research dichotomy observed in polytechnics) occupy marginal states, yet have considerable power, derived from their marginality. I would comment, from my own experience, that one's own power is often not obvious when one is feeling marginalised at the time! Douglas' writing illustrates, too, the difficulties of challenging boundaries in an institution operating along collection code lines, where strong boundaries between content areas and strong framing in which formal research into one's content areas or practice are not the norm, pertain. If one operates within a department that has little or no tradition of carrying out research, then one is likely to be perceived as 'other' by those not carrying out research (Hill, 1997). A potent example of this situation is described by one of the action researchers, in Chapter 8, page 252-253. One is attempting to step outside the 'normal' ways in which things are done – to change perceptions of one's own and others' professional identities.

Douglas observed that those holding an ambiguous role, are 'perceived as dangerous because they do not neatly conform to accepted boundaries' (Douglas,

1966:102; see also Schein, 1995). This perception could constitute a barrier to new researchers who might be concerned about their roles. But the potential role of researchers as critical intellectuals is pertinent here. Nancy Fraser examined the role of critical public intellectuals in analysing welfare discourses in her book, *Unruly Practices* (1989). In this analysis, she drew on the work of other writers such as Foucault, Rorty and Habermas to develop ways of interpreting needs when one has an intention to change society. She commented on the ways in which dichotomies have been used unhelpfully to maintain distinctions between groups and concepts, as I claim that the teaching/research dichotomy has been unhelpful at TWP and elsewhere.

One can draw parallels between Fraser's work in welfare discourses and the work of critical intellectuals in education. Fraser said it is the role of critical public intellectuals to try to inject their perspectives into the cultural or political public spheres to which they have access (Fraser, 1989). While Douglas observes that ambiguous role holders are perceived as dangerous, it does not seem to me that the position of the critical intellectual permits one to keep silent in order to remove the perception that one is dangerous. I have noted the possibility that one can be considered dangerous; indeed, it is my perception that I have been considered as dangerous at times by some within my own institution because of my marginal status as a new researcher, although this perception may show a touch of paranoia!

However, Fraser's interpretation of the position of 'critical public intellectual' as that of occupying a mediating position in which we try to build bridges, 'to find ways to knit ...disparate discourses together' (ibid., 11) describes possibilities for positive intervention. I was trying to knit together the discourses of teaching and of research, in order to support the development of both sets of skills in staff. This support, I believe, is critical in the role of staff development (in New Zealand, Bridgeman, 1997; Buckeridge, 1997; Crotty, 1992; Hill & Barnett, 1997; and Sylvester, 1993, have all stressed the need for staff development to help teachers come to grips with research skills).

It is important therefore that in work aimed at overcoming barriers to the development of a research culture, the *feelings of staff* are given due consideration by their immediate and senior managers. Staff can perceive

themselves as marginalised, feel their professional identity is threatened, and sometimes feel that management perceive them as a threat. It is important that all staff work towards ways of knitting their disparate discourses together for the greater good of the educational community. To help diminish role tension, ways of operating which do not portray teaching and research as antithetical activities must be helpful. Action research is one such way of operating.

The second issue identified in the studies as a barrier has to do with resources. Specifically, the studies mentioned computers, funding, technical support, library resources and appropriate room availability. The major issue that has caused problems at TWP has been that of funding support, so I shall consider that resource issue first. The barriers have been both external and internal. Chambers (1995) commented on the difficulties faced by new researchers in attracting funding from outside their organisations. Polytechnic staff may now access the Public Good Science Fund. This is a state-provided research fund established to support research, both in the natural and social sciences, deemed to benefit New Zealand public interests. It was previously accessible to polytechnic staff only through joint applications with universities or Crown Research Institutes, an indication of the low esteem in which polytechnic researchers used to be held. As polytechnic researchers had not had a high profile previously, this caution was, perhaps, understandable. It is unlikely that *any* 'novice' researcher would attract funding from this body without being linked to an established researcher or institution.

Chambers, a senior staff member at TWP, wrote a paper in which she analysed various influences and demands on the strategic direction of the institution. In her paper, she commented that the polytechnics

> ..may still be developing the skills for successful application [and until these skills are acquired,] funds for research would currently, in the polytechnics, have to be gleaned from other activities. It would seem that such a situation will continue until such time as the polytechnics are able to build a reputation for research with external funding agencies (Chambers, 1995:10).

This reflects the difficulties that institutions such as TWP face when moving into a new research environment. The costs of research should not be underestimated, and doubtless contributed to my own difficulty in accessing funding from *within* my institution, the second situation where funding problems

can prove to be a barrier to the development of a healthy research culture. Where Chambers argued that external funding may be difficult to attract because funding bodies perceive a lack of prior experience in the conduct of research, among polytechnic staff, I found that it was impossible even to get my proposal for external funding out of the polytechnic. My experience, below, illustrates the kinds of communication problems that can occur in an institution in transition.

A third area of difficulty, then, that institutions seeking to establish a research culture can experience is that of communication problems. In 1995, faced with the initial refusal by the Research Committee to contribute further to my doctoral study on top of the $3,500 they had given my department in 1994, I wished to apply to an outside funding agency. This agency, the WEL (Waikato Electricity Ltd) Trust, was offering research funds for proposals having local relevance, a fact that had been advertised in the Staff Bulletin. Expressions of interest were sought. Following the suggested protocol, I submitted to the Principal a proposal to WEL for funding. I put considerable energy into this proposal, needing to get letters of support from both my supervisors as well as work out specific costings and timelines. Four other staff members also submitted proposals at the same time. My log shows my reaction to what happened next.

> 21/4/95: I was totally shattered to hear from X [a senior manager] (whom I banged into in the corridor while supervising groups for a course I was teaching) that Peter [the Principal] had not forwarded my application to them and that nobody had informed me of that decision. This happened two weeks after the deadline. My face must have showed my feelings because Chris, who was attending the same meeting as X, caught up with me at morning tea to let me know she had known nothing either. It never occurred to me that she would, but I appreciated her support.

I queried the decision that same day with the Principal, and he told me it was his decision not to forward the proposal as he felt it was too far from WEL's criteria. He may have been right; I disposed of the criteria shortly afterwards and have been unable to locate them subsequently, so cannot refer to them here in depth. My reaction, recorded in my log at the time, was that this decision was quite unfair, done as it was without consultation with anyone else,

> ... especially without informing the applicant as to why. It is indicative of the need for the research culture to change, yet again. But it does feel masochistic to keep proving it at my own cost.

With hindsight, my application was probably inappropriate for WEL's criteria, and I accept Peter Johnson's right to make a unilateral decision. However it was the communication malfunction that was hurtful, as much as the rejection of the application. Subsequently the Research Committee, who were aware of this situation, decided to grant my department $5000 to cover replacement staffing of one day per week over most of 1995. Altogether, I received $8500 in replacement staffing to my department from the Research Committee. This freed me for one day per week for most of 1994 and 1995, and enabled me to make substantial progress with the reading for the thesis, as well as preparing and presenting papers for local and overseas conferences. Subsequently, I have had to rely purely on my normal leave to keep the project going on top of a full time job. I was extremely grateful for the Committee's support, despite the struggle I had to get it.

The incident does, however, show some change in the research culture. Despite its early discussion about my work being perceived as a private good, this granting of funds shows that there was some flexibility emerging in the institution with regard to perceptions of the work as being at least partly a public good, otherwise no funds would have been granted. The issue with the WEL incident seemed to be one of quality control from the Principal's perspective, and of communication failure from mine. Given the unease in new researchers which has already been discussed (and see also Bazeley, 1994; Dyer-Smith & Candler, 1994; Hill, 1993; Phillips, 1992; Poole, 1991; Wood, 1994a; 1994c) this kind of communication failure can constitute a major barrier to research.

The studies cited also identify other resource constraints. Researchers need appropriate computer resources (both hardware and software); the availability of appropriate library and study materials (whether located in the polytechnic, the Internet or elsewhere); the support of experienced researchers and administrators; clear policy guidelines pertaining to the conduct of research; and the availability of suitable classrooms and laboratories in which to carry out research. If these resources are not provided, it can be difficult for good research to proceed.

These demands all put pressure on an institution that is striving to carry out research in a previously predominantly teaching environment. They confront

the institution in a restricted funding environment with hard decisions over how, appropriately, to reward both teachers and researchers (in an environment where the two activities currently occur separately). Contestation over resources can arise from resistance to degrees at all in what has traditionally been a vocational and technical institution. A reluctance can develop at managerial level - reluctance to fund the ongoing study that is required for many degree teachers, to make time for research activities within their timetables, to free up laboratory space for research, to provide the computer hardware and software necessary to perform certain research tasks.

The situation is not clearcut - competing discourses cloud the issue of resource allocation. One such example of competing discourses is the tension experienced by staff who see teaching as their predominant focus rather than research. Moses and Ramsden carried out a study in 1992 into academic values and practice in new universities in Australia, focusing on a number of new universities and investigating differences between Arts, Social Sciences, Health Sciences, Engineering, Science and Commerce/Law staff. They conducted interviews with staff, using various scales of academic values constructed from a variety of statements which respondents rated on a 5-point scale. The scales measured academic motivation, good teaching practices, commitment to student independence, and one on the teaching-research synergy which the authors claim 'tapped into academics' experience of the complementarity of teaching and research' (Moses & Ramsden, 1992:105).

Their general discussion illustrated a conflict of values which affects both individual motivation, and subsequently the institutional resources which are allocated to research.

> There is a strong tendency [by researchers in the new institutions] to put teaching lower in priority. And people who are just very good teachers who just want to teach and that's all they want to do, and they want to do it as well as they can, are considered to be drones on the system rather than being rewarded for filling a niche (Moses & Ramsden, 1992:115).

The dichotomy between teaching and research identified here is similar to the dichotomy described earlier between public and private good issues in the funding of research, in that polarised thinking is used to bar access to institutional rewards. The two researchers later stated that 'the threshold for

research is such that staff whose values are teaching and service and who have not been engaged in research will not be able to progress beyond senior lecturer' (ibid., 116). This perception was supported also in a New Zealand study. Harvey (1997:185), commenting on the new requirement for teaching staff to 'reconstruct themselves' as researchers, said that staff find the requirement "even more ominous when it is eventually compounded by threats of loss of status, barriers to future promotion, and even, eventually, job loss." Joan's distress at her situation at TWP was to be mirrored at other New Zealand polytechnics also, as is clear from Harvey's comments (she is a Research Head at Auckland Institute of Technology).

Lack of adequate institutional support for research, including counting research production as a promotion criterion, was identified by four of the fourteen studies that I considered, as hindering research culture development. The strategic direction of the new universities in Australia, as with New Zealand polytechnics offering degrees, is one in which research is being promoted. The discourse of restricting one's practice purely to teaching and to being good at teaching is therefore denigrated in such an environment. It was good to hear (interviews with HODs, Chapter 4) that staff wishing to remain 'teachers rather than researchers' were able to do so; how long this situation can continue remains to be seen.

In the section above, I referred to the need for clear policies related to research, as a resource that the institution needs to provide to prevent the perception of barriers to the conducting of research. I recognise that it is almost impossible for such policy to be provided in the absence of institutional experience. Indeed, the whole point of the metaphor, 'We make the road by walking', is the recognition that the new researchers are those who force the development of policy, usually at their own expense and frequently at the institution's expense also. My story, in this chapter, illustrates this point. But that is how policy is developed, out of pressures, practices and analysis of existing and expected situations.

Policy development difficulties

Mixed policy priorities about the place of research and teaching have influenced the development of TWP's research culture. Some senior managers

appear to have considered Masterates and Doctorates to be a strictly private good. This has created a problem, that of trying to define research in ways that *exclude* any research done for professional development or credentialling purposes. See, for example, the Academic Board Minutes of 14 June 1994:

> X stated that there was a need to distinguish between research and professional development...and asked for guidelines to clarify the matter. It was noted that the source of funding these was complex.

By way of response, Eileen Chambers, Chair of the Research Committee, advised the Academic Board in its Minutes of 21 February 1995 'that the problems with the complexity of funding between Research and Professional Development were still being addressed'. They went on being addressed, as R.C. Minutes of 23 March 1995, 22 June 1995, and 23 November 1995, showed. The issues continued to concern the Committee as late as August 1998 (see Minutes, following on from a suggestion in the School of Communication Studies' Board of Studies Minutes dated 21 July, 1998, that 'The Research Committee produce a more definitive policy on research that belongs to a qualification').

I provide the following description, to help the reader try to understand the Committee's position. During 1995, the Higher Degrees support group (which I convened) wrote to the Committee asking for clarification of the situation of staff undertaking research as part of a credentialling process. At this point (30 June 1995) the response was:

> The Committee does not have a policy which allocates funding on the basis of the academic programme in which an applicant is enrolled. The Committee welcomes proposals and funding applications from any member of TWP staff.

This letter seemed to leave the issue of research funding open, not exclusive of 'the academic programme in which an applicant [was] enrolled'. However the R.C. Minutes for 22 June 1995, in considering the Higher Degrees group's letter, had stated 'The Chair discussed the position of Ph.D candidates. It was agreed by the members that the role of the Research Committee was to focus on research and not qualifications'. This is an ambiguous statement. If it is saying that research should be judged on its merits, not on whether it is done for credentialling purposes, then I support it. If, however, as had been suggested in

my case, research done for credentialling purposes is *not* an appropriate case for Research Committee funding, then I think the issue is one of power wielding through definition, yet again. To me, the discourses of professional development and of research overlap in our context; to separate the two is unhelpful.

This issue of unclear policy has constituted a barrier to the smooth progress of research at TWP. Probably this is inevitable for an institution in transition, as its members seek to put in place strategies and policies for a largely unknown environment. Policy frequently has to emerge by trial and error. I have illustrated ways in which my initiative in undertaking Ph.D study has prodded such emergence at TWP; for instance via the discussion about whether my work was/is a public or a private good. But those who experience inconsistent treatment resulting from unclear or changing policy can feel quite aggrieved. Notes included in this study from my log illustrate this.

Another example of unclear policy is provided by the Research Committee's discussion about funding for researchers to present papers at conferences. Research Committee Minutes for 28 September 1995 noted that 'Differentiating the separate areas of research was discussed. It is noted that conferences are not strictly research'. This note was in response to an application from a staff member, refused initially, for funds to present the results of research in progress at a Conference. Such funding had previously been granted to other staff, as a means of encouraging them to disseminate the results of their research and to network with the wider research community. Yet in many of the studies of research culture development that I have presented, the publicising of one's work via conference attendance and publication (e.g. in Conference Proceedings) was identified as helping to develop a research culture (see Table 2 summary, Appendix C). At UNITEC, another New Zealand polytechnic, conference attendance as a means of boosting researcher confidence is specifically targeted as 'a further catalyst for change' in their developing research culture' (Beverland & Bretherton, 1997:3). The situation at TWP shows the lack of a clear policy over funding of conference attendance at this time, compared with the separate funding available for this purpose to university staff. In the past, some polytechnic staff have been able to use their P.D. money to assist with conference attendance, although this was usually quite inadequate

to cover the cost of conference registration, travel and accommodation. Until the Research Committee determined that they would not fund conference attendance, they were seen as an additional funding body to help staff wishing to present their work at conferences.

By the time of the Research Committee's 1996 Pilot production, "Application for a Research Grant from TWP's New Entrant Research Fund", the policy about funding for conferences had been spelled out clearly: 'The Research Committee will not fund conference attendance. TWP has other funding sources for conference attendance.' This was quite correct. However the 'funding sources' referred to were the departmental professional development funds. These vary from department to department, rarely exceeding $1000 per year in the 'richest' department, and frequently only the $350 stated in the Collective Employment Contract, per staff member.

Since staff development grants have to cover *all* professional development done during a year, attendance at conferences, particularly overseas conferences, becomes a substantial drain on the salaries of staff. Many still use their own resources to ensure that their research work becomes known on the wider stage of conferences, despite this. One of my supervisors informed me that this practice is fairly common in the university sector also. TWP's current definition of research requires researchers to present their work for 'peer critique and validation by the wider research community'. A common way of doing this is via conference attendance at which one's paper is presented for examination and comment. If very limited funding is available for conference attendance, then, this can constitute a barrier to the development of an effective research culture.

My own application for funding to continue my doctoral study in 1996, which had to be presented by the end of 1995, was rejected (R.C. meeting 9 November 1995.) My log notes:

> I got a letter from the Research Committee two days back saying no funds for next year. I was really expecting that but it still gives me a sick feeling in my stomach.

The anxiety which has been identified in six of the studies I considered (Table 3, Appendix C) is evident here. The letter suggested that I apply to my own department for Staff Development funding. The letter did not specify the reason

why my work would not be funded. I would have found this information helpful in knowing whether to reshape my request, or to accept that issues of definition meant that my work was excluded from funding because it was being done at least partly for credentialling purposes. I was unaware of the Committee's thinking because my 2-year term as staff representative on the Committee ended in late 1994.

Here, again, communication problems that can occur easily in institutions in transition were evident. Issues like the provision to 'rejected' candidates of letters or memos giving specific information about the deficiencies of their requests are developed over time, as processes emerge and policies are clarified. I attempted to facilitate the clarification of these processes and policies at TWP. My memo to the Chair of the Committee, dated 29/11/95, states:

> When an applicant, whether myself or some of the totally novice researchers who have spoken with me this year, submits an application for funding to the Research Committee, it is most unhelpful to receive a rejection note which gives no indication of the Committee's thinking on the matter. The applicant then has no idea whether the project is considered inadequate, a waste of time, does not meet the Committee's criteria, or what the thinking behind the decision is.
>
> I appreciate that the Committee doubtless wants to improve the research culture of the Polytechnic as much as I do. Would the Committee therefore please consider including in their letters rejecting a proposal, the basis for the rejection and suggestions as to how the applicant could shape up their proposal so that it meets the funding criteria.

This now occurs at TWP - 'rejected' candidates receive a letter and are referred to a research mentor who can assist them to rework their requests. I, for my part, had to hunt out a Committee member, who indicated that my work was being seen now as part of my job, which is why the Committee felt it should be covered by my department's Staff Development funds. This was a reversal of their previous position, given the debate over my work being a private good. I already knew that my department was unlikely to provide funds, as I had discussed the matter in depth, at the start of my research and subsequently, with my Director. She did not see it as sufficiently part of my job to justify funding for it outside of my usual professional development entitlement, so there was a

disparity in perception between her and the Research Committee here, with my application caught in the middle.

Concerns about time and funding/practical support are common in institutions in transition attempting to develop a research culture,[12] so my experience was not unusual. Indeed, with hindsight I am grateful I got the initial 5 days of extra P.D. from my Director, and that my department received $3,500 in 1994, and $5,000 in 1995 from the Research Committee. But after 1995 there was no financial support from the Research Committee. While the Director attempted to 'top up' normal P.D. funding where she could, this support was made available on an equal basis to all in the department, whether attending conferences, studying for doctorates or Masterates. There was no time provided beyond the normal 10 days of P.D. leave. UNITEC, by contrast, recognises study for higher qualifications as benefiting the emergent research culture. Beverland and Bretherton (1997:7) stated that 'gaining a higher qualification has now become mandatory' for staff in the Centre for Applied Management, and up to 75% of any cost of gaining a higher level qualification is paid.

As with previous years, therefore, I have committed all my discretionary and most of my annual leave to the Ph.D reading, tape transcription and chapter writing which has been necessary in a work of this size. It absorbs nearly all my Saturdays and many evenings. I have also had to bear the brunt of my fees costs myself as well as contributing substantially, sometimes entirely, to my conference expenses when disseminating the results of my research to date in a variety of workshops and papers. The importance of individual motivation in contributing to a research culture is therefore significant.

What I believe the above issue highlights is the tension that can emerge during the development of a new discourse (research, in our case) where this new discourse can be seen to 'trespass' into areas covered by an existing discourse (that of professional development). Further tension exists, and has been seen in the examples above, between the needs of individuals and the attempts of the institution to define the parameters within which it will work. I believe negotiation and clear communication are vital in this context. There have been communication problems from both sides in my situation, with my failure to

clarify exactly what 'support to undertake doctoral study' might mean, with my Director, and the institution's failure to communicate consistently on what grounds it will or will not provide funding.

There needs to be some equitable formula worked out across an institution, to support staff who are upgrading their qualifications. This should be the case regardless of whether they are *required* to upgrade or whether they *choose* to upgrade, as long as it can be demonstrated that their area of research is adding benefit to their teaching, to their students, to their own motivation in their work, and to the institution. In other words it should be the *benefits of research* rather than the purposes for which it is done, which govern its determined worth to the institution. The Committee seemed to have moved to this thinking at the end of 1996, as their "Application for a Research Grant from TWP's Contestable Research Fund' guidelines showed. However, the discussion on page 186 hints at continuing problems regarding the funding of 'research that belongs to a qualification'.

The analysis so far has touched on issues requiring managerial support, or identifying how managers can constitute a barrier to the development of a healthy research culture. Five of the studies on research culture that I found, identified "Perception of no or insufficient senior management support' as one of the issues constituting a barrier to the development of a healthy research culture. In one of the studies cited, an Australian researcher, Pat Bazeley, received funding to investigate the research-related needs and attitudes of academic staff at the University of Western Sydney, a newly-constituted university.

Bazeley drew on a variety of sources for the research, including interviews, attending meetings with a range of staff, an examination of documentary sources and a self-report questionnaire completed by 67 academic staff (a 50% response rate). Bazeley investigated the research background and experience of academic staff, their current skills and those they considered to be important in their context, ways of motivating and promoting research activity, and what institutional support was available. Provision of time and funding were indicated 'as the most critical element to foster research' (Bazeley, 1994:129), as this provision was seen to imply commitment by senior management to research.

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[12] Over half of the research culture development studies I examined identified these areas as

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However, absence of management support could lead staff undertaking research to feel isolated in institutions in which 'teaching was still broadly seen as being the primary role, (or, indeed, the only legitimate role) of the lecturing staff' (Bazeley, 1994:131). Both feelings of isolation and confused perceptions of the role of the institution were therefore identified as barriers to the development of the research culture. Researcher anxiety militates against the smooth development of a research culture for a variety of reasons. The feeling of having one's efforts considered unacceptable without an explanation being provided unless one 'probed', which I experienced with regard to my WEL application and also in 1996 from the Research Committee, is quite anxiety-arousing, as Wood, a research mentor at Otago Polytechnic, commented.

> There is anxiety at having not only to learn new skills but also to display them publicly by opening up their initial research efforts to the scrutiny of their professional peers. There can be a degree of hostility that this new endeavour is required of them on top of an already full workload, with what they regard as little practical support in the way of reduced responsibilities (Wood, 1994a:350).

Wood was employed as a research mentor at Otago Polytechnic to help facilitate the development of a research culture, and published several papers describing her work and her observations of the constraints and possibilities for new researchers in institutions like hers (Wood, 1994a, b and c). She mentioned hostility from teachers who are *required* to undertake research, in the paper I quoted above. My research endeavours were as a result of my own initiative, and yet I was feeling hostile. So I can well imagine the barriers to engaging in research which staff must want to erect, when they are *required* to engage in research but are reluctant to do so.

The studies I have examined cover some of the issues that have been commonly construed as barriers to the development of a healthy research culture. The issue of enforced credentialling was not listed in these studies, specifically. But from my experience at TWP, it can constitute a further barrier to healthy research culture development while at the same time, paradoxically, as it provides an incentive to engage in research. It is a requirement of NZQA that staff who teach on degree programmes are 'appropriately qualified' (NZQA,

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barriers to the development of a research culture.

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1993:12). This is commonly understood (although not specifically written in their documentation) to mean that they have a qualification at least equivalent to, and preferably higher than, the qualification for which they are teaching. Even if this interpretation is more in the realm of folklore than legislative requirement, it operates as a controlling discourse in tertiary education.

This perceived requirement has caused considerable concern at TWP, although paradoxically it has also provided part of the impetus that fuelled our cultural development. It is the stimulus that caused Joan to visit my office, and provoked me to commence this study. Chambers described the situation as

> ..pressure on staff to undertake further study, along with increased documentation requirements, to meet the needs of outside monitoring and accreditation bodies (Chambers, 1995:59).

When I looked at the development of the degrees at TWP in Chapter 4, this issue of credentialling was raised by two of the HODs in interviews, and by the NZQA reports on two of our degrees at the time of their initial approval. I have not been able to investigate whether ongoing comments on the adequacy of staff credentials have been made. This is because my attempts to access the NZQA Approval and Accreditation reports and the Monitors' reports have been blocked on the grounds that my need to access information is outweighed by the need to consider 'the collective welfare of The Waikato Polytechnic' (memo from the CEO, dated 18/12/96).

The introduction of degrees has required many of the staff teaching on degree programmes to upgrade their academic credentials rapidly. Where this has involved the acquisition of initial degrees, there has been no discernible impact on the research culture, apart from the inevitable stimulation which study creates for staff. Study at initial degree level rarely involves conducting research, although it does train one to critique the research of others. At higher levels, however, much of the study can involve independent research of some type. This is not automatic; a research leader at TWP discussed with me his concerns that departmental staff undertaking Masters study were opting for taught papers rather than writing theses and dissertations, consciously to avoid engaging in any in-depth research. This is a worry given Phillips' (1992) comments on the necessity for staff to *experience* the skills and methods they

would later try to develop in their students. It is an example of staff resistance to perceived imposed requirements.

I have spent considerable time in this chapter illustrating barriers which can emerge in the development of a research culture, reflecting on my own experience as a relatively novice researcher in our context, and contextualising these using the writings of other researchers investigating situations like ours. I shall conclude by considering one other barrier which I have observed in our own context, and which illustrates an attempt by staff to resist some aspects of the emergent discourse, specifically that of the panoptic gaze applied via the Research Register (Harvey, 1997). This Register is compiled at the end of each year and is the institution's formal recognition of the research conducted by staff during the year. It relies on reports of such research being submitted to the Executive Officer of the Research Committee, usually by the staff themselves.

Some staff, who cannot utilise duty hours or study leave to conduct research, do their research in their own time. As a resistance strategy, they do not specify it on the Research Register as they consider it strictly their own work. I have had several staff members report this strategy to me when I tried to encourage them to list their work in the Register (see also Hill, 1997). They argue that if they get no institutional support they feel no obligation to provide institutional credentials. They may also be resisting, consciously or unconsciously, the official surveillance of their work which Foucault described as a control mechanism (Foucault, 1977a).

I do not personally think that refusal to report one's research is a particularly effective strategy, either for the institution or for oneself, since both gain credibility through the official listing of research. But it is some people's choice, and their form of resistance. Others respond by leaving and conducting their research in more supportive environments. One of my fellow Higher Degrees group members did just this. Both of these resistance strategies I see as barriers to research culture development, since they are removing valuable research resources from the institution one way or the other. But they are interesting examples of *staff themselves* rather than *managers or processes* creating barriers to the development of an effective research culture.

CONCLUSION

I referred above to TWP's Research Register and the ways in which some staff resist supporting this official scrutiny of research in the institution. In his foreword to TWP's 1996 Research Register, CEO Dr David Rawlence stated that:

> The Development of a research culture is one of the hallmarks of a maturing institution in the tertiary sector.
> This is not a development that can be "ordered up" or created instantly.
> Rather it is the product of a great deal of individual professional effort.

This statement recognises the contributions of a variety of individuals across the institution. As the studies explored in this chapter, and TWP's own situation show, the development of a research culture requires focussed and consistent effort from a range of people across an institution - both managers and their staff. It involves the institution in a major investment of resources - funds, library expansion, computers and relevant packages, room allocation, staff training, technical support, the 'buying in' of qualified staff to assist research novices. It involves the development of a wide range of policies and processes, some of which are not obvious initially, but are developed as individuals 'test the waters' in attempting to conduct their own research. Also, as my own experience has shown, the introduction of a research culture requires that considerable goodwill be exercised by all parties in an environment where individual feelings can be easily disturbed simply by the lack of established protocols or procedures.

Truly, the early researchers in an institution that has no established research culture 'make the road by walking'. It is a narrow, uphill and difficult road frequently. But the passage of many feet should render it smoother, wider and less hazardous. In Chapters 3 and 4 I investigated the development of technical education in general, and of The Waikato Polytechnic in particular, through to the introduction of degrees. This was, in answer to my first research question, to show how I have attempted to understand my own educational context. The work involved in those chapters helped me to analyse the

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discourses in which I work, and which have shaped my practice and that of my fellow staff at TWP.

In Chapters 5 and 6 I have explored the development of research cultures, and barriers which have been experienced in this development. This was, in answer to my second research question, to show how I have striven to understand what constitutes a sound research culture, how one might be developed and what factors constitute barriers to this development. The work involved in these two chapters has revealed a complex situation in which discourses of public and private good, of professional development and research, of managerial priorities and personal feelings, compete for space. Yet my own and others' research has revealed possibilities in the development of a research culture, in which multiple perspectives can be valued. In this institution, I want to contribute to a research culture which encourages the weaving of 'varied speaking voices together as opposed to putting forth a singular "authoritative" voice' (Lather, 1991:9). In this way, voices – such as those of Maori and of teacher practitioners - which have in the past been silenced by dominant discourses can contribute their own knowledge to a shared culture.

My final research question, then, "How effective is action research as a way of helping to develop a tertiary research culture?" is investigated in the following two chapters. I shall introduce the action researchers whose feet, through the conduct of research into their own teaching practice, are helping to broaden the research road at TWP. I shall conclude the thesis by considering how effective action research has proved to be in contributing to a healthy research culture at The Waikato Polytechnic.

PART TWO
ACTION RESEARCH: RE-PRESENTING OURSELVES AS
RESEARCHERS
CHAPTER 7: THE COURSE

"The old order changeth, yielding place to new
And God fulfils himself in many ways,
Lest one good custom should corrupt the world."
- The Death of Arthur, Tennyson

INTRODUCTION

Following the Education Amendment Act of 1990 and the Polytechnic's decision to offer degrees, staff at The Waikato Polytechnic were faced with a new requirement, that of actively engaging in the conduct and supervision of research if they taught on degree programmes. Prior to this, the 'good custom', as Tennyson expresses it, of the institution had been the encouragement of staff constantly to improve their teaching, so that students might learn better the range of skills which the polytechnic taught. The 'good custom' of what little had passed for research in the institution prior to 1991 was predominantly that of the 'objective, neutral' and predominantly 'researcher as outside expert' practices of the natural sciences. However, this 'neutrality' and 'objectivity', and the appropriateness of 'outside experts' determining what is appropriate practice for others, has been roundly criticised (Harding, 1986, 1991; Kincheloe, 1991; McWilliam, 1994).

I believed that it was timely, with the move to include research as a legitimate and required part of the institution's role, to expand the 'good custom' of what passed for research so that it included approaches which built on the active involvement of the teachers, working from the confidence they already have in their own practice. In this way, I aimed to encourage teachers within the institution to position themselves as active agents in the ongoing development of our research culture. By seeing themselves, and the teaching practice that they valued, as legitimate subjects for the conduct of research, they could meet the legal requirements to engage in research without perceiving that they were abandoning their 'primary' responsibility. The dichotomous perceptions of teaching and research that were described in previous chapters might, therefore, be avoided.

As a staff developer, I felt I needed to do something concrete to support staff in a time of transition. Joan's situation – her lack of a degree despite her extensive professional experience and certification - was the catalyst that provoked me to take action. I dislike accreditation systems that recognise only individual 'ownership' of knowledge, preferring ones that admit of joint possibilities also. Nevertheless, I think that the battle to change an entire certification system is too great for one individual at grassroots level to achieve. I did try, in the early stages of this work. But my attempt to enrol in a joint doctorate at the University of Waikato with my friend and fellow staff developer Eileen Piggot-Irvine came to naught. Therefore, while I may be leaving myself open to charges of domesticating rather than liberating staff (Freire, 1972) by encouraging them to meet legalistic requirements, I nevertheless decided to work on a way of encouraging staff to develop research skills by working on their own questions in their own context, in a collegial and supportive way. I defend this action by my claim that the use of action research actually *empowers* staff to investigate and change their own practice. Ultimately, I hope it will enable us all to investigate and change our institution and our education system in ways that empower all staff and students.

In my action, I recognise my multiple positioning. My family, educational and spiritual backgrounds lead me to want both to support individuals and to challenge injustice and inequity. While I try to combine the two as I work, in this study the support aspect has predominated in my efforts in working with staff; the challenging of injustice and inequity has been more prevalent in my own journey. Luke challenged teachers to be transformative of their societies:

> The transformative task is for teachers to enable students to name and give voice to their experience (their subject positions) and then transform and give meaning to those experiences by critically examining the discourses that give meaning to those experiences (Luke, 1992:35).

I have seen evidence in my course that some individuals do indeed discover through the research skills they learn, ways of challenging their own perceived injustices and inequities, and those in their wider society, by critically examining the discourses that constitute research and education. How this course was

brought about and structured forms the remainder of this chapter, along with some of the contradictions experienced as the work has progressed.

Setting the Scene

So far, I have explained the history and development of my institution. I have looked at ways in which research cultures have developed and been impeded, both at TWP and elsewhere. In this and the following chapters, I shall address my third research question, "How effective is action research as a way of helping to develop a tertiary research culture?" by showing the effect that the action research approach has had on The Waikato Polytechnic and its staff.

I summarise my thinking with respect to the action research course briefly here. I had an official mandate for my decision to offer action research as a tutor training course, as it is my role in staff development to assist staff in their acquisition of the skills which the institution requires of them. I recognised that the acquisition of research skills would be seen as an additional, and possibly resisted, burden on top of heavy teaching and administrative workloads. Pragmatically, then, I decided to incorporate in the tutor training programme required for new staff, an optional action research course of the kind which I had already completed as part of my own tutor training. This action constitutes an example of a creatively alternative interpretation of the political requirement that new staff in the institution undertake tutor training. As Middleton (1998:3) says, 'Political orthodoxies, although powerful, are never monolithic. There are always oppositions, alternatives, resistances, and creativities.'

In the first part of this chapter, I report on the introduction and effect of the action research course. I describe how the course was approved, structured, taught and assessed - how it was formed, controlled and scrutinised (Foucault, 1977a) by the academic processes of the institution. I provide some statistics about the participants in the course over the three years I have selected for analysis in this thesis. I then acknowledge a number of contradictions. There is the contradiction of questioning the formal certification of knowledge as the possession of individuals, while teaching an individually assessed and certificated course. There is the contradiction of my teaching and assessing of the action research of others, when my ideal approach to action research is that of 'emancipatory' action research in which there is no power differential between

participants. Finally, there is the contradiction of undertaking in my doctoral study, solitary action research when the approach is avowedly collaborative.

INTRODUCING THE ACTION RESEARCH COURSE

New tutors in a polytechnic are required to undertake up to twelve weeks of tutor training, as part of their conditions of employment. I, as a staff developer, was able to introduce action research as a certificated course within that twelve week programme, as an option for staff wanting to acquire research skills. When I first joined the Technical Institute in 1985, this training was done through a centrally funded unit, the Northern Region Tutor Training Centre (NRTTC) in Auckland. In 1989, as part of the government's encouragement of local educational institutions to become more autonomous, local staff developers in technical institutes were permitted to offer the initial four weeks of basic tutor training. This was done 'under surveillance', with senior staff from NRTTC monitoring our teaching to ensure that we delivered their content in their ways.

In this way, we staff developers were ' "seen," diagnosed or classified, disciplined or "normalized" by those working in the apparatuses of power' (Middleton, 1998:2) as we were later to observe and normalise our fellow staff. The situation resulted in some uneasy moments, as the Waikato staff developers preferred to use more andragogical (adult-compatible, student-oriented) methods than one or two of the senior NRTTC staff. However by 1991, after the government moved to grant more local autonomy in education, The Waikato Polytechnic was free to offer its own tutor training for its own staff across the entire twelve week programme. We were to call our eventual qualification the Certificate in Tertiary Teaching (CTT).

Vestiges of the centralised control remained in the form of certificates being granted by Auckland, so initially they still had some control over TWP's tutor training. Our ability to offer radically different courses, had we wanted to, was therefore circumscribed in the early days of 'independence'. It was during this time of transition that I commenced my doctoral study, seeking to incorporate into our tutor training programme the action research course which I had studied in Auckland the previous year, with Professor Tony Morrison of the University of Auckland as my tutor. I had found the course reasonably

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compatible with my own values, and quite effective in introducing staff to action research, so I did not wish radically to change NRTTC's course design, although I introduced some modifications over time.

This situation was probably fortunate, for to conform to NRTTC's protocols, I had to offer the course for the first time in conjunction with an 'approved' tutor. NRTTC surveillance of my teaching was provided in the welcome form of my friend and fellow staff developer at Northland Polytechnic, Eileen Piggot-Irvine. As Eileen had been 'inducted', as it were, into 'orthodox' ways of teaching action research by offering it in her own context in conjunction with an NRTTC staff member, she was now free to 'induct' me in turn. I was permitted to co-teach the course because I had already completed it through NRTTC.

It can be seen that there was a high degree of control, surveillance and normalisation operating here, which fortunately, given the compatibility of Eileen's and my thinking, proved to be not only tolerable but supportive for me. If my thesis was that the course itself is novel, then the thesis would fail, as the work is so obviously similar to that of others (Piggot-Irvine's, in this case). My thesis is, however, that it is my use of action research *to help to develop a tertiary research culture* that is novel, not the course itself.

A full description of the structure, assessment and delivery methods of the course, then, follows. I have described the ways in which TWP's staff development unit was required to conform to outside requirements, in this case the monitoring practices of the NRTTC. But TWP also had its own monitoring and controlling practices, described in depth in Chapter 4. The institution, in response to government direction, shapes the discourses within which I practice.

The Descriptor; structure and delivery methods

The processes whereby a new course is admitted into a programme specify that a course descriptor must be written, conforming to established guidelines - the 'normalisation' to which Foucault refers. Indications of the relevance of the proposed course to both local programme enrolees and the curriculum, need to be provided. This information is presented to the departmental Programmes Committee, which decides whether it meets the specified criteria, who will be teaching it, when, where and how (depending on

the size of the change to a programme, the Quality Assurance Committee – QAC - and the Academic Board may also subsequently be involved). Assessment is obviously also an important part of the descriptor. I presented my request to offer action research, in conjunction with Eileen Piggot-Irvine, in 1993, and this was duly accepted by the Programmes Committee, as QAC and Academic Board approval was not required for a small course like mine.

The course was structured as a 70-hour offering, of which 35 hours was held in-class and the remainder consisted of independent project work by enrollees, with my supervision available as needed.   This conformed to the NRTTC course structure and guidelines. A fuller description appears shortly, but both Piggot-Irvine and I found some of their requirements constraining, especially in terms of our preferred orientation towards emancipatory forms of action research (Chapter 1, page 23). We were not able to restructure the course in any significant way.   In her Masters thesis, Piggot[13] had recognised that emancipatory action research may be resisted by polytechnic management. She wrote: 'In reality, present day polytechnic management is remote from these emancipatory ideals – in fact, such ideals are often perceived as threatening and esoteric' (Piggot, 1993:51). However, she also pointed out, pragmatically, that

> Tutors in polytechnics today have little time to waste on directionless activity, and management of these institutions would not support such activity. In order to 'sell' action research to staff, therefore, it may be important to provide considerably more structure to the process than is frequently purported by many contemporary writers in the field (Piggot, 1993:61-62).

In presenting the course format to the Programmes Committee, therefore, I stated that

> The course is proposed in the format laid out because it gives opportunity for input, suggestions/reflection on the participants' own practice, the devising and implementing of a small action research project within their own teaching situation, and opportunity for discussion and feedback on the work as it progresses (PC93006: the Programmes Committee's approved Action Research descriptor).

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[13] Eileen incorporated her maiden name, Irvine, with her married name of Piggot subsequent to publication of her Masters thesis.

The descriptor further noted that

> Participants are encouraged to develop self-critiqueing as teachers: to reflect upon their own practice; to analyse current trends in education and see how these might apply to their own situation; and to design and monitor their own projects for improvement of teaching. It is also part of the aim of the research to enable the outcomes of the research to be shared with others, whether by the writing of academic papers, the conducting of seminars at which results are shared, or merely by the contagion of enthusiasm (ibid.)

In this paragraph there is a hint of the hope I had that action researchers would critique also the wider discourses – institutional, political and social - within which their work is situated. I was overt about this agenda in my doctoral proposal:

> I am aware that research which aims to empower people and to encourage their critical awareness of their own practice within the context of the wider issues affecting society, is threatening to those who find the status quo comfortable. This is not a reason to desist from conducting such research....The methodology of the research will be an action-research based participative approach, which includes aspects of Freire's empowerment through dialogue concepts.

I include this material here because it supports my contention that, despite the formal nature of the course, my preference is to encourage individuals to critique their own context and to encourage Freirean 'empowerment' (a term with which I am becoming increasingly uncomfortable, and which explains why I frequently use this term, and 'emancipation', in inverted commas). Gore (1992) critiques the concept in her essay about empowerment being what 'we' can do for 'you', suggesting that it implies the 'giving' of power by one person who 'has power' to another who is 'powerless'. From a Foucauldian perspective, this concept is inappropriate.

Assessment guidelines in the course descriptor stressed the collaborative and participatory nature of action research by requiring participation at all sessions and involvement in peer critique. Students were required to keep and hand in a reflective log while the course was in progress; and to submit a written report which conformed to guidelines provided (see examples of Handouts in Appendix B). As with all our courses, assessment was on the basis of pass or resubmit, with one resubmission being permissible.

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Course participants attended an initial three days of classes. The course itself differs quite significantly from some other suggestions of ways of introducing teachers to action research (see, for example, Laidlaw, 1992; Sanger, 1992). It is more highly structured, and includes a very brief overview of other ways of conducting research. The reason for this is historical and practical. NRTTC's requirements have already been mentioned. Also, because staff are drawn from departments across the polytechnic, in their home department they may be required to critique, carry out and/or supervise research using methods other than action research. Historically, as Chapters 3 and 4 showed, many of our staff do not have a background in research at all. Practically, therefore, it was important that we provide them with an overview of ways in which research may be carried out even though we were promoting action research, specifically.

On the first day of the course we taught sessions that introduced them to the concepts of positivism, interpretivism and critical research, using Candy's (1989) descriptions (see course handouts, Appendix B). An exercise designed to clarify these different approaches involved the perusal of a range of research articles, and the determination of which research approach best fitted with a given article. We presented information on the history of action research, and the various ways in which it has been defined and graphically depicted. The work of Carr & Kemmis (1986); Kemmis & McTaggart (1988a); Laidlaw, (1992); McNiff (1988); Zuber-Skerritt (1992), were useful in this investigation.

Carr & Kemmis' work (1986) also formed the basis for a session in which differences between technical, practical and emancipatory uses of action research were investigated. Piggot and I were both overt about our preference for emancipatory intentions in action research. But we also made clear to participants that our injunction to 'think small', a warning designed to prevent new researchers becoming overwhelmed by the burgeoning size of research projects, could result in their work being practical rather than emancipatory.

On the second day of the course we considered action research projects carried out by others, both at TWP and elsewhere. This aimed to familiarise staff with the variety of ways in which action research is used both in New Zealand and elsewhere. Proceedings of various Action Research Conferences (e.g. Laidlaw, Lomax & Whitehead, 1994), articles from *Tutor Magazine* (a now

defunct publication recording articles and research work by polytechnic tutors); and work published in the *New Zealand Action Research Network Newsletter* were useful as sources for up-to-date and relevant action research reports in this session.

A further session that participants have commented favourably on over subsequent years was one devised by Prof. Morrison for NRTTC. It was an exercise designed to have participants carry out a *very* brief action research project (in about an hour and a half). This required participants, acting in small groups generally, to design a research question. They then had to specify an appropriate procedure for investigating the question, carry it out, and present the results to the course tutor (and each other, if different groups were used). One member of the 1996 intake was so impressed by the work her group did that she wrote it up formally and had it published in the *New Zealand Action Research Network Newsletter* (Hill, K. 1996).

A further session, usually held on Day 3, was one in which a researcher from the previous year's action research course joined the group and reported on the development of his/her own research project. This enabled the 'autobiographical voice' (Apple, 1998, p. x), to represent the researcher's own reality without the intrusion and possible distortion of the course presenters' voices. It enabled course participants to enter into dialogue with a relatively novice researcher and to benefit from the strengths and areas for caution that the researcher was able to identify. As a way of 'rewarding' these novice action researcher for their input, payment was offered if they were part-time staff, while staff who had continued on to the Diploma in Adult Learning and Teaching were able to credit their leading of this session towards a "Professional Publishing" practicum.

General research skills also taught on the course included the use of CD-ROM and Internet searches (led by staff from the Polytechnic's library); the use of computers to perform simple data analysis functions, such as constructing pie and bar graphs (led by a staff developer with computer expertise); and the constructing of a workable research proposal. This last session was based around a workshop format devised by Piggot in which course participants worked from the writing of a general research idea, in paragraph form, down to a

one- or two-sentence research question. Examples of some of the questions investigated over the three years that this study covers appear below.

- Do students value the experience of linking theory with observing practice?
- How can I improve maths education at Prison X?
- What helps students develop good writing skills?
- How can I better manage group processes?
- What teaching methods and resources would best motivate Department X students to be successful?
- What prevents some of our students from achieving in calculations class?

Prior to their departure at the end of the third day, participants were assured of ongoing support and encouraged to check in periodically for supervision. This encouragement is important; despite the emphasis on checking for supervision, particularly before proceeding with any action having ethical implications, one action researcher during the period under study failed to do this. His work varied so significantly from his initial research question and from action research practices that he was unable to be certificated.

The fourth day of the course was held approximately two months after the initial three days. It provided an opportunity for course participants to meet again as a group. Valuable work was done during this time as they described their work to date, heard of each other's successes and difficulties, looked at each other's 'research instruments' if questionnaires or interview schedules had been used, and received both peer and tutor critique and support for their work. Additional tutor input covering the action research process was provided on this day in order to develop further their understanding of action research. The computer session alluded to earlier also occurred on Day 4. Finally, the processes for writing up a research report were worked through (the work of Stalker, undated, has been useful in this session). Marking schedules were provided to ensure that the structure of the final report was clear to the students, and they were reminded that their reflective logs were also due with the reports on the final day of the course or, at latest, within two weeks.

The final day of the course – usually in late November or early December, and about six months after the initial days - provided an opportunity formally to present the results of research to date. While by this stage most research was already completed, frequently the staff's own examination setting,

supervision and marking pressures meant that the actual written reports were not yet ready. Nevertheless, the day gave participants a chance to present their work in public, to comment on its strengths and where it might be improved, and to receive feedback from peers and tutor. A course evaluation session concluded the day.

Assessment Issues

Assessment for the course included both informal and formal requirements. Research questions and proposals were the subject of informal assessment prior to the commencement of the research project. The peer critique of each other's work mentioned above was an informal assessment requirement, seen as a way of developing skills in both giving and receiving feedback on research in progress. Supervision sessions also provided an opportunity for one-to-one informal assessment, as participants received guidance and support in devising appropriate statements or letters covering ethical information for their co-researchers, peers or students, and help with structuring interview questions or questionnaire construction where this proved to be appropriate. Informal feedback was also available on an early draft of the report, if participants requested this. A minority sought this informal feedback. The remainder chose to submit the report as it was and carry out a resubmission on incomplete or inadequate work, if necessary.

Formal assessment involved the submission of a completed research report, and the handing in of a reflective log. Difficulties inherent in the assessment of the latter will be investigated in the next section on contradictions; criteria for the former appear in the handouts in Appendix B. Despite the existence of specific criteria in the marking schedule, a variety of styles of report have been submitted. I am happy with this. It is their own practice that staff have investigated, and their own styles of reporting are compatible with this. As long as all the criteria are met, I have passed project reports that, for example, incorporate log details with the report; that collapse the categories of results and discussion; of conclusions and suggestions for future research.

What is important from my perspective is not that reports meet a standard format. Rather, it is that participants demonstrate awareness of the areas covered

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in research reports and can construct a report themselves that makes clear to the reader how their research was carried out, what results have been achieved, and the significance (or otherwise) of these results. Considering the incongruity (Geelan, 1998:Ch 7) of *requiring* written reports from individuals using a research approach that stresses collaboration and sometimes, use of idiosyncratic techniques (see, for example, Mattingly, 1991; Reason, 1994) this flexibility feels appropriate to me. Even so, anomalies can occur which oppress specific individuals. An example of such an anomaly arising out of my assessment processes for the course, and oppressive of a Maori action researcher, is discussed on page 251.

Course statistics

Action Research courses have been offered at TWP since 1993, at a rate of one per year. The first was co-taught with Eileen Piggot; subsequent courses were taught mainly by me. As might perhaps be expected given the fears some staff have expressed about undertaking research, and the pressures they complain of in their workloads, enrolments on the course were not high. As well as TWP staff, in each of the first two years, there was one course participant from other polytechnics. I did not interview these people as they do not impact on TWP's research culture, which is the purpose of this study. I would have felt that to interview them would be an unwarranted intrusion on their time, given that I could not influence their contexts. Numbers of course participants for 1993-5 are shown in the table below.

Table 4: Numbers attending Action Research Course, 1993 - 1995

Year course offered	TWP staff attending	Staff from another polytechnic attending
1993	5	1
1994	4	1
1995	8	0

Because my research design involved interviewing course participants a year after the course, and I wished to write up the thesis mainly during late 1996 and 1997, I did not conduct interviews with the 1996 or subsequent course participants.

It is important in terms of my claim that action research can act as a catalyst to help to develop the research culture of the polytechnic as a whole, to look at the spread of departments that are represented in the action research course. Table 5, below, presents this data. Up until the end of 1998 I had not had course participants from Agriculture/Horticulture, Information Technology, Mechanical or Construction. This is not surprising, since statistics reported by the Research Committee on 1994's work showed no research at all being conducted in any of those departments except Information Technology. I know, however, from hearsay, observation and discussion, that reflective practice, research and development are occurring in all those departments. The comments from foundation staff in this study bear out this contention. But it does not yet seem to be part of the prevailing cultures of some of those departments to report their work formally. The encouragement of weaker framing within the organisation, which I hope that the shared method of research into teaching practice promoted in my action research course can bring about, may help to break down this insularity.

It is hard, faced with silence from some departments, to tell how pervasive TWP's research culture actually is. All other TWP departments, however, have been represented in the Action Research courses at some point.

Table 5: Departments represented on Action Research Course, 1993 - 1995

Departments represented	1993	1994	1995
Maori Studies	2	0	0
Electrical	1	0	0
Business Studies	0	0	2
Design & Communication	1	0	1
Community & Continuing Ed.	0	2	2
Office Technology	1	0	2
Hospitality & Tourism Studies	0	1	0
Education Services	0	1	0
Nursing	0	0	1
TOTALS:	5	4	8

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Because of the discussion and peer critique that happens in the courses, I argue that it is a way of encouraging the weakening of pedagogical framing at TWP, as staff hear each other's questions, listen to investigations into the ways that others teach, and come to understand better each other's contexts. I claim that this is a way of building a healthy research culture in which different ways of both teaching and researching will come to be valued.

The advantages of cross-department interrelationships in the establishing of a research culture are recommended by Wood:

> ...crossing the boundaries between individual lecturers, departments, institutions and countries must be a powerful way to initiate people into research (Wood, 1994c:6).

Wood's comments, building on her work in developing the research culture at Otago Polytechnic, reinforce a point made by Tripp (1990a). He argued that the collaboration of critical pedagogy, from which action research has sprung,

> ..has to do with "the empowerment of subordinate groups through shared understanding of the social construction of reality" [and that] Socially critical action research is perhaps most effective when done by mutually supporting groups of teachers, not only because such research is difficult but also because only a group is usually sufficiently powerful to affect other factors, such as changing the situational constraints in which the project operates (Tripp, 1990a:161).

Tripp's latter comment reinforces the strength of group processes in bringing about institutional change. In its reference to 'situational constraints' it also recognises the cultural norms within which research operates. The 'departmental silence' on what research is being done, and by whom, is one such situational constraint.

Other statistical data about the course reveal that of the seventeen TWP staff attending over the three years, gender representation was seven men and ten women. Of these, one man and two women were Maori. Four course participants did not complete in the sense of handing in completed reports. Two of these did the course purely for interest and were not concerned with certification. One was overwhelmed by the volume of his teaching work and did an inadequate report for which resubmission was required. One decided that her

priorities had changed during the year so that research was no longer at the top of her list, and dropped out before the final day. She has told me subsequently, however, that the skills she learned on the course have been useful to her in other contexts since. One went overseas before I could interview her. Interview data are available, therefore, for twelve of the seventeen TWP enrollees. I decided not to interview those who did not complete the course as their work, being incomplete, cannot be formally counted as contributing to the development of our research culture, unlike that of those who wrote reports.

Changes to the course over time

I implemented a number of changes over the three years that the course was monitored for this thesis. In the first year (1993), as the action researchers were among the first people doing formal research in the institution and research policies were still in their infancy, I required my action researchers to submit their proposals to the Research Committee. These were favourably received (written feedback to two course members from Chair Eugene Crotty supports this point). However, as they were fairly small pieces of research and usually had implications mainly for the departments in which they were carried out, the Committee decided to limit its perusal in the future to research which had cross-departmental or Polytechnic-wide implications. So the 1993 participants were instrumental in provoking a more specific research policy decision by the Committee. In that way alone, they contributed to the institution's research culture, quite apart from the other benefits of their research. Subsequent course participants have not been required to submit their proposals to the Research Committee unless these have cross-Polytechnic implications or are seeking New Entrant[14] funding.

Another change was to handouts, for the 1994 occurrence of the course. In 1993, one of the handouts I used to present information on different ways of conducting research (see Perry & Zuber-Skerritt, 1992, handout - Appendix B) was found to be too dense to be understood readily, so I paraphrased it, breaking down the level of the dialogue but staying as faithful as possible to the concepts. A similar amendment process was carried out in 1995, for similar reasons. In one handout, for example, I provided the 'original version' in the left-hand

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column, and a simplified breakdown in the right-hand column. I based this format on an 'alternatively constructed' paper by Middleton (1995b); it gave people a choice of ways of approaching information.

I have concerns about both versions, however, in that the left-hand column can make novice researchers feel inadequate in not understanding the jargon, but the right-hand column could be seen as patronising. In terms of critically reflecting on my own teaching practice, this concern arose from course evaluation data from our Certificate in Adult Teaching (CAT) students over 1995 and 1996. Initially, student comments on these forms indicated that the level of my dialogue was confusing to some participants. So, later in 1996 and again in 1997, I worked hard to break down the level of language I used, only to get feedback mid 1997 from one CAT group that I was patronising them! I am now possibly hypersensitive about the language level in my handouts as well as in my teaching currently, both in terms of the advanced and the deconstructed language. When I asked the 1997 action researchers, however, all indicated that they found the simpler right-hand column version helpful.

I did not attempt to change the format of the course at all, since the three day/one day/one day format had been favourably reported on in course evaluations. Some participants commented, on their course evaluation forms or in their reflective logs, on their appreciation of being able to come back together mid-project to report on their progress and to hear about each other's work, and that they liked having the final day of the course occurring after they had finished administering their own examinations to students. They mentioned appreciation, too, of the ability to hand in their final reports by early to mid-December as this gave them time to mark and return their students' work and then to concentrate on their own assessable reports. Not all aspects of the course have worked smoothly, however, and it is to the contradictions I have encountered, and accommodations I have tried to make, that I turn next.

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[14] The 'New Entrant' funding available at TWP is an attempt to encourage specifically novice researchers to carry out research.

CONTRADICTIONS AND ACCOMMODATIONS

It can be frustrating for researchers who try to operate with integrity in their research environment to find that their work contains contradictions, and that they need to adapt their preferred ways of operating to meet the demands of their situation, but that is the reality of conducting research in an environment such as ours. Such flexibility can be read as a research strength when one is undertaking avowedly collaborative research. I describe the contradictions and accommodations I have had to make, below.

Certification

The location of the course in a certificated programme and the presentation and assessment of the course confronted me with certain contradictions. The first pertains to the certificated nature of the course. Why did I seek to locate action research in a certificated programme, given my resistance to the continuation of individualised certification as the only means of officially accrediting students with mastery of scholastic work?

The notion of contradiction is not a new one to many researchers. In his book, '*The Growth of Educational Knowledge*', Jack Whitehead discussed how

> ..my claim to have produced a new form of educational knowledge is grounded in my experience of living contradictions in the workplace (Whitehead, 1993:17).

In Whitehead's autobiographical work, he pointed out the injustice he felt he had been exposed to in his own doctoral study and the ways in which this injustice had led him to seek less oppressive ways of developing educational knowledge with his students. For Whitehead, the contradiction inherent in doctoral study that purports to develop intellectual independence, but then limits the ways in which this independence can be expressed, provides a fertile ground for the challenging of established knowledge and ideas. I have experienced the same contradiction myself in the writing up of this thesis.

My discomfort with regard to the action research courses, then, arose from the ambiguity of wanting to resist individual certification of knowledge as the dominant form of knowledge recognition, while offering an individually

certificated course. But I also recognise that in our new environment, overworked staff are required to gain new skills in conducting and supervising research. The acquisition of research skills had not been a part of the tutor training programme at TWP prior to my introduction of the action research course, although the NRTTC had offered Action Research and a Research Methods course as part of its programme. I reasoned that I could introduce the course as an optional part of a certificated programme, then, rather than offering it as a stand-alone method of acquiring research skills without assessment or certification. This logic was born from a pragmatic recognition that, given the fear of some staff about engaging in research, there had to be some incentive for them to undertake the course. Being able to count action research as two weeks towards their certification requirements could provide that incentive, as well as providing time for them to learn the new skills. There is logic in my action, but the situation remains contradictory.

Assessment in Action Research

The second major contradiction I have encountered in presenting the course as I have done, is that of needing to structure and assess it in ways which conform to the institution's requirements. As I described in Chapter 3, we now operate in a discourse of accountability that was less obvious when I first commenced work at the Waikato Technical Institute in 1985. When I introduced the course in 1993, I was required to state how it would be presented and assessed. The contradiction for me was that because of my role as both facilitator and assessor, there was inevitably a power differential between me and the course enrollees. My preferred approach to action research is that of the 'emancipatory' style, which stresses collaboration and egalitarianism. This is how I attempt to ensure that, as far as possible, individual agendas are not overridden by the agenda of the 'teacher'. Emancipatory action research operates when

> ..the practitioner group takes joint responsibility for the development of practice, understandings and situations....[it leads to a situation where] a process of collaborative action research is employed in an open-minded, open-eyed way to explore the problems and effects of group policies and individual practices (Carr and Kemmis, 1986:203-4).

I could not claim that joint responsibility was taken for the development of our practice, when *I* had been the one who described the course structure, chose the teaching methods and specified how it would be assessed, backed up by the 'regime of power' of the institution (represented, in this case, by our Programmes Committee). The problems inherent in this situation were identified by Carr:

> ..despite the rhetoric of 'teacher emancipation', action research will be constrained by traditional academic controls and distorted by the evaluative criteria and assessment procedures which academic institutions impose (Carr, 1990:504).

He was critiqueing a book by Lomax, a British writer, who subsequently argued that the contradiction of assessing action research enabled her to

> ..treat the 'problematic' of its assessment within an award linked programme as a 'living contradiction' that we can work to resolve in practice (Lomax, 1994:114).

My situation of feeling contradictorily placed is not, therefore, unique.

However, it may well be that some of the concern that Carr expresses, and that I have experienced, is misplaced. Describing their work with teacher researchers, Maher and Tetreault commented that the situation of one was paradoxical.

> ….by becoming more prescriptive, [a teacher] has given the students more freedom - a better grounding in the text which enables them to "take the authority they need" (Maher & Tetreault, 1994:237).

The apparent contradiction of structure giving freedom may be further illustrated using an example from my own experience. In 1995 I advertised in the Staff Bulletin for fellow staff members who would be interested in using video as a tool to critique our own practice. I felt we could set up an informal action research group using the videos as a trigger to identify research questions pertaining to our own practice, which we could co-research. Only one person responded. Her work subsequently prompted her to join the action research course and formalise what she had been doing, but my own video confronted me

with a discrepancy between the Freirean principles I espoused theoretically and my theory-in-use – what I do in practice (Schon, 1983). I saw on screen a far more directive approach at times in the videoed lesson than I was consciously aware of taking.

My co-researcher and I explored this discrepancy, and decided that I should go back to the 'student group' of fellow staff members who were taking my assessment course, and ask them for feedback on the discrepancy I observed on the tape. To my surprise, they seemed quite relaxed about the situation I described. One pointed out that what the video didn't reveal (as it showed only me, not the student group) was the body language which experienced teachers pick up from their students. Their restlessness, irritation etc. can lead the teacher to move things along a little more rapidly.

This teacher direction is not necessarily antithetical to Freirean principles – Freire himself was quite directive in his work in Guinea Bissau (Freire, 1978). When I discussed my concern with the student group, several students said they felt comfortable with the teaching style and quite able to make their own voices heard when they wished. One said she felt it was vital that the teacher be able to intervene and bring discussion back on track if it was becoming irrelevant, a point with which I agree. (It is, of course, possible that as this group were yet to be assessed by me, they were telling me what they thought I wanted to hear....) This incident appears to support Maher and Tetreault's contention that, paradoxically, a degree of teacher direction can in fact be liberating for students.

But not all teacher direction can be construed as liberating. One issue which I need to keep constantly in mind and explore further is the degree to which my assessment of action research reports constitutes part of the 'gaze' which Foucault describes, and which could conceivably disadvantage individuals by forcing what might be private thoughts and potentially subversive strategies into the public view. I suggested in Chapter 6 that locating reluctant contributors to the Research Register could be subjecting them to such a 'gaze' and forcibly 'outing' them as researchers in an environment that might not welcome this identification. Foucault had commented that

> A 'power of writing' [is] constituted as an essential part in the mechanisms of discipline (Foucault, 1977a:189).

As the institution 'disciplines' its researchers by capturing their work in the research register, so too the assessment in my course disciplines the action researchers by capturing their work in logs and research reports. My assessment in the course requires the production of a reflective log as a tool to aid reflection and capturing of thoughts to assist the later construction of the other formally assessed piece of work, the Report. Foucault's work has caused me to consider to what extent my 'gaze' as an action research assessor, through the requiring of a certain kind of written outcome, becomes a potentially normalising instrument.

Foucault claimed that 'Like surveillance and with it, normalization becomes one of the great instruments of power...' (ibid., 184). It is the constraint and normalisation which Foucault described here, which makes McNiff's warnings about standardised approaches to action research very pertinent.

> Are we not then in danger of providing an elitist group within C.A.R.N. [Collaborative Action Research Network] that is actually going to start setting clear parameters as to what constitutes quality action research, or what constitutes action research itself?...Some eminent action researchers - I certainly don't share this view - are quite specific about the kind of criteria they lay down as to what counts as action research (McNiff, 1994a:19).

Prior to reading Foucault, it had not occurred to me that the reports and reflective log which my action researchers are required to produce could be construed as subjecting them to a normalising gaze, although I had decided that using the contents of these more personal logs for my own academic purposes in this thesis would be unnecessarily intrusive and colonising. I therefore consciously excluded the logs as a data-gathering instrument.

My thinking was reinforced by the argument of Paechter (1996). She used the 'pastoral power' concept of Foucault (1983b:214, quoted in Paechter) to describe a concern with power that is 'salvation oriented…individualizing…co-extensive and continuous with life…[and especially, for this thesis,] linked with a production of truth – the truth of the individual himself'. She advised that the 'confessional' aspect of action research, among other social science research approaches, needs to be treated with caution as action researchers 'are some of the least powerful individuals in the research community' (Paechter, 1996:82).

I decided to exclude the logs for these reasons, but still require a report, as a way of teaching generic research skills. As I have said, I am fairly tolerant of different writing up *styles* but still require reasonably consistent research report *criteria* to be met. On reflection, I think it is quite possible that my gaze, and the self-gaze through report and log writing that I require of my action research course participants, is potentially normalising. The danger of this normalisation is that it can be repressive of other ways of researching, and the log can force students to make themselves known in ways that they might prefer to avoid. Both possibilities are antithetical to emancipatory action research principles.

If one was considering the situation only from the perspective of how to learn research skills, normalisation might not be an issue. Knowing 'normal' ways of conducting research could be an advantage. But it is potentially problematic in an action research context, particularly when looked at from the perspective of an action researcher who purports to be working from an 'emancipatory' perspective. It raises the possibility that while individuals are being told they are free to research their own questions in their own ways, in fact this 'freedom' may be being restricted by the normalising requirements of the marker. Bishop (1994) and Bishop and Glynn (1992) raised this point with regard to Maori and action research. I have not yet found an acceptable way to resolve the contradiction of requiring assessment against pre-determined criteria, when one is attempting to work from an emancipatory perspective, although I tried a variation with the 1997 and 1998 course members.

In this variation, I suggested that while the research report still needs to be formally assessed and to contain the criteria specified on the marking schedule, the reflective log could be assessed differently. Prior to 1997, I took these logs in and 'marked' them, in the sense of responding to comments made. Student logs varied from occasional paragraphs on subsequent weeks' work to two entire exercise-books full of reflection and comment from one committed diarist. Reflective logs have proved to be a powerful tool through which tutors identify patterns in their work, critique their own performance, and record their successes.

As an attempt to reduce my 'gaze' and its possibly constraining effects on the reflective logs, I suggested to the 1997 and 1998 intakes of course participants that they could choose to submit their log rather to a 'critical friend', an action research concept promoted by Altrichter, 1993; Kember et al, 1997; and Laidlaw (1997) among others, and warmly encouraged in my course, particularly for those who find peer involvement hard to attract. Laidlaw says that the critical friend

> ..has to interpret and listen, to play back what the researcher is trying to reveal, to illuminate where there is any ambiguity, and to challenge where there is any untruth (1997: 29).

While this is still obviously a form of surveillance, the more 'friendly' nature of it, with the removal of power differentials between gazer and writer, may help to minimise the normalising, controlling function of the teacher's gaze. The critical friend's feedback could be submitted as evidence rather than the log itself. Nobody in the 1997 intake chose to use this alternative; one suggested that if some form of 'teacher assessment' was not required, she knew she would fail to carry out the task despite stating that she had found reflective logs a valuable tool for her practice, on our Reflective Practitioner course.

The internalisation of outside monitoring requirements here (Foucault, 1982) is obvious and worrying, although not unusual in our context. Hill had the same problem with Business Studies tutors in his Research Methods course (Hill, 1997). However the people on my course, while highly competent in their own content areas, are generally not trained teachers. So they are therefore trying to fit their tutor training in around planning, delivering and assessing their own coursework. Perhaps their perspective indicates not a devaluing of the task per se, but rather the pragmatic recognition that they 'need' outside requirements in order to focus energy. Eventually, with the 1997 intake, we decided that sufficient evidence would be submitted to indicate that a log had been kept. This could be a computer 'cut and paste' of selections which they were comfortable for me to peruse and/or comment on, rather than having me 'gaze' at the whole log, as some had indicated that this latter option would constrain what they might otherwise write. This option seems to have worked. The 1997 and 1998 action researchers seem (to me) to have been quite intrigued with the whole concept of Foucauldian surveillance, as I discussed my dilemma openly with them. So

perhaps the discussion by itself has been emancipatory in terms of the ways they may think about their own student assessment in future, although this is obviously speculative thinking on my part.

Solitary Action Research

The final contradiction is that of trying to carry out action research on an individual basis. Some have made strong statements about whether solitary action research is legitimate action research. Habermas, a critical theorist, warned that

> The self-reflection of a lone subject...requires a quite paradoxical achievement: one part of the self must be split off from the other part in such a manner that the subject can be in a position to render aid to itself...in the act of self-reflection the subject can deceive itself (Habermas, 1974:29).

I recognised this tendency to delusion in some of my reflections reported in the previous chapter. At the time I may not always have perceived my imbalance; later I certainly did. Perhaps because of this tendency to self-deception, people like Kemmis and McTaggart have claimed that

> The importance of the group in action research cannot be overemphasised. Activities where an individual goes through cycles of planning, action, observation and reflection, *cannot* be regarded as action research. *Action research is not individualistic* (Kemmis and McTaggart, 1988a:15, emphasis theirs).

However despite my invitation to my peers in the Professional Development Unit to join me in my action research on changing the research culture of the polytechnic, and in peer critiqueing our teaching practice, workloads or inclinations have been such that none has joined me. My work has therefore been largely solitary, assisted from time to time by conversations with 'critical friends' such as those named in my acknowledgement section, many of whose challenges and support have made me stop and think on frequent occasions. But I argue that my work on this doctoral study *can and should* be regarded as action research - that the process *can* be carried out on a solitary basis despite the preference for collaboration that is stated in all definitions I have quoted in this thesis. I discuss this issue further in the concluding chapter.

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Webb (1996b:62) supported my contention with his observation that "The example provided by Jack Whitehead may be argued as a challenge to the privileging of group over individual. He has shown how an action research approach may be applied to an individual, in fact, to oneself."

Collaboration, in my case, comes about through discussion with critical friends in New Zealand and abroad (using e-mail), with my action researchers themselves, and via the sharing of the results of my work. In a joint paper offered by myself and a critical friend, for example, we were able to share our insights into the benefits of conducting 'insider research' in two differing tertiary institutions in New Zealand (Gorinski & Ferguson, 1997). I have offered seminars and workshops based on my work both within and outside the institution, encouraging dialogue on my methods and seeking the involvement of others. I have sought and responded to student feedback across the range of courses I teach, in a conscious attempt to model the action research processes I am facilitating within the institution. Some examples of my responses have been quoted in this study. When I was in the U.K. on a teacher exchange in 1994, I interviewed Professor Jack Sanger of City College, Norwich, on his perspective about solitary action research. He agreed that the process, while espousing collaboration for all the excellent reasons discussed in my study, *can* be carried out on a solitary basis provided that the cycle is followed and change in one's practice is sought. This, of all the contradictions, has been the easiest to live with philosophically.

CONCLUSION:

How and why were action research courses introduced into The Waikato Polytechnic? In this chapter I have shown the historical background for the course itself, in its origins within the centralised tutor training required of polytechnic staff as part of their conditions of service. I have linked its introduction within TWP both to my own initiative and to government attempts to increase local autonomy. I have further linked the administrative requirements through which I had to work to bring the course into being, with the Foucauldian normalisation and surveillance functions required of the institution from the time

of the 1990 Education Amendment Act, and currently administered through our Programme Committees, the Quality Assurance Committee and the Academic Board. The power of the latter two bodies to normalise and scrutinise our academic processes were investigated in the preceding chapters; the power of the Programmes Committee to require substantial and specific descriptors was investigated in this chapter to show how the micropractices of power operate throughout the organisation.

The course itself has both benefited and been constrained by NRTTC's historical influence. As I indicated, some excellent sessions have been carried over from NRTTC's curriculum, while others have needed amending to meet better the local needs of our staff. I have moved from admittedly 'friendly' monitoring and shaping procedures, evidenced by Eileen Piggot's presence with us at TWP in 1993, to offering the course almost single-handedly since. My own requirement to monitor and shape students in the course has been investigated, and the worrying contradictions inherent in my work have been discussed.

So far, however, the comments made about the action research course have been my own. It is time to see what the action research course participants themselves thought of the ways the course was structured, taught and assessed, and whether they supported my contention that action research is indeed a good way to help to develop a tertiary research culture. The interview data from this group, therefore, appears in the next chapter.

CHAPTER EIGHT: IMPACT OF THE COURSE
INTRODUCTION

How effective is action research as a way of helping to develop a tertiary research culture? So far my thesis has considered action research from the perspectives of authors both in New Zealand and overseas; from my perspective as a declared advocate of the approach, and with reference to some of the formal records of the institution, such as Programmes Committee documents and memos. But how effective did the action researchers themselves find it as a way of developing their knowledge of research, and their ability to carry it out along with their teaching duties in the polytechnic? What effect has their work had on our research culture from the perspective of individual, departmental and institution-wide impact? How relevant did Maori action researchers find the process, from their different cultural perspective? As befits a study that claims triangulation as a form of validation, the perspectives considered in this chapter are those of the course participants themselves, as well as supporting material from other action research writers. Carr and Kemmis' technical, practical and emancipatory framework will be used as a tool in this chapter to investigate the issues.

The data that I present here support my claim that action research can contribute to the development of a healthy research culture. I argue that participation in an action research course, or through engagement in action research projects, can: assist the development of research skills and awareness in individuals; help some staff to act as catalysts in the development of a research culture both within departments and across the polytechnic as they share the results of their work and enthuse others; and demonstrate how staff may affect developing policy and practices pertaining to research within the institution. The sample of twelve staff is not large, given the over 400 fulltime staff in the polytechnic. But given the very limited number of people engaged in research within the institution at the start of this study, the impact of the course was significant for them and their departments, and had some effect on the wider polytechnic.

Action researchers were not interviewed prior to the course commencing. Past experience shows that the staff who are booked on a course prior to its implementation frequently are not the same staff who actually show up on the

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first day, because of work pressures within departments and because of other variables over which the P.D.U. has no control. It would have been an unnecessary burden to staff who did not subsequently attend the course, then, to have interviewed them prior to the course commencing. Since the only information I could have gleaned from them prior to the course was their experience of research to that date, it seemed appropriate to ask for that information following the course. It is factual information and recall was highly unlikely to have been affected as a result of the course.

I indicated that twelve staff who completed the course were interviewed approximately a year after their experience. The delay was deliberate; it was intended to distance student perceptions of myself as assessor on the course, a position that I have already indicated is incompatible with the emancipatory form of action research that I espouse. It was intended to allow time for the impact of the course, if there had been an impact, to settle, and to permit the action researchers to consider the situation with the benefit of hindsight. I have found delay time valuable, in my own work for this thesis, in helping me to gain a sense of balance in my reaction to situations, and hoped it would work similarly for the action researchers. It was also intended to allow time for any catalytic effect to start to permeate departments, as I hoped it would in response to the work and enthusiasm of the course participants. I also conducted a brief e-mailed questionnaire as I wrote up the penultimate draft of this chapter in late 1998, to ascertain the longer-term impact of the course on participants. Unfortunately, by that time only eight action researchers remained in the institution. As it was approaching Christmas, a time when staff are extremely busy, only five of these eight responded.

This chapter draws, then, on comments made by the twelve, to investigate the practical, emancipatory and catalytic effects of action research on these individuals, and to determine whether or not it has had wider catalytic effects in our environment. However, in order to provide a fuller picture of the kinds of work undertaken, I have permission from two of the course participants to represent their work in more detail as case studies. Drawing on Carr and Kemmis' (1986) framework, I have chosen one that fits predominantly within the practical descriptor, while the other is predominantly emancipatory in

orientation. These appear at the start of the chapter, so that the reader better understands the type of work being carried out, when interpreting comments made later in the chapter. The actual methodological procedures I used in requesting participants' co-operation, carrying out and analysing the interviews appeared in Chapter 2, page 46.

The specific questions that I asked the action researchers are included in Appendix A. In this chapter, they are paraphrased as subheadings. Ideally, of course, a truly collaborative and emancipatory action research project would have involved all of these people meeting to decide what *they* felt were the issues, and resulted in a joint report containing all our names, not just mine. But while individual certification is required by accrediting institutions – the University accrediting this thesis, in this case - and teacher workloads remain as heavy as they are, full collaboration seems idealistic. I did, however, check back with the action researchers I could contact that what I have written feels appropriate to them. Three who had subsequently left the polytechnic were unable to be contacted, but as their comments are reported anonymously ethical responsibility is maintained. As McTaggart (1998:10) put it, 'Writing, or indeed otherwise reporting the work of the project, will often be an individual activity, but confirmation must always be collective.'

While all action researchers contacted have approved the content of this chapter, I was particularly careful to gain written permission from Anne O'Brien and Ramesh Shah to identify their work and ensure that they knew they could embargo material used. Neither has chosen to change anything; Ramesh felt strongly enough to write on the form he signed that he trusted my professional judgement and 'high ethical standards' and didn't find such ethical approvals necessary. The two case studies, Anne's and Ramesh's,, which they have authorised me to identify and to interpret, appear below. I show through their interview material, the effects that their work has had for them, for their departments, and, where appropriate, in terms of influencing policy and/or practices in their contexts.

A Practical Action Research Project
Anne is a New Zealand-born woman with no previous research experience. She worked as a literacy tutor using computers to assist students on

a twelve-week 'Bridging Course' [one designed for students with a past history of educational failure] who 'have a phobia about writing original work.'[15]   She identified a need to 'find out promptly what type of activities will encourage development of written skills in adults who have no background in such skills' (ibid.)   That this work falls predominantly within a practical action research context is evident from the description by Carr and Kemmis (1986:203, quoted in Chapter 1 on page 23) and supported by Grundy's writing. Grundy, like Carr and Kemmis, saw practical action research as seeking 'to improve practice through the application of the personal wisdom of the participants' (Grundy, 1988:357).   The case that Grundy cited was of a teacher who attempts to motivate students to take responsibility for their own learning, drawing on her 'accumulated store of practical wisdom' (ibid.)   Grundy suggested that this teacher 'would ideally be assisted by a facilitator and a co-operative group of colleagues' (op.cit., 358).

This is largely what happened in Anne's case, although the co-operative group of colleagues did not emerge. Through her involvement in my course, she identified that she wanted her students to develop their skills in writing original material. As Carr and Kemmis (1986) suggested, I was the outside facilitator who helped Anne to develop the structures and processes to investigate this question with her students. She also was positioned largely as an 'outside facilitator' as far as her students were concerned. Her practically-oriented work aimed to improve the development of writing skills in her students.

Anne learned to use the Internet as a research tool as she sought related work. However her endeavours here drew a blank, largely. She identified that most related research, covered work done one-to-one over a long period of time, not in her situation of having students for only 3 months. Anne decided to use 'individual conferences, small group discussion and sample collection and diagnosis of samples using the facilities available in a programme called Success with Writing' (O'Brien, 1994, Data Collection & Analysis) as her way of investigating how to help her students. Her actual cycles of work are presented in Appendix B, a fascinating series of diagrams that show her own high degree of computer literacy. In addition to the findings presented there, she identified

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[15] O'Brien (1994); Project Report: Significance of the Question. Anne did not use page numbers

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that 'one of the major things this research project taught me is that there is no short cut to improving writing skills' (O'Brien, 1994, Findings). Further, she noted that 'All students showed progress in both quality and quantity from their first essay to their final essay' (ibid). She concluded:

> This research has brought a real development in the way writing skills are taught in the CAL [Computer Assisted Learning] Unit....I discovered that there are some basic strategies, techniques, activities and order that worked during the Action Research, and I will continue to use those. There are some things I discovered did not work. But I am always looking out for ways to reach my students and while my students keep presenting as individuals with differing needs then I will continue to look for ways that will meet those needs (op. cit, Discussion of Findings).

The kinds of practical improvements to course delivery that Anne identified here were mentioned by two thirds of the action researchers whom I interviewed. In her comments above, Anne identified both personal and departmental benefits arising from her study. These insights are clearly practical. She was not overtly seeking to bring about change in social systems and practices, although one could argue that literacy *can* bring about profound change (Freire, 1972). Did action research lead Anne to want to continue researching in her own context? Her 'Implications for Further Research' section indicates that it did.

> I would like to continue looking into ways that will give students confidence to tackle essays on topics they have no personal knowledge of, by introducing research methods for students. I also need to look at the concept of plagiarism with students and teach them how to summarise instead of merely copying.
> While undertaking this Action Research I have discovered a computer programme called Writing for Success, put out by Ashton Scholastic which looks as if it would be great to use in the CAL Unit. I would love to have the time to learn the programme myself and discover ways to integrate it in the CAL Unit.
> All three of these: Student Research Skills, Plagiarism and Writing for Success would lend themselves to future Action Research Projects.

As Anne left for Australia at the end of 1997, I have been unable to determine whether she has continued engaging in research. However, drawing on the data from the e-mailed questionnaire sent at the end of 1998, of the five

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in her report; therefore I have to refer to the relevant sections.

replies I received, four of these indicated that they, too, wanted to continue researching. Mainly owing to time constraints, however, only one said she had been able to do so. But in November 1998 I had attended the research presentation of another who did not reply to my questionnaire, a person who had taken his ongoing research to an overseas conference, so other action researchers were obviously continuing to do research.

The implications for future research that Anne identified above clearly show the practical focus of her project. She was not consciously attempting to change the wider political, economic or social context in which she worked; rather, her intention was to improve the ways she taught so that her students could better learn the writing skills they were in her classroom to acquire. While Anne attempted to include fellow staff in her research, time pressures or lack of inclination meant that none chose to join her. Loneliness and a lack of peer support was commented on by a quarter of the action researchers I interviewed. Anne had earlier identified one as a potential 'critical friend', a role I teach about on the course (Laidlaw, 1992), whose skills she should have utilised as the project proceeded, but did not follow through with this person. Altrichter (1993:51) described the role of a critical friend as being one who is 'supposed to give both sympathetic and constructively critical feedback to the practitioner's actions and reflections'. Such people have been invaluable in my own action research.

Anne did, however, attempt with some success to include her students as co-researchers, although the questions and methods of researching were hers (typical of technical action research). In her Reflective Diary, which she chose to include at the back of her report, she wrote: 'I talked to the students about my Action Research Project...Nobody seemed averse to the idea of helping by supplying samples of writing or by talking to me about their attitude to and past experiences of written language'. Discussion with her students revealed that part of the cause of their writing problems was lack of prior experiences. 'That was when I really began to realise how few positive experiences these students had had in their lives. I decided we had to give the students some experiences they could refer to.'

Again, this language shows the teacher's choice of action rather than the students' choice as co-researchers, although she did encourage their input in terms of a later field trip. While the impetus for planning alternative life experiences about which to write came from Anne, the students were intimately involved in selecting the field trip, which was a visit to hear Nelson Mandela on a local marae. This trip may well have had an emancipatory effect on the students; it certainly prompted them to engage in 'original writing' more than they had in the past. Their joint work, typical of practical action research, is obvious at the end of Anne's diary: 'The students and I are still perfecting our strategies for becoming independent writers'. Her diary concludes on a humorous note: 'My next big stumbling block is to convince them that plagiarism IS NOT an acceptable means of producing a quality assignment...*but that is another action research project altogether!'*

An Emancipatory Action Research Project

Ramesh worked for TWP as a mathematics educator in a regional prison. A Kenyan Indian forced to leave his native country, his cultural background is different from that of his students, the majority of whom are Maori. He had had extensive research experience in Kenya, and later in the U.K. All his students were male; some were convicted rapists and murderers. He noted in his report that '[Prison x] caters for all types of sentenced inmates. The sentences range from less than 2 months to over 10 years.'[16]

Considering Ramesh's own background of having been persecuted because of his ethnic identity, it is perhaps not surprising that Ramesh chooses to work from an emancipatory perspective, even within the constraints of a prison. Carr and Kemmis (1986:203-4, quoted on page 23) identified emancipatory action research as that which happens when a practitioner group jointly decides on ways of developing practice, with a view to changing their situation at a macro, as well as a micro, level. Grundy (1988:358) elaborated on this:

While its general orientation will still be toward the fostering of prudent, professional practice, it also has as its purpose the emancipation of participants in the action from the dictates of compulsions of tradition, precedent, habit, coercion, as well as from self-deception. In this it

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[16] Shah (1994); Report: Introduction. As with Anne's work, page numbers were not used, initially.

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focuses not only upon particular practice, but also the theoretical and organisational structures and social relations which support it.

As it had been with Anne's work, my positioning with regard to Ramesh was that of 'outside facilitator' providing a different framework in which to conduct research than Ramesh had hitherto encountered. The relationship between us was typical, then, of practical action research. But Ramesh was firmly committed to genuinely co-research with his students, seeking their input in the questions and methods of researching used in his study, and trying to improve the way they were treated within the prison system. His positioning with them was therefore predominantly emancipatory.

Ramesh's teaching situation was not an easy one. I have done classroom observations for both Ramesh and other polytechnic staff in this prison and noted the constraints. Most rooms are unwelcoming, with high barred windows. Equipment given out is carefully monitored and scrupulously checked back in, lest violent inmates use it to harm themselves or others. Ramesh wrote in his report:

> From experience, I have found, one needs to be extremely flexible, dedicated, resourceful, non-judgemental, have a good sense of humour, thick-skinned, and sometimes slightly crazy to work as a prison tutor. Sometimes the work can be dangerous but on the whole it is challenging, rewarding and mentally very exhausting. I have been thanked by a lot of my students and threatened by a few for doing my job (Report: Introduction).

Because of the tenuous nature of Ramesh's employment (Polytechnic staff in the prison were employed on a contract basis, and the contract was lost in 1997) he found long-range planning difficult. He chose to do his research on the maths (sic) needs of prisoners because it followed through on a previous large survey carried out in 1991, covering 540 inmates, 48% of whom said they needed help with maths. Ramesh had been involved with this survey, including doing data collection, which took him two weeks.

Ramesh commented in his report on the different orientations of the Justice Department (the prison section of which is now renamed Department of Corrections) and of the polytechnic. Where the 'Roper Report' into imprisonment in New Zealand described the objectives of prisons as 'retribution,

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individual deterrence, general deterrence, incapacitation and denunciation' (Chair: Roper, C.M. 1989:21), the Polytechnic aimed to provide broad education, recognising the Tangata Whenua under the Treaty of Waitangi; to provide equity for under-represented groups, to make courses accessible, to create a safe, caring environment, and other similar aims (TWP Charter, 1991-95:3). Conflicting discourses are obvious here, but Ramesh stated on page 7 on his report:

> Everything we do in class must be in accordance with [the Education Centre Programmes] aims, e.g. the urge to enquire, concern for others, the desire for self-respect, and growth in academic and social areas of inmates.

Ramesh was therefore attempting to adhere to the values of education, to promote learning and self-development, within an environment whose aim is mainly punitive and constricting. Considering the crimes for which his inmates had been imprisoned, his educative intentions were transformational in a much wider context than just mathematics.

Ramesh's commitment to wider prison reform, the motivation which causes me to identify his project as emancipatory, was shown through his reading for the project, and through his own words.

> As far as I know, the inmates have never been consulted on a formal basis about the types of programmes they prefer to have at X. Penal Institution General Orders (PIGO) Section K clearly states that inmates *should* be consulted. When I mentioned to some students that I was planning a small research project - they said it was a good idea and they would like to be involved. So the project was born (Report, page 4).

This is a good case of a specific intellectual exercising power within his own context. In his action, Ramesh was attempting to influence practices within the institution, using established but ignored policies in order to do so. The inmates then proceeded, with Ramesh's help, to identify the 'ideas, questions and issues they would like investigated or comment on current courses and the improvements that can be made', another indication of the emancipatory nature of Ramesh's work. Accordingly, Ramesh's students decided on 25 of the 30 questions on the questionnaire, with Ramesh providing the other 5. He commented: 'Students did not have to give me a reason for any question in the

survey form' (page 6). Ramesh therefore attempted to minimise his power to control or limit his students, a situation that is compatible with emancipatory action research. His research method relied on both the questionnaire, and followup interviews if inmates wished. As many of his students have literacy problems, some took advantage of this offered interview.

What did the research carried out by Ramesh and his inmate students reveal? There was a considerable amount of statistical data (Ramesh is an experienced quantitative researcher) identifying the inmates' past experiences of both maths and other forms of education. The researchers, working under Ramesh's leadership, identified the maths qualifications which inmates wished to achieve; other types of education in which they wished to be involved; and then specific information about how students found out about the maths course and their perceptions of it. Some of the comments here were illuminating, and bore out Ramesh's emancipatory commitment. For example, 'For 4 hours a week I get treated like a human being and that's why the course should be ongoing.'

Recognising the high Maori population in New Zealand prisons, Ramesh asked whether inmates had any objections to 'Maori Maths' being part of the course. This would involve maths being taught drawing on Maori examples predominantly. While some objected on traditional grounds (inappropriate to use Maori processes in this way) or because they thought the idea impractical - 5 replies in all - 23 did not object and made comments such as 'Different languages makes the other appreciate more', 'No objections as long as I don't have to do it', 'Would love to count in Maori and Japanese'. Ramesh concluded that 'Maybe in future the Cultural and Maths tutors could run joint classes'. Here, again, Ramesh's intention to make his educative practice as holistic and relevant to his students as possible was seen - he was intentionally suggesting changes to current practice. He commented that 'After attending classes at X, some students begin to realise the importance of education - which is one of my aims' (Report: page 59).

Under 'Any other comments you would like to make' the inmates reflected:

This is the best education I have ever had; pity it is in a prison.

I am grateful for the opportunity.

I need a calculator in my cell. My wife is on D.P.B. [Domestic Purposes Benefit] and can't afford to buy me one.

I understand everything in class but next day I forget everything I learnt. That's always been my problem.

Teach us how to learn.

Maths was hard at school and I played truant. It is still hard but I am coping. My wife cannot cope with my son playing truant. I don't want him ending up in prison. When they visit me, we sometimes talk about Maths.

It would be helpful to have more homework as I am locked up 20 hours a day.

I used to cheat in maths at school. Now I know it is not big deal if I make a mistake, I really feel good.

I am serving a life sentence and education is a therapy for me. Education should be compulsory for all LIFERS.

Bet nothing will happen after I complete this survey. I have been in the prison too long and seen a lot of teachers come and go. Can't be easy teaching some of my mates.

While these comments are selected from a wide range of responses, and are mixed, they gave the inmates a chance to identify specific issues that they as individuals felt were worth commenting on. This is congruent with Ramesh's desire to assist individuals in their ongoing development, not just to improve their maths.

In his Conclusion, Ramesh noted that 'Action research turned out to be a very time consuming but rewarding, interesting and worthwhile project' (Report, page 66). What impact did Ramesh's work have on his own context? He has tried to disseminate the methods he used and the results of his work more widely: 'When I discussed the project with fellow maths teachers in Hamilton, I was humbled by the support, encouragement and the resources they provided' (ibid, 66). In his dissemination of his work for peer scrutiny, Ramesh was meeting one of TWP's research criteria. He investigated taking a paper based on his work to an overseas conference, but was unable to gain the requisite funding and time

release. Gaining the confidence to share research results with others was a benefit also noted by half of the action researchers whom I interviewed.

Consistent with his emancipatory focus, in his research report Ramesh recognised the problems that contribute to New Zealand's imprisonment rate. 'There is a definite but not well researched link between poor literacy and crime.' He noted the features of successful prison programmes and made suggestions for improving the ways maths is taught, and improving resources at the prison. Finally, Ramesh wrote:

> I have enjoyed the experience (otherwise wouldn't have spent over 300 hours doing the project) and gained some new skills. It has been a perfect exercise for reflecting on HOW, WHY and WHAT I am doing at X (Report, page 70).

Ramesh, an experienced researcher already, found the action research approach provided him with some new skills personally, skills that enabled him to work more effectively at Prison X. The data in his report show the impact that their joint work had had on various prisoners; what I have not been able to determine is whether the work had any ongoing impact on policies and practices at Prison X, since the contract has been lost and we now have no access to the Prison.

Questioning the Categories

I have indicated through the use of two case studies above, how different results can be brought about within what appears to be a practical action research approach. Technical action research suggests that an outside 'expert' comes in and co-opts teachers to work on questions decided by the researcher, questions that are not based in the practical concerns of teachers themselves, with the aim of adding to an outside research literature (Carr & Kemmis, 1986:202). This was not my situation at TWP, nor those of most of my researchers. But the distinction between the categories is hard to draw at times, as my examples have shown. All the action researchers, in their relation to me on the course, worked within a mainly practical action research perspective, with me being the outside facilitator and them working on their own questions.

But they were differently positioned in their own action research in relation to their own students. Anne O'Brien was quite specific in stating that it

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was *her* questions that she encouraged her students to look at, not theirs. If a literal interpretation of this were to be taken, this would position her work more towards technical than to practical action research. But it was her own practice that she sought to change, and she also encouraged students' input in deciding the specifics of what they would write about, a practical orientation. Ramesh Shah consciously worked to include his students' questions and methods into his joint work with them. This was pronounced, as so many of the questions were contributed by them and only a sixth by Ramesh himself. Therefore, while his work with his students fits predominantly within an emancipatory perspective, the students were not in a position - being imprisoned - to bring about change in their social situation, as emancipatory action research suggests. The complexities of this situation have led me to question the boundaries between the various approaches, although both I and others (e.g. Grundy & Kemmis, 1982; Jennings, 1985; McTaggart, 1991a; Zuber-Skerritt, 1992) find them a useful conceptual tool.

Noffke and Brennan (1997, quoted in Zeichner & Noffke, 1998:22) commented that 'although not all teachers embrace a social transformation orientation, all practice embodies a political stance, whether directly or tacitly'. Hard distinctions between the categories may therefore be inappropriate. In the remainder of the chapter, these tensions and complexities will be investigated by reference to the interview data from the remaining researchers. As with the case study material, I shall show what impact their involvement in action research had for individuals, for their departments, and, where appropriate, for policy and practices at TWP with regard to research.

THE ACTION RESEARCHERS SPEAK

In the section below, I present the questions I used in interviewing the action researchers subsequent to the course. These are presented in full in Appendix A, and summarised as section headings below.

Previous research experience

What did course participants know about the conduct of research prior to coming on the course? I claim to be operating, at TWP, with an emancipatory agenda of exploring 'the problems and effects of group policies and individual

practices'(Carr & Kemmis, 1986:203-4). Therefore, if I am claiming that action research operates as an effective way of introducing staff to research, or further developing existing research skills, I need to provide both evidence of prior experience, and participants' declarations as to whether my claims are correct. My first interview question, therefore, sought to determine what experience the action researchers had had in research prior to coming on the course. There was considerable diversity demonstrated in answers to this question.

This is interesting, because it demonstrates a shift in the perceptions of relatively new staff, of what constitutes research when compared with the comments of the foundation staff - a change in the discourse of research was already occurring. When asked a similar question, two of the foundation staff considered that they were not engaged in any form of research and two that their form of research was reflective practice. Half of this admittedly small sample, therefore, considered themselves to be at least informal researchers already, by virtue of being reflective practitioners. However, only one of the twelve action researchers I interviewed mentioned 'informal research', and this was in the nature of statistical data gathering, not reflective practice. Six - half the group - frankly stated that they had no previous research experience - 'Absolutely none, zilch', said one. This would seem to indicate that the higher profile research now has in the institution is one in which reflective practice is not, initially, perceived as a form of research.

What is really fascinating, however, is that later in the interview they revealed that through using action research, a quarter of these participants have recognised that their reflective practice *is* a legitimate way to approach research. Comments from course participants in the next section reinforce my contention that reflective practice constitutes a form of research. Considering the prevalence of reflective practice within polytechnics and doubtless other tertiary educational institutions also, the use of a research approach that builds from this feeling of familiarity and existing skill makes good sense.

I want to summarise here, then, the comments that were made overall in response to my question about previous research experience. Six participants said outright that they had no prior experience. Another three had Masters degrees; one of these had done a little positivist research, one had carried out

extensive research projects including working with a senior researcher, the last had done only papers with no research requirement. Of the remaining interviewees, one had carried out an independent research project for a Diploma in Yoga Teaching. One had done the 'informal', statistics-oriented task, which he did not describe as a research project. One was a very experienced researcher who had carried out research projects in a range of countries and across a range of approaches (excluding action research). A third of the interviewees, therefore, identified themselves as people who had previously been engaged in some form of research. I identify these people as experienced researchers, where appropriate, in the quotations that follow. For the novice two thirds of the group, then, any comments about research appearing below, are comments pertaining to their experiences on the course.

Skills acquired on the course

Practical action research aims to improve the 'practical reasoning' (Carr & Kemmis, 1986) of practitioners, to 'identify potential problems, underlying causes and possible solutions or interventions' (Hatten, Knapp & Salonga, 1997: 3-4). Practical benefits of the course were of two kinds: those related to the acquisition of research skills, and those related to participants' classroom practice. I believe it is important to identify both, because the former, (research-related skills), are those that we need to develop in order to develop our research culture. The latter, (classroom-related benefits), are those that are likely to attract busy teachers to participate in a way that purely research-related benefits may not do. The latter benefits are therefore pragmatically, perhaps the more potent 'sales pitch' to use to attract teachers into action research. I reiterate here, of course, that I think the dichotomy between research and teaching is not helpful. But I recognise that many of our staff think in this dichotomous way before they come to the course.

As I had speculated, action research, based as it is on reflective practice, felt familiar to over a third of the course participants. But they also identified their reflective practice as a skill that they, as individuals, already used. Comments included:

> ...the recognition that a lot of techniques of enquiry and development I use could actually be called research, with a little brushing up.

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...recognising that I do do research without ever having put a handle on it before; that was quite an eye opener.

...I've got a better understanding of concepts. I think the course probably brought together many skills that were lying there, but I think it actually brought them together.

This same sense of familiarity was commented on also by an experienced Maori researcher, who said 'There were lots of processes that came out of the particular action research project that I was doing that I had always been doing.' Another Maori researcher supported this comment, with her statement 'For me, the process of action research is an everyday thing.'

The comments above are congruent with much writing on teacher research, which identifies practitioner-based research as feeling comfortable and familiar to teachers. McNiff, for example, claims that

..far from being ad hoc and woolly, action research [which is practitioner-based] raises to a conscious level much of what is already being done by good teachers on an intuitive level (McNiff, 1988:7).

However this is not to claim that doing research in a *formal* sense is intuitive to teachers. Lomax and Parker (1995:302) maintained that

..making explicit the processes of changed understanding in a research account is not a natural thing for teachers to do.

But new practical research skills, rather than mere identification of existing ones, were also mentioned by seven of the interviewees in response to my question. Report writing was one. The comments below may surprise university readers; they are, however, common in an environment based on predominantly technical/vocational teaching.

[I had some experience of report writing but found] there is no room for sloppiness, you have to be tighter with the writing and the referencing and so on. So I mean that was something I was aware I had to do. As soon as you start writing things in a more formal way, everything that you say you have to think now, can that actually be said? You've not got to make sweeping statements that somebody can then drive a great truck through.

The presentation of research - I tend to get everything down, bang, on the paper and I know what I'm doing but I've never had the opportunity of someone else having to read what I've put. I've had it all there, but it was all over the place, not in any sequence. Then I thought, what good's this, if you don't get it down so that other people can read it? Your efforts are largely wasted, and they'll lose the thread. So that skill was well worth while.

While some action research writers do not advocate the formality of written reports, preferring to admit of other ways of disseminating the results of the research (see for example Dadds, 1995; Freire, 1972), in my course some of the participants, at least, found the requirement to write a report had assisted them practically in their context.

Another practical research skill identified was the effective use of library systems. Several researchers commented on 'learning to use new resources'. For example, discovering the ERIC (Education Resources Information Centre] system in the Library was helpful to two: 'I have actually used it since so that has been really good; it hasn't been just a one-off in doing your paper', said one, while a second commented: 'I learned to become confident about using ERIC, and was too scared to do that before - to realise what the Library resources were.' The reader may, again, be surprised by these comments. But they reflect the predominantly vocational and practical discourses that have been prevalent until recently in polytechnics. Many staff have concentrated on developing teaching materials based on their practical experience rather than using the more 'academic' tools that university teachers may take for granted (see also Beverland & Bretherton, 1997).

Not only CD-Rom searching, but the use of the Internet was commented on by two action researchers as a valuable new skill. 'The Internet intro was the best, wow!! The power!! A very vital part of any course involving research'. One researcher had found 'an Australian article where action research was used [by early childhood educators], and the students found it really interesting analysing that article.' But one person commented on the more orthodox resource of books, as a new skill she had learned on the course was 'being able to look at a book and just take out what I wanted instead of ploughing through the whole book'. I paraphrased, 'Sifting?' at this point, and she agreed. The

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skimming of research articles in order to report back to the group on the methodology used, which I encourage in one session of the course, would have helped with the development of this skill. Given the tight time frames and heavy workloads that staff experience in polytechnics, even the new skill of skim reading was a benefit of the course.

For one interviewee, what the course showed up was not so much the skills she had, but those she needed. However she was a very positive person who was able to reframe her 'deficiencies' into opportunities to identify areas for further development. She also commented on a strength she had developed in analysis.

> I learnt heaps of things on [the course]. Most of the things I learnt were what not to do and what I did wrong because I don't think it was a particularly good piece of research. But I think it was a good piece of research in that it taught me a lot of things. First of all, it taught me a very basic thing, time management. Which I didn't do. I put a lot of time and effort into the practical parts of it and left myself really short at the end for the report and things like that, but that was my own bad time management....How did it help me? Well, it really made me look at the steps. It made me look at a huge problem and find that it can be solved by breaking it down into small problems..

This ability to approach a problem using careful analysis and specification was also commented on by another interviewee. He said:

> The ability to find out what the question is - to reduce it down. I think too generally. So to refine the question down I find quite good.

Other practical research skills participants commented on were developing awareness of ethical issues (a quarter of the interviewees); the skills of setting up a project (a quarter of the interviewees); better insight into ways of conducting research (a third of the interviewees); confidence in their own research which enabled them to refer to it both when teaching and in an in-house conference (half of the interviewees); and the skill of keeping a diary (a sixth of the interviewees). Examples of comments were: 'Keeping a diary was [a new skill]. I hadn't ever done that...it was good, I actually enjoyed doing that'. Considering my reservations about the panoptic gaze I had exerted over these reflective logs, this was an interesting comment. My intrusion as assessor did not seem to have diminished this student's ability to profit from the experience.

Another participant gained confidence, although he was challenging the 'normal' pedagogical practices in his department.

> In repeating [a practical electronics laboratory class] this year, I went into it a lot more confident in the way I was going to do it....I know that the students last year, 50% of them, preferred it [the new] way over the traditional way and this year, I just went into it with a lot more confidence.

Similar insight into better ways of teaching courses was commented on by one:

> We had made a mistake through an unresearched decision, if you like, two years before. We had to change it at the last minute; we weren't catering for the right area.

This staff member was able to use her action research project, in conjunction with peers in the department, to research a more appropriate method of delivering a course so that it better met the needs of students. The skills identified in the section above are those that benefited individual action researchers, and were derived or further developed by their work in the course.

Practical benefits for students, also, were commented on by two thirds of the action researchers. For example, the tutor who investigated mathematics teaching commented that 'My C group, they've actually come up to the level of the B group because I've worked on developing their confidence.' This confidence boosting was in response to the investigation he had done the previous year for his action research project. A tutor who investigated helping her students in the development of their writing skills said, 'I think it made the teaching, our writing skills teaching, more focussed, and more focussed on them, and more focussed on their problems. So I think they got a lot out of it.'

The range of skills commented on above, for both staff and students, fit comfortably within the 'practical action research' framework. They are skills that enable practitioners (and their students) to function more effectively within their own classrooms, and in re-presenting themselves as researchers in our changing context. But care needs to be exercised in too rigid an application of the categories. When I asked the question about whether, or how, staff had felt empowered as a result of doing the course, some very practical methods of empowerment were identified by two thirds of the group. In the next section,

therefore, I commence with these more practical effects before moving on to those that might better be termed 'emancipatory'.

Action research as 'empowerment'?

A really practical effect of the course was identified by one interviewee, in response to my question to her about whether she had found action research empowering. A good example of practical action research, her project had introduced an alternative form of content delivery to the way she had previously covered material in part of the course, and the assessment she introduced resulted in a lower marking load.

> *Me: It cut down your marking?*
> Yes, markedly. That was what I was after and that certainly worked, and I don't think the students felt cheated at all.

This kind of result is encouraging. It may not have the emancipatory action research intention of transforming systems, but if staff perceive it as empowering for them in terms of lowering workloads then they are more likely to feel positive towards undertaking research, and encouraging others to do likewise.

Practical results of the research were reported by other interviewees, in response to this question. One commented on the skills she had learned through the course, and how these helped her in a curriculum development matter.

> I think I am using a lot of what I learnt in that action research in my horrible fight to try and bundle CAL [Computer Assisted Learning - 'bundling' is a course organisation device] and to rewrite my assessments.

This researcher also commented on the fact that the course had taught her the technique of taking 'massive huge tasks' and breaking them down into smaller, more manageable units of work. Another researcher was emancipated by her research, from the perception that her students strongly disliked the teaching package she was required to use, and which she personally found unsatisfying.

> *Me: Did that actually make a difference to the way you feel about teaching that course?*

It did, it did. Because at the end of the class they'd all go, "Oh, thank you, X, I really enjoyed that!" And I'd think, "I haven't done anything, it must have been really boring for you, how could you possibly think it's enjoyable?" but they do. They do enjoy it. They get really enthused about it.

The results of her research, which had shown her that despite her reservations about the package her students were finding it very valuable, changed her attitude to the teaching of it. She commented in her Report:

The results received clearly indicate a positive response to the X programme, and that students on the whole feel it is a valid and useful means of learning the keyboard.

For this tutor, her research discovery helped her to see that what was irritating and boring to her was actually helpful to her students. She could then reframe her thinking about the course in a more positive way.

The comments made so far in this section predominantly relate to empowerment of individual tutors (and, by 'osmosis', of their students) with reference to classroom practice. In the following comments, more personal effects of empowerment are noted. Confidence was one that was mentioned by half of the interviewees.

It's given me the confidence, I think, to take work done by the students to the international arena, whereas I wouldn't have done that before.

This tutor, as well as his students, had presented a paper at an overseas conference, thus not only boosting the confidence of all involved but having a demonstrably positive effect on our research culture, as their paper was entered in the Research Register.

This was not an isolated example. Confidence gaining was reported by others, across a range of skills. One said:

...[action research] has definitely empowered me. One of the best things I have actually done for a long time, the course, I really got a lot out of it. How has it empowered me? Well, it has increased my confidence, it has made me realise that some of the reflecting and so on that I do within my work can be developed and can become a form of research.

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She had been asked to speak about her research at a national conference, and said, 'Oh, that was wonderful, I just loved it, that was terrific and I need to do more of those.' She also recognised that the course had given her the confidence to seek research funding from the Research Committee.

> Prior to doing your course I would have read that form [for the Contestable Fund] and I would have thought this isn't, this is not for me, I can't actually do this. But going on the course has made me see that it is just a question of just sit down and write it....It enabled me to take a chance of applying for some money from the fund and it made me feel that I would really like to do more. Yes, it is very empowering in fact and I have said that to many people.

She had earlier identified as a benefit the discovery that 'to find that you can manage to do [research] on the hoof is quite a breakthrough'. This researcher is a good example of the catalytic effect I had hoped action research would have within departments. Her enthusiasm and vocal praise of the course have resulted in others in her department completing the course in subsequent years, thereby having a catalytic effect on the institution via the 'contagion of enthusiasm' I referred to in my course descriptor (Chapter 7, page 200).

Besides developing confidence, five of the course participants felt that they had been empowered in the area of having their abilities identified by HODs, fellow staff, and even the promotion panel at the polytechnic.

> I think it has had very positive effects. Just for instance at the end of last year when they were wanting papers for [an in-house conference], I could stick my hand up and say, "I'll do it!" I wouldn't say it was totally easy, it required a bit of guts to do that when you stand in front of your peers, you think...they are just going to sit there and think what's she doing, standing up there? What's she got to say? So it wasn't exactly easy, but it enabled me to do that and then other people in the department who came to that were aware that I was doing it, and were able to say, oh, that's a good idea; I might do some videoing.

Both empowerment of individuals and catalytic effects on the institution are evident here. As a result of this researcher's promotion of her own research work through the in-house conference, a publication and as a guest speaker at a national action research conference, her departmental peers have been made

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aware of her work in using video to critique her own practice. It is now a relatively common tool within that department.

Another was given specific leadership roles within her department as a result of the work.

> This year I've been handed all the writing skills classes [in a particular programme], whether, because I showed an interest in doing it from my research assignment on it they suddenly realised I could do other things apart from teach computers, I don't know.
> *Me: You did an excellent job of producing your report, I thought; all those flash charts and things.*
> Yeah, it was in Word for Windows, and we were just starting out Word for Windows classes, and through that project, my use of the Windows and the Excel, has put me as the Team Leader for Word for Windows... That's my main subject now, Word for Windows. I'm setting all the exams and that, yeah. A little bit of added responsibility. And I was quite happy to take that on because I've never been offered anything like that.

Another said that the recognition she had received through her action research work 'led to me seeking, not directly, but it was part of getting an increase in pay and responsibility, that recognition'.

Feelings of personal pride combined with a higher profile within her department were commented on by one of the action researchers in response to the question on empowerment.

> [Action research has empowered me] quite a bit really, I think it has, yeah. I think that if something...if [her HOD], for example, wanted something evaluated she might include me with someone else.
> *Me: Because she'd seen the outcome of your work?*
> Whereas she might not even have considered me...
> *Me: So the actual publication of your report has been quite an important part of this consciousness raising?*
> Definitely.

This researcher had got a real boost from seeing her research report recognised as among the new acquisitions in the polytechnic library - 'I'm really quite proud of it.' The research report is not, then, just an oppressive assessment requirement of my course; it has had positive benefits for some action researchers also.

The two previous speakers were novice researchers, and found parts of the course empowering. An experienced Maori researcher commented on the

empowering benefits of the course for her. This person had previously used positivist research in a market research context:

> It was nice to have a recognition for all the other work I had done within research, and yes, I can still do it. I do like research; I have always liked it. And it certainly was a style that was more comfortable to me.

In the light of my comments about the similarity of action research processes to the collaborative Maori research methods such as whakawhanaungatanga, this comment is very significant.

As might be expected from a project that set out to be emancipatory, there were comments from Ramesh's students that demonstrated empowering effects for them. Ramesh wrote in his report:

> This was supposed to be a small, two week project, for my own reflection. Action Research turned out to be a very time consuming, but rewarding, interesting and worthwhile project...During the interview one student said, "Boss, you planted a seed of knowledge in me. Now I am growing the tree of knowledge and occasionally I might come to you for help. I feel really good about myself. I will serve my sentence with dignity and will never return to the prison again." This was one of the highlights of the project (if I had the power to change the life of one inmate per year, then, I feel I have done my job) (Shah, 1994:66).

In this statement, an emancipatory effect of Ramesh's practice, compatible with his intention to work from this framework, is obvious. The inmate student here has obviously determined that he will change his entire life, not just take advantage of the mathematics tuition he received. (Some of Ramesh's students definitely had - from my perspective - practical, rather than emancipatory, aims. One of his other students was honest enough to admit that the reason he was taking maths classes was to learn to use a calculator, so he could see how he was being ripped off in his drug dealing!)

Another action researcher, while using a practical action research approach in his work with his students, found the course itself and the reading he had done as part of his project to have an emancipatory effect on him. He now wanted to change the culture of his department, an intention that is decidedly emancipatory.

What we're doing, it's big brother. And how to change that culture is a big issue. In fact this is, I think, starting to become the concept of the workshop that I want to do [at a local Conference].

As a result of this pondering, he had developed a strong interest in organisational culture, seeking out and reading books on the subject. I queried him about whether it had been the course that had provoked this interest.

I would be very interested to know, for example, whether that book on Corporate Culture that you're reading at the moment, whether you would have been interested in reading that kind of book before you started doing your own research work and looking at what kind of culture it is that you're working in.
Um, probably not. I would say definitely not.

I had not suggested engaging in such reading, although the wider transformative interest that is evidenced by this reading, is typical of emancipatory action research, as is his reaction to it. This demonstrates how inappropriate it can be to label as 'purely' practical, an action research project that can have such outcomes. Ramesh, too, had commented on the breadth of reading which his project had stimulated him to engage with, and which he would not have read had he not been doing the project (Shah, 1994: 71ff).

In the section above, I have investigated the empowering and emancipatory effects that the course has had from the perspective of the action researchers, in response to my questions. I have explored some of the tensions and paradoxes of positioning their projects within one or the other 'boxes' in Carr and Kemmis' framework. Throughout this thesis, I have contended that action research can have catalytic effects on the development of a research culture in an institution such as ours. As the course participants re-presented themselves as researchers within their own departments, did they identify such catalytic effects? In investigating this question, I shall comment on whether these effects have had any lasting impact on departments by referring to the brief followup email questionnaire I conducted at the end of 1998.

Catalytic effects on departments?

The results of this question were mixed. A catalyst is an agent for change; was the change broader than intrapersonal? The data suggest that,

frequently, wider practices than those of individuals were being changed. Eight of the studies into strategies for developing research cultures that I investigated in Chapter 5 had identified sharing and discussions with colleagues about research as being beneficial in the development of a healthy research culture. What was TWP's experience as far as the action researchers were concerned? As far as within-department reaction was concerned, interviewees felt that the results of their work had been positive in some departments, but neutral to negative in others. The tutor who researched students' difficulties with mathematics, gained new insight into how to present the subject in ways that helped his students. But he did not just change his own practice; he had shared the results with his fellow tutors: 'We look at it in a totally different light now we have that insight into what's in their head already.'

This staff member had found that his research benefited himself, his peers and his students. If he had done similar work in the past, using the usual process of reflective practice, the dissemination that occurred via the action research course would likely not have happened. Another course member was not so fortunate. Asked about the benefits of his work for his department, he answered:

> Zero, directly...a copy of the report was given to the HOD who never read it until the end of last year. When he did, he didn't initially think that I had produced it.

This is hardly surprising, since later in the interview he commented that 'it's unfortunate that the environment doesn't lend itself to actually sitting down as a team and actually analysing what went on'. His project, using novel teaching approaches in an attempt to improve students' thinking, challenged the tight framing in his department. He may therefore have been seen as a threat to the 'normal' teaching identity in that department. Within his department, therefore, he has been unable to achieve a catalytic effect despite his best intentions: 'I'm quite excited about what *could* happen if we, or many more of us, actually got on the [action research] concept and started testing the environment to see whether things would change'. At the end of 1998, however, his e-mailed reply to my question about what had prevented him from doing more research stated: 'Lack of interest in department and totally negative support from HOD.' He had wanted to do more research, but 'not been able to' because of this culture.

Catalytic effects on peers were noted, however, by others. One said:

> What really came out of it for me was producing an end result like that. I've never really done something like that...I got good feedback about it from other people in my department.

She was therefore re-presenting herself as a research model for others in her department. Five of the papers on research cultures that I investigated in Chapter 5 identified the presence of research mentors as being beneficial in the development of a research culture, and TWP's experience supports this argument. Subsequently, six others from that department had engaged in action research via my course, up until the end of 1998.

An unexpected benefit was identified by one researcher, which has catalytic possibilities within the institution. She said she had gained a better understanding of how research is done and what it actually involves, when one has to conduct research alongside other responsibilities (a quarter of those interviewed commented on this enhanced understanding). This, too, is a contribution to the research culture in that it encourages tolerance of the pressures which researchers in our environment face. This person said:

> I understand a little bit more about the implications of research, and why it's difficult for people to undertake research alongside a job. I have more empathy now for colleagues who are undertaking research.

It is obvious from this interviewee's comments that, although she was one who had had tutor training time allocated, having conducted a research project herself and tried to fit it in alongside her regular teaching, she is highly likely to be more sympathetic and supportive of other staff who need to undertake research within her department. In this way the course has acted as a catalyst for her in understanding, and hopefully supporting, others conducting research in our context.

But catalytic effects from the action research involved students as well as staff. A third of those who tried to engage students as co-researchers, as is compatible with action research collaborative methods, found the students appreciated it. Design and Communication students 'were quite keen on it. I think they felt like I thought they were mature enough to participate. They were

really enthusiastic about it.'   An Office Technology tutor said, '[It was] something that the students enjoyed doing'. Prison inmates, as Ramesh's case study showed, responded with surprise and appreciation that their opinions were being sought and responded to. If tutors are trying to change and improve their own practices, obviously these impact on students, who can feel like 'guineapigs', as one researcher put it. Ethical guidelines laid out in the course required course participants to explain to students that a variation of 'normal' practice is occurring, and to gain HOD approval before proceeding (see Appendix B).

But the modelling that course tutors are demonstrating to students, the refusal to stick with traditional ways of doing things but of constantly striving to improve one's practice, can be beneficial to students quite apart from the benefits of changed practice. It provides a healthy form of mentoring for the students. One course participant commented, in this regard,

> Students love to know that you are going through the same sort of pain that they are going through. And I think that is the biggest thing, you are trying to say all the time, we're in this together...I say well, look at me - I've been teaching for 28 years and I am still having to jump through hoops of fire to prove that I am developing myself, I'm getting better or learning more...they see that you are just not stagnating.

It is this desire to change and improve one's practice that is a feature of action research. I demonstrate this to my own students (fellow staff members) in the work for this thesis, and in the ways that I have reported I am trying to improve my practice.   They demonstrate it to their students through their ethical statements and requests for co-operation in their research, and in their obvious attempts to open up both themselves and their students to other, possibly better, ways of practising.   We are all, staff developers, tutors and students alike, constructing ourselves as researchers in our new environment and thereby contributing to the development of a healthy research culture.

From these comments by the action researchers, some of the catalytic effects that their work had on themselves, on peers and on students can be determined. Were these catalytic effects lasting? And how widespread were they? Drawing on the e-mailed questionnaire results gained at the end of 1998, as this chapter went through its final draft, the following conclusions can be drawn. I shall present the questions asked, and indicate the numerical results and

comments made following each question. "Looking back on the experience of doing the course, has it left you with: A) an ongoing interest in research relevant to your teaching role?" Four agreed; one said no. "B) concerns or commitments in relation to the place of research in your own department?" Four replied in the affirmative; one in the negative. "C) concerns or commitments in relation to the place of research in The Waikato Polytechnic?" Three replied in the affirmative; one in the negative; one did not reply to this question.

I asked, if they answered yes to the above questions, that they comment further. Answers included: 'I am very aware that the X section of TWP has not undertaken any formal research since we became an entity. To be acknowledged in [our] field, we really need to produce something substantial, and I believe that will happen within the next two years'. Another wrote: 'Nothing formal being done.' A third: 'I am interested and keen and always on the look out for opportunities.' The fourth: 'We need to keep progressing and moving forward or we will go backwards. Research into possible new methods of delivery is imperative to our survival'. The fifth did not comment further.

The next questions asked, "Since you completed the course, have you wanted to do any more research?" and, "If no, what has deterred or prevented you from doing more research?" Four had wanted to do so, but only one had been able to. One commented: 'Time - or lack of time - is the key reason. We have produced a new curriculum document and that took massive time and effort. The development and setting up for running the new programme is also huge. Another reason is that I have not been brave enough to enrol in a Masters paper - but have now made that step for 1999, so will be venturing back into the research area for that, I'm sure.' Another, quoted earlier, commented on lack of interest in department and lack of support from the HOD. A third said, 'Time and other things I don't want to mention.' The fourth said, 'Too busy with other interests, decided to take a short break after completing Diploma.' The fifth said, 'Time to think, the memory of the time involved. Also, a topic which has turned me on enough to overcome the above difficulties'. Time constraints had been mentioned as the foremost major constraint in all the studies I have encountered, so these comments were not surprising.

I asked them to provide information about research currently engaged in or completed. Since only one of the five had been actively engaged in research, she indicated the title of her research, for which she had received Research Committee funding and which is reported in our Research Register. My final question asked, "Do you believe that you have been able to have a positive influence on the development of a research culture (a) within your own department?" Four agreed. One, who is now a Programme Leader, cited her recent appointment of a new staff member with a Masters degree 'who is interested in research for us some time'. She saw this as a way of influencing the introduction of research into her section, which had previously done no research. But she also noted that she needed to be more proactive, and was aware of the work pressures already on her team. One said, 'I think others have seen that it's not a mysterious process and have tackled a project by themselves'. A third said his peers 'had read my research, applied some of the techniques discussed in research to enable them to improve delivery within certain topics'. Had they been able to have an influence "Within TWP?" One did not reply; three said they felt they hadn't influenced the research culture polytechnic-wide; one said she encourages 'all staff in [her] department to take part in research and assists them directly where [she] can.'

Four of these five action researchers, therefore, identify catalytic effects on their departments, although they are reluctant to claim institution-wide influence. From my perspective, knowing that two of them have presented the results of their work at lunchtime Research Seminars, it is possible that they have had a wider influence than they realise. However, this is speculation. I am also aware that their initial submissions of proposals to the Research Committee, at a time when I was on the Committee, were instrumental in the Committee's decision to restrict its panoptic gaze to research that had cross-departmental implications. Almost all the action research I have supervised since 1993 is confined to the individual's practice and department, so it does not have to receive this official scrutiny. This shift in Committee policy was therefore influenced by the action research course projects.

I wish to move now from examining the possible catalytic effects of the action research course for individuals, departments and the wider polytechnic.

So far, I have listed benefits of action research in terms of practical research and classroom-based skills; emancipatory, empowering and catalytic effects on staff, departments and students. In the section below, I shall present some of the constraints that action researchers experienced, in the same way that I presented those impinging on my own work, in Chapter 6.

Constraints experienced by participants

It will be fairly obvious from the interview and report data presented so far, and further discussion in this section, that some action researchers found themselves operating in supportive environments while for others their work was not received with wholehearted enthusiasm by HODs or peers - only half said that they had good HOD support. Some HOD resistance may have pertained to the particular culture of a department. In Bernstein's schema, those who challenge identity in departments operating under a collection code are perceived as threatening. The acquisition of research skills, particularly by the use of a common research approach such as I argue that action research offers, potentially challenges strong boundaries. Bernstein (1971:56), states that 'Any attempt to weaken or *change* classification strength may be felt as a threat to one's identity and may be experienced as a pollution endangering the sacred'. I am not claiming that action research will challenge the *content* knowledge of departments; rather that it provides a potentially integrative framework within which individuals from diverse professional knowledge backgrounds can investigate their own practice in mutually understandable ways. By conducting research on one's *teaching,* one can find common ground which is understandable by other teachers within the institution, be they chefs or tree surgeons. But, as I have claimed, cross-departmental sharing has been uncommon at TWP, and the acquisition of a common research framework in my course may appear threatening - a way of 'polluting the sacred' as Bernstein suggested.

What other constraints did my action researchers note? Some were very idiosyncratic. I shall discuss these first. A Maori researcher noted:

> [When] we have made the decision, we are actually into the course, acting on the decision, so for people to have to go through looking at the process is for us a big time waster...writing up anything is something that we are not very good at.

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This comment reflects a combination of the time and work pressures common to many staff at the polytechnic, exacerbated by the historical emphasis in Maori culture on oral rather than written forms of expression. The situation is doubly difficult for Maori Studies department staff because most of their dialogue occurs in Te Reo Maori, but the report (and, in fact, all official documentation for the polytechnic) is usually presented in English. The discriminatory and oppressive nature of my course requirement on Maori staff had not occurred to me until the time of interview, a year after the course, when one Maori staff member told me:

> The language thing was difficult because on one hand a lot of my data was being collected and delivered in Maori, thinking and the discussions with staff and people involved in it was in Maori, and then having to bring it together in English...I was actually doing it in Maori and then translating and thinking, oh no, I'm going to have to do it in English and when you are reading data in Maori and then having to write it up in English there's just that jumping around and also the meaning was lost sometimes or distorted.

They *could* have opted to present their written reports in Maori, which is an official language of New Zealand, but decided not to, probably out of consideration of difficulties I could face in finding a suitable marker. I did not think to emphasise that possibility at the time, although I do stress it now, in a range of courses I teach. The power of writing that Foucault identified as an instrument of power is obvious in this situation.

Other idiosyncratic constraints were expressed by the action researchers. One had the problem of questions on ethnic identity being construed as political by her HOD and therefore deleted from her questionnaire. This researcher had wished to check whether there was an ethnic influence on students' responses to her research questions, but she told me that her HOD thought the results of this question could be potentially embarrassing, and instructed her to withdraw this demographic request from her questionnaire. Ethical approval requires HOD permission, so she had to conform. This provides another example of the monitoring and surveillance of which Foucault (1977a) speaks, being required both by me as supervisor, and by HODs as gatekeepers for the institution.

Only one new researcher specifically mentioned feelings of fear: 'It's a bit scary, you know, I think it is fear.' This comment reflects the 'wonderdread'

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which Wood (1994c) described as common in new researchers - a kind of research approach-avoidance phenomenon. Another said she had considerable difficulty in finding any relevant previous research (a quarter of the interviewees mentioned this problem). 'There was really no expert research stuff I could find that looked at groups of adults with learning disabilities and physical disabilities and that you only had for 12 weeks...that was a problem, because it meant I was making it up as I went along'. These kinds of situations may not be identified in advance by either the action researchers or by their supervisors but point to the need for ongoing supervision in support of new researchers.

One researcher identified as a constraint for him, personally, within his department, the development of critical skills that he had acquired in the course. This surprised me; critical analysis of research work is one of the stated outcomes expected on the course, and it had not occurred to me that this could have negative consequences. But within his department, in which the exercise of such skills was not the norm, he had fallen foul of the departmental culture. A piece of research had been done by an outside agency, which was being used to promote a new programme within the department.

> Maybe I wasn't flavour of the day when I criticised that...When I brought it up at the meeting, it was like, why are you making waves? Why are you being critical? Why are you trying to put up roadblocks? Shut your mouth, don't say anything...I think I said that the research showed that what we were proposing to do, there were a few flaws in it, and one of the guys said, well, the lady who did it, she's a really lovely lady...And I said, I haven't got a problem with her...What I'm saying is, in answer to the question here, when you look at the numbers, they don't stack up with what we're trying to do. It has made me much more critical. When I was doing the course, I had no conception that I would ever be using it from that tack, so that was really interesting.

This ability to critique research is another contribution to our research culture - his awareness of inadequate research may well have prevented his department from making a poor choice based on poor research.

Another, from a different department, faced a similar problem of falling foul of the departmental culture. He felt that his choice to expand his qualifications in an education, rather than a trade-related area, had worked against him. 'I think the words were along the lines of 'Don't expect to get any

recognition for your Diploma or your Degree in Education around here.' This is a very clear example of a collection code - trade knowledge was valued; the 'intrusion' and pursuit of 'educational' knowledge was denigrated. He continued: 'It's almost as if there's only one god and that's all technology around here.' For him, acting in ways that threatened his departmental culture had been a painful experience.

The remaining constraints identified were more generic. As was identified in seven of the studies on research culture investigated, time was the major problem. Time was mentioned as a constraint by three quarters of those interviewed. For most, it was their own time to conduct the research project that was construed as the difficulty. One noted, on a course evaluation form:

> Length of course. Suggest
> (1) 1 week of class time or 6 days
> (2) 5 weeks (fulltime equivalent) for the Research Project
> (3) Flexible completion date for the Project - say up to 1 year

This suggestion clearly indicates where the main time difficulty lay for this participant, which was in the time available for the project and the completion date for this rather than the classroom input time. However his was the only negative comment I have received about course timing, so I have chosen to stay with the current format. Others suggested stressing the 35-hour time frame for independent work more strongly; complained of receiving no time allocation (from a Diploma in Adult Learning and Teaching participant, who was not entitled to time relief as the Certificate in Tertiary Teaching participants were); commented on time involved in co-ordinating co-researchers, and mentioned time management problems (two participants particularly stressed this situation). Their comments indicated the difficulty that first-time researchers faced in anticipating quite how time-consuming the conducting of research can be.

The situation has obvious implications for management in supporting the development of research cultures. Over half of the research papers I considered in Chapter 5 stressed the need for management support in building a healthy research culture. If research is not allocated 'duty hours' (a workload rating mechanism used - the other type of hours, when one is actually teaching, are called 'class contact hours') then staff have to try to carry it out on top of teaching

commitments.[17] When the discourses of 'teaching' and 'research' conflict, if there is not a mechanism built in that recognises the legitimacy of both functions within staff members' workloads, then time for research is likely to remain a site of struggle. Even the use of an action research approach, which seeks to combine both discourses as compatible processes, has shown that time is identified as a constraint. In fact, Altrichter (1993:53) suggested that action research can exacerbate workloads.

> Its strong methodological claims and its reintegration of practice into the research process are very demanding; these demands are frequently incompatible with the existing working conditions of practitioners and with the culture they have to live in. Thereby, pressure on individuals is sometimes increased where working conditions for professionals are in need of being altered.

But how does one argue for improved working conditions before demonstrating that staff are overworked and need change? The situation is paradoxical and confusing.

The other major constraint that was identified by a quarter of the interviewees was that of isolation, identified also as a constraint in Australian research by Bazeley, (1994) and Poole (1991). Despite the emphasis in action research on collaborative endeavours, many found it difficult to engage their peers as co-researchers. The comments made above, about time being a problem for peers rather than necessarily the researcher her/himself, support this. One, commenting on her sense of isolation, said, 'That was the constraint, not really having anyone to talk to about it.' While some received verbal support from colleagues rather than practical involvement, others were able to co-opt students as co-researchers. It does seem, however, that in a busy teaching environment, unless peers are involved at the outset then only peripheral support can be expected. This is why situating action research in a course that is generally only attended by one person per department at a time has been problematic.

Rarely have there been two from one department in the Action Research course; co-researching from the very beginning of the project has not, therefore, been an option. Largely individual action research has been the result. This

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[17] What happens in duty hours is not closely monitored in most departments; how the time is used is a matter of individual integrity and of meeting the workload demands.

could be considered a criticism of the way the course is located and structured, as it has undoubtedly limited the catalytic effect of the action research approach within the polytechnic. How do I know it could act differently, if a number from one department engaged in action research together? I now describe a way in which action research has operated catalytically at TWP *outside* my assessed and certificated course.

Musgrave et al (1996) investigated their common work as teachers of English to speakers of other languages (ESOL for short), using an action research approach. This work did not arise from the action research course, although my enthusiasm for the approach was acknowledged by Musgrave in an informal interview, as instrumental in provoking and supporting the work, and my mentoring was mentioned in their report. Probably even more valuable was the time allocation given to Musgrave by her HOD, Rosanne Matheson, as a way of developing a research culture within the department. Matheson had used action research in her own Masters' thesis (Matheson, 1993) and understood the approach so she was happy to support joint work by the ESOL teachers. Eight of them participated, and the work is ongoing. It has had a truly catalytic effect on the department, as I am now mentoring another action research project from a different group of staff in that department. Musgrave et al's work has been twice reported on in Research Committee seminars, as well as at an international ESOL conference, and listed twice in Research Registers. The situation demonstrates my contention that action research can indeed have a catalytic effect in changing and improving a tertiary research culture. It also demonstrates the effectiveness of appropriate and informed HOD support for new researchers.

In this section, I have considered the constraints that were identified by the action researchers in conducting their work. Interestingly, in terms of the exercise of power in the institution, and the management constraints raised by the Australian and New Zealand writers on research cultures cited in Chapter 6, few of the researchers cited their HODs as blocks in any way to what they wished to study. The two exceptions were the researcher who had been asked to remove the ethnic questions from her questionnaire (for what may well have been sound political reasons), and one who had indicated that his HOD queried his authorship of his report.

The HODs have not, therefore, exercised their power in a capillary top-down way to prevent the 'teacher-as-researcher' intention which action research promotes. Perhaps this is partly because of my insistence that HODs be kept fully informed about what their staff were doing - the HODs were required to sign each researcher's proposal before it proceeded. Half mentioned their HODs were very positive and encouraging about what they were doing. The overall positive response of the HODs - only one was cited as a block, specifically, and one as having exercised a censoring function over part of the research - suggests that they, as much as their researchers and myself, wish to extend the research culture of the institution. It suggests that they are prepared to encourage staff to research their own teaching - to re-present themselves as researchers as well as teachers.

Effectiveness of action research in introducing staff to research?

I have claimed that my research shows a developing understanding of my context, and that from that understanding and from my position as a staff developer at the polytechnic, my introduction of action research as a way of introducing staff to some of the research skills that our changed environment demands is both effective and appropriate. The comments of the action researchers throughout this chapter suggest that it can be effective; that it can act as a way of providing and/or extending practical research and classroom teaching skills; that it can empower, emancipate and act as a catalyst within the institution, particularly at individual and departmental level.

In this final section of the chapter, I shall present the reflections of the action researchers as to its appropriateness for their departments. While most are positive, there are one or two reservations expressed. One new researcher commented:

> It's probably a more appropriate research tool within our area. I can't imagine going out to get a lot of quantitative data so much, but when I do my Masters I'll hope to use action research.

She works in an area that involves training early childhood teachers, and her research looked at the transfer of skills from the classroom to the early childhood centres in which the students worked. This comment shows her perception of the

relevance of the approach both to her department, and to her personally in ongoing professional development. Another commented on its relevance in terms of his industry.

> I think it is [appropriate]. I think our industry is always in change, there's always something different going on. I think it's appropriate, and one reason is that the boss backs it.

This researcher identified, in his interview, the importance of 'top down' support for getting a research approach recognised in his department, and stressed in the comment above that his HOD supported action research.

The comment of another identified the usefulness of the approach, given the heavy workloads that polytechnic staff identify.

> I think it is really very appropriate and very timely...It gets people started who have previously thought research is only for people who teach three hours a week like at the University and have eons of time in their own little office with their own little computer and all sorts of secretarial help, that's who research is for. Not for us who are just chasing our tails.

There are some interesting conceptions of what life is like at universities in the above comment, which university teachers would doubtless challenge! The comments reveal the still-prevailing perceptions of research being valued above teaching in universities, against a perception that research has to be 'squeezed in' alongside of teaching for those in polytechnics. Research in polytechnics is still seen by this participant as an additional burden on top of teaching, for already overworked staff who 'are just chasing our tails'. But the comments reflect the researcher's appreciation of the usefulness of action research in getting novice researchers started.

A discourse of university (academic) research compared with polytechnic (teaching oriented) practice is obvious in the above discussion. A developing discourse showing the marketplace's effects on TWP is evident in the comments below.

> I think action research is an appropriate research tool for anybody, anywhere at any time because it is just looking at what we are doing, questioning what we are doing and you are continually improving....*And the fact that we are now much more customer driven, the customers are demanding the best* and I really think the only way we are going to do it

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is continually questioning and changing and going through those cycles. So yes, I think it is not just an appropriate research tool; I think it is a necessary tool that we all have to take on board and do (emphasis mine).

Peters, Marshall and Massey (1994:263) linked the development of the NZQA Framework with 'busnocratic rationality underlying the [educational] reforms'. According to these authors, the motivation for government was 'to 'upskill' the workforce in order to increase productivity and, ultimately, the volume of international trade'. The influence of the competition generated by market forces on education is argued in their writing; the researcher cited was recognising in her comments here, an awareness of this discourse affecting not only her department, but the whole polytechnic. Her department has been more exposed than some, to the forced introduction of NZQA unit standards, which have required a lot of extra work for the staff. However her response was not to respond negatively but to encourage staff to take on action research as a 'necessary tool' for ensuring that the polytechnic maintains its quality orientation to its customers, the students. Her comments support the argument presented in Chapter 1 (and in Peters, Marshall & Massey, 1994), that a New Right discourse of the marketplace has brought an emphasis on competition and economic survival into tertiary education which was not evident in earlier decades. Her comments also, however, illustrate how action research can be used for domesticating (Freire, 1972) rather than emancipatory purposes (see Humphries' 1998 reservations about quality management as a tool of social control).

In response to my question about whether action research was perceived as benefiting departments, a Maori researcher responded:

> Well, like I said, it is a process we are doing anyway....In terms of getting other people on board, I know what it means, probably, to our department in the long run and to research in general. I just feel for my colleagues that don't understand.[18]

She is an experienced researcher, and her identification of 'colleagues that don't understand' recognises that, for many in our context, research is a strange and unfamiliar skill. She recognised the importance of research, but contrasted this

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[18] When this researcher was approving this chapter, she asked me to stress that while her comments were correct in 1994 when the interview was conducted, the situation is changing.

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with the double workloads I have already commented on Maori staff bearing, with relation to resource development in Te Reo Maori, and the unfamiliarity of the research process for people who see themselves as predominantly teachers.

While the comments above are positive, conflicting viewpoints were expressed by two people within the same department (I shall call it X). One, a new staff member who had transferred from another polytechnic department to X, speculated that 'they probably don't want to introduce any new things that might rock the boat, so to speak'. This statement recognised that action research could be construed as different from previous research methods encountered by staff in X, in the pursuit of their own professional credentials. However her colleague, taking the course in a subsequent year, said:

> Because research is very young in our department, to look at different ways of researching, I think, is the best thing that we can ever do, before we start going out to do research. It therefore fits quite well, because we are so young. We're able to look and say, okay, traditionally this is what research is - action research gives us a different angle on the same thing, and I think that can only be of use to us.

For these two people, then, there are differing perceptions as to the relevance of action research within their department. The comments of the bulk of those interviewed, however, permit me to offer cautious confirmation of the relevance and appropriateness of this way of doing research across departments at The Waikato Polytechnic.

CONCLUSION:

I began this study having great hopes for the catalytic possibilities of action research as a way of changing and transforming a tertiary research culture. What evidence does the interview material from the action research course participants provide to substantiate these hopes? As the brief e-mailed questionnaire conducted at the end of 1998 showed, for the five who responded there have been positive changes in the degree of interest they have evinced in research, subsequent to coming on the course. All but one respondent declared that they had maintained an ongoing interest in research either relevant to their

teaching role, within their department or within the wider polytechnic. While only one had been able to carry out further research, all but one had wanted to do so, with one answering equivocally that he had not been able to. All but one were able to describe ways in which they felt they had been able to have a positive influence on the research culture within their departments[19]. None, however, thought they had had any specific influence on the wider polytechnic.

Does this information mean that my hopes were negated? It certainly suggests that the transformatory intentions I held originally were unrealistic. I had imagined action researchers being able to co-opt colleagues into their projects, spreading the approach 'by the contagion of enthusiasm', as my course descriptor stated. On an early draft of my thesis, Sue Middleton wrote: 'Do you intend your work at the Polytech and in this thesis to deal Capitalism a fatal blow? And free the oppressed masses of the world from oppression? Be modest and realistic about what this work can achieve.' This was wise advice, and the quotation helps to indicate ways in which my thinking has changed over the course of the study. Where I commenced the thesis drawing strongly from Freirean notions of empowerment of staff, of changing our context so that it better reflected the interests and concerns of teachers within a changing and, for some, threatening environment, I have had to recognise the partiality of my perspective. Foucault's notion of the impact of specific intellectuals, and his explanation of how power operates, have helped me to investigate the extent to which one individual, working in a specific context, can hope to influence an entire institution. Foucault's analysis of how power operates has, however, provided me with alternative perspectives on changing both my practice and the institution in which I work.

My experience has not disabused me of hopes that action research can indeed contribute positively to our emergent research culture, but it has made me reflect more realistically on ways in which this might happen, and particularly on the timeframe within which such transformatory hopes are achievable. I have been working as a specific intellectual within The Waikato Polytechnic, discursively positioned within a staff development tradition that requires me to encourage the development of better teaching *and* to help to meet the

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[19] One initially said she had not had any influence, but later described ways in which she had

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institution's strategic goals. Sometimes the two have seemed antithetical in our current situation of change - informal discussion with some staff (see also Hill, 1997) reveals that the need to engage in research is seen as antithetical to ongoing delivery of excellent teaching.

My introduction of action research has been an attempt to combine those two, in a pressured environment in which the discursive influences of market forces-driven competition mean that staff perceive that they have little, if any, time to engage in research. They are constantly engaged, instead, with ongoing curriculum design, meeting the demands of NZQA, trying to provide what 'the customer' demands. Action research enables them to learn research skills *while doing* these tasks, but this awareness is obviously going to take time to bring about.

It is fitting that I conclude this chapter by reflecting on the words of one of the action researchers, who stressed the practical benefit of the course for her.

> I think it was very valuable, one of the most valuable things I have done. A lot of things you learn and you put them in the filing cabinet and you may bring them out later, whereas you can always remember this, regardless of what you are doing you can see that and it's there, you don't forget it.

I attribute this comment to the familiarity of the approach, based as it is on the reflective cycle with which staff are already familiar. It makes sense; 'it's there, you don't forget it.' There are no complicated formulae to follow; just a sound process of planning, action, observation and reflection. In the final chapter I shall reflect on the effectiveness of the tools I have used, and how these have helped me to interpret my context and to work as a specific intellectual to help to develop it. I shall describe the action research journey I followed in this work, by adapting Dick's (1998) concept of 'circles within circles' to show how I have observed, reflected on, planned to change and acted in my environment. Finally, I shall conclude by declaring how effective I found action research as a tool for helping to develop our research culture at The Waikato Polytechnic.

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been able to support others in her department with research.

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CHAPTER 9: SUMMARY AND CONCLUSIONS

"We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time."
T.S. Eliot, "Little Gidding", 1942

INTRODUCTION

My investigation of the development of a tertiary research culture in an institution where there has previously been little research done has been a challenging experience, and one that is likely to become increasingly common in New Zealand polytechnics. This chapter is my opportunity to summarise the themes that emerged from the research, and to draw conclusions from the study. As a conscious act of validation of the efforts of other polytechnic researchers, in this conclusion I include their writing alongside that of more traditional academics. I recognise that newer researchers (such as those in polytechnics) are not deemed to possess the same 'weight' as sources, that published researchers in universities are considered to possess. Nevertheless, my use of the work of polytechnic writers in this chapter is a deliberate attempt to challenge the incongruity of the academy in sanctioning some in their 'speaking for others' when 'only those directly concerned can speak in a practical way on their own behalf' (Foucault, 1980b:41).

In the introduction to her book *Disciplining Sexuality* Middleton (1998:xx) quoted McWilliam (1995), who described as her overwhelming concern that of "helping my students to understand the power relations in which teachers work" and in which they as students study – "without being defeated by them" (p.134). I believe Middleton has been successful in this intention, as the work we have done (together with Neil Haigh) has helped me to discern and to use the power relations in which I work, in a positive way. The tools that Michel Foucault suggested, and the perceptions of one's context that Basil Bernstein's paper permitted, have been of considerable benefit to me as I strove to understand my own context. They helped me to see where I am positioned in the polytechnic. They helped me to see how I am complicit in the power relations of that context. They provided insight into how I might use my own power as a

teacher, researcher and staff developer 'to dislodge the ordering principles, thereby creating a greater range of possibility for [subjects within the polytechnic] to act' to influence their own context (Popkewitz & Brennan, 1998:28).

In this chapter, I revisit the themes described in Chapter One, using again the work of Foucault and Bernstein to help me in my analysis. I draw on the work and discoveries described in the subsequent chapters to illustrate how my work for this doctorate has shown a developing awareness of my own local and wider educational context. I describe how my analysis of the development of research cultures elsewhere has illuminated and supported the work I have done as a specific intellectual, to help to develop the research culture at The Waikato Polytechnic. Finally, I reflect on the effectiveness of action research as a way of helping to develop a research culture in an environment such as ours.

Polytechnic Education at the end of the 20th Century

At the start of Chapter One, I reflected on the current state of polytechnic education in New Zealand, and on how space had been made for polytechnics to offer degrees through the changes wrought since the election of the Fourth Labour government in 1984. I described the 'New Right' emphasis, based on the neo-liberal principles of the marketplace with its commensurate promotion of individualism and consumer choice over the previous discourse of collective responsibility, shown in predominantly State-dominated provision of education. At the end of the 20th century, this discourse of the marketplace remains dominant.

It is not without its critics. James Marshall, Professor of Education at the University of Auckland, critiqued the neo-liberal tradition of individualism from a Foucauldian perspective. He argued that 'fundamental to the reform literatures have been notions of freedom and choice' (Marshall, 1996:187). Successive governments in New Zealand have devolved responsibility for much educational administration and provision to local level, using the rationale of the consumer as 'autonomous chooser' as part of the rhetoric for their action. However, as Marshall pointed out, 'the notions of autonomy needed to make choices, and the notions of needs and interests, presupposes that such choices are the student's (or chooser's) *own*, that they are *independent*, and that needs and interests have not

been manipulated or imposed in some way upon the chooser. Therein lie problems for the notion of the autonomous chooser' (ibid., 187).

It is in this identification of the presumed neutrality and independence of choosers that the covert manipulation occurs. Parents and students, as consumers of education, can rely for information only on what they hear or read, and they are faced with a barrage of contradictory information. Foucault argued that power and knowledge are inextricably linked, and that knowledge engenders power (Foucault, 1977a). If parents and students lack in-depth and appropriate knowledge of educational contexts, then how can they exercise their power as autonomous choosers wisely? Proponents of neo-liberalism promote knowledge about 'freedom' and 'rights' for individuals, downplaying the strong tradition in New Zealand of collective responsibility for social wellbeing. Marshall, quoting Lyotard, argued that autonomous choosers do indeed exercise independence 'but at a tremendous price for the community. [Lyotard] argued that independence in this sense was gained at the expense of discarding social obligation for the other members of the community' (Marshall, 1996:192). Opponents of neo-liberalism, such as Marshall, try to put a less 'selfish' point of view. It is hard to tell how effective either perspective is in influencing the thinking of parents and students. As Marshall pointed out, 'the autonomous chooser is highly manipulable and easy to pick off' (ibid., 193).

Neo-liberal influences affect other countries' education systems also – Goodwin (1996:68) described how in Australia power continued to be exerted centrally despite a rhetoric of devolution. 'Ostensibly devolutionary practices conceal the extent to which government seeks to manage a population'. As Goodwin's comment suggests, manipulation is not obvious at the individual level only. The notion of the autonomous chooser also affects institutions. Post-Picot, educational decision-making was supposedly devolved to institutions, which were encouraged to make 'autonomous' decisions free of the interference of an Education Department. I have discussed earlier in the thesis how this supposed freedom was in fact constrained by the control that the NZQA exerts over our curricula and qualifications, by the surveillance exercised by the Ministry of Education's Educational Review Office, and by our requirement to state our institutional objectives and report on the effectiveness of our meeting

these, in our Annual Report to Parliament. When I investigated the development of our degrees, it became clear that our 'autonomous choice' to take up the possibility of offering degrees was largely motivated by the competitiveness engendered by the neo-liberal approach. Had the departments involved not 'chosen' to offer degrees, their Heads of Department felt that students would be lost to competing institutions.

How is our polytechnic responding to this discourse of neo-liberalism in 1999? One impact of the increased competition on TWP in the late 1990s was the interest expressed by the institution in merging with other polytechnics. In the official communication flyer, *Merge*, staff were informed that the reasons for such mergers being considered were the multiplicity of tertiary providers operating in New Zealand – 26 Polytechnics, 7 Universities and a large number of private providers. Also, demographic shortfalls in the 18 – 25 year cohort for the next few years were discussed, as was a northern shift in the population of the country being likely to cause fierce competition for students by southern providers. The attempted 'erosion' of polytechnic markets by firstly, the university sector offering vocationally oriented degrees and secondly, private providers 'aggressively marketing profitable niche market courses' was also commented on (*Merge,* January 1998). Accordingly, during 1999 TWP was in the final stages of merging with the Central Institute of Technology (CIT), and was also working intensively on a merger with a lower South Island polytechnic, Aoraki (see map, Appendix C).

In chapter 3, I discussed the incursion of academic discourse alongside the traditional technical and vocational ones affecting polytechnics. The merger with CIT, which 'plans to offer 11 degree programmes in 1998' (*Merge,* January 1998) would be likely to increase the prevalence of an academic discourse within TWP. The CEO described, as part of the benefits of such a merger, 'greater opportunities for collaborative research' between staff at the two institutions (op. cit). In that *Merge*, however, he also declared TWP to be 'firmly committed to vocational education'. Despite attempts by several other polytechnics to become universities (none was so designated at the beginning of 1999) our institution was not trying to reconceptualise itself as a university.

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However, the development of academic discourse continued. In the *Bulletin* of 15 September, 1998, Dr Rawlence stated that 'research and scholarship are increasingly important activities for staff, as they enable us to carve out a unique and well-respected niche in the tertiary education market', and in the *Bulletin* of 17 November, 1998, he commented on tangible expressions of this academic discourse. 'Just like the Graduation Week, the wearing of academic regalia on Graduation parades, and the development of our first Strategic Plan, the [institution's first ever paper and electronic] Academic Calendar is a sign of a 'coming of age' for our institution'. Clearly, as TWP enters the next century, discourses of technical and vocational education will continue to be promoted alongside an increased emphasis on an academic one.

Understanding power in polytechnics

In my Masters thesis (Ferguson, 1991), I used Freire's tools of analysis to investigate how oppression works in practice, and to look at how it has operated through the New Zealand education system to restrict Maori in particular. However, this analysis was inappropriate for developing my understanding of my own context. It was too simplistic to see 'management' as oppressors of staff in adding research to existing heavy teaching workloads, particularly when my investigation showed that the most senior management had, in fact, resisted the introduction of degrees in the first place! Government had obviously not 'required' polytechnics to offer degrees, 'only' opened up spaces whereby this possibility was extended. The location of a particular 'oppressor' in our situation proved unrealistic. As Fendler (1998:60) expressed it,

> In previous patterns of governance, wherein power relations constituted a transcendent subject, it was plausible to define a sovereign site of resistance – as in liberation from domination. However, in a pattern of power wherein the subject disciplines the subject and the soul/self is reflexively identified with the social, the identification of an "agent" or an "oppressor" is problematic.

In analysing power functioning in the polytechnic, then, I found the tools of Foucault and of Bernstein were useful in the understanding I developed of how policies come into being, and how specific intellectuals in the polytechnic can work.

As Law and Sissons pointed out in their work, 'liberating education occurs within the context of everyday life', in the 'cracks and spaces' that open up, which specific intellectuals 'have the courage to exploit' (Law & Sissons,

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1985:83). I had to broaden my thinking beyond a Freirean inclination of wishing to 'liberate' the polytechnic staff, given Foucault's injunction that intellectuals must not 'articulate for others' (Marshall, 1996:29). However, I could liberate myself from some constraints to my thinking – I could liberate my students from my own oppressive practices, as far as that is possible in a normalised and regulated environment. I could develop a more complex understanding of how polytechnic staff, teachers and managers alike, are constrained and enabled in their respective endeavours. I was helped in this development by my interviews with Peter Johnson, with the HODs, and with key informants as the work progressed.

I found Bernstein's schema helpful to me in understanding how TWP functions structurally, and in understanding how power 'flows' around the polytechnic (Foucault, 1980b). Bernstein's diagram (below) shows that organisations dominated by collection codes have strong boundaries separating management staff from junior staff, with 'top down' rather than 'both ways' flows of power evident. He specified weak horizontal relationships at grassroots level.

Figure 2: Bernstein (1971)
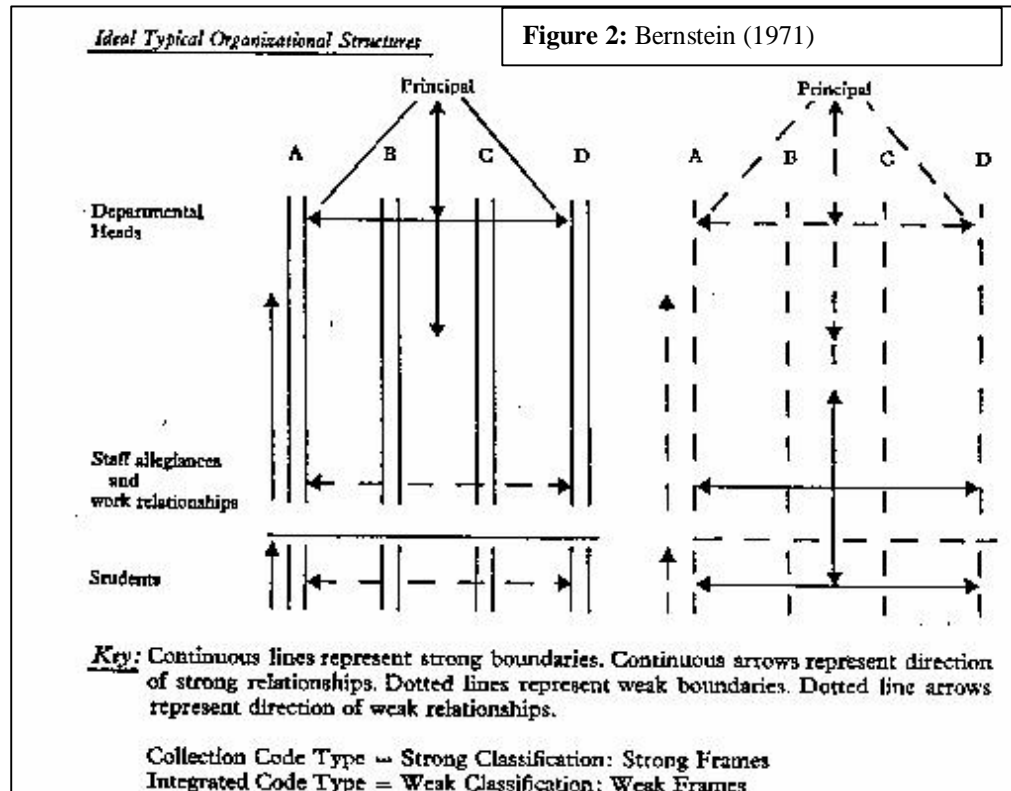
I have argued that TWP's functioning tends to fit more closely into a collection code type of organisation. I indicated that, apart from the boundary

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crossing engaged in by my unit (and by staff when engaged in tutor training), and by the Communications Department which teaches across subject areas, there is little vertical relating at grassroots level. In Chapter 4 I discussed how, even when there was an attempt to bring in a degree that was based on integrated, rather than collection, codes, this came to naught. The institution predominantly, I have argued, demonstrates the characteristics of being dominated by collection codes. Such a structure, said Bernstein, 'points to oligarchic control of the institution, through formal and informal meetings of heads of department with the head or principal of the institution. Thus, senior staff will have strong horizontal work relationships (Bernstein, 1971:61).

However, it is at this point that the partiality of my knowledge of my own institution became apparent. It was my perception that the introduction of degrees was a top-down initiative, probably resulting from intervention by Peter Johnson. This interpretation was incorrect. A key informant wrote to me (memo dated 17 April, 1998), that "I became firmly convinced that for the powerful members of the "old regime" research was a mere irritation brought upon the Polytech by those damnable departments who had ventured into offering degrees'. Likewise, my interviews with the HODs showed resistance by the most senior management to the introduction of degrees into departments. This renders debateable, from the perspective of Bernstein's scenario, how strong the work relationships are at that level. Further research would be needed to investigate this point, and probably by somebody who is part of that cohort of staff and who would therefore be trusted.

The situation supports a contention that the importance of specific intellectuals 'speaking of the structure of domination [of their institution] without claiming more than [their] due' (Poster, 1989:37) should be tempered by a recognition that these 'speeches' come from a partial perspective. I have claimed that both the HODs and myself act as specific intellectuals in our context (therefore can speak validly of that context); nevertheless on the issue of introducing degrees into TWP, my perspective was different from theirs. Caution needs to be exercised by specific intellectuals in making their speeches!

How have I resolved the internal contradiction of 'wanting to liberate' while recognising my own complicity in the normalising, controlling and

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scrutinising functions of the polytechnic? Here, again, Foucault's analytical tools have been useful. In Foucault's view, power is not seen as being concentrated in the hands of only a few. Rather, it operates at capillary level at the point where 'power reaches into the very grain of individuals, touches their bodies and inserts itself into their actions and attitudes, their discourses, learning processes and everyday lives' (Foucault, 1980b:39). This has encouraged me to see how the other staff and I can influence the micropractices of the institution, and to help to bring about regimes of truth that we can endure with integrity. Through my study, I have gained insight into how one can bring this influence to bear in our context via participation on committees and working parties.

As a specific example, in Chapter 3 I critiqued the lack of attention paid to Maori interests and needs in TWP's early days. Subsequently, I indicated that tangible recognition of the need to rectify past injustices has been demonstrated through such internal policy moves as the recent acceptance of the Protocols for Conducting Research in Maori Contexts (White et al, 1998). I was a member of the Working Party that constructed this text, and was able to draw on reading I have done in my doctoral study to help the group. In this way, I was able to 'insert my perspective' into a policy-making group that would affect the future conduct of research at TWP and help to establish a regime of truth in research, in which I can operate with integrity.

The presentation of this paper at the Academic Board meeting in early February, 1999, showed an interesting intertwining of discourses. Part of the discussion prior to the acceptance of the paper revolved around its importance to TWP's chances of obtaining external research funding, a clear link to the discourse of competition. Professor Paul Spoonley of Auckland University had presented a seminar at TWP in early December, 1998, in which he spoke of the weight placed on demonstrated commitment to Maori values and research processes by the Public Good Science Fund, of which he is a member, in the allocation of research funds. The situation demonstrates that the requirement to consider Maori needs and interests appropriately can also operate in TWP's wider interests in terms of possibly helping to attract the research funds that the institution will need to extend its research culture in the future. It indicates that funding power and Maori knowledge have been linked in a way that is

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productive (Simola, Heikkinen and Silvonen, 1998), not restrictive of Maori interests. It well indicates the complexity of the way that power operates.

In the foregoing discussion of how power operates in a polytechnic, I have demonstrated how I have used some of the tools that Foucault suggested in intervening as a specific intellectual to bring about the inclusion of values to which I am committed. This is compatible with the way that Foucault himself operated. Some writers (e.g. Donnelly, 1992, quoted in Simola et al, 1998:247) have suggested that Foucault 'fails to demonstrate adequately the development of modern disciplinary society' and others that Foucault, by 'refusing to take part in theory construction…remains a relativist' (quoted in Marshall, 1996:130). Foucault himself refused to "assume the standpoint of one speaking for and in the name of the oppressed" (1980b:256).

But there is ample indication that Foucault involved himself in political action to bring about change in social situations. Marshall (1998:161) described him as being 'committed to some form of proletarian revolution, he was committed to some form of the welfare state…he was committed to the reform of higher education' while Gore (1998:248) quoted Foucault (1988c:11) as explaining that 'changes can still be made' to the functioning of institutions. Foucault was not content merely to describe *how* power operates and how institutions normalise and control; he also sought at times to bring about change in their functioning, being arrested for protesting for prison reform at one point. My holding of my own values while promoting a Foucauldian analysis as an effective way of understanding one's own institution is not, therefore, contradictory. Other educators have done likewise. As Gore (1998:249) eloquently put it,

> Pedagogy's governmental influence, both within and beyond schooling institutions, is enormously powerful in the control of populations. Attempting to understand those processes and remove those that are harmful cannot, in my view, be any more dangerous than maintaining what already exists.

In this section, I have looked at the overall question of how I have demonstrated my understanding of the context in which I work, and exercised my power. I have shown that, despite the neo-liberal discourses currently permeating education in New Zealand, productive change is possible. As Marshall expressed it,

If Foucault is correct, what is needed in response to neo-liberalism is an increased vigilance, and an increased imagination and inventiveness, for there is a complex problem space brought into play by such neo-liberal reforms (Marshall, 1996:193).

In the remainder of the chapter, I summarise the ways in which I, as a specific intellectual, have exercised my imagination and inventiveness, based on sound analysis of established ways of doing so, to help to develop the research culture of TWP using the action research approach.

Helping to develop a research culture

The establishment of research culture in a polytechnic indubitably involves power/knowledge issues. The introduction (or expansion) of research in our environment is disruptive of existing identities, of existing power dynamics. It is hardly surprising, given the newness of this requirement in New Zealand polytechnics, that there has not been a wide literature on the topic up to this point. My recognition, during 1992, that research skills were going to be a strategic requirement of staff in the institution in the foreseeable future was prescient. That I had to battle to get the introduction or further development of research skills in the staff included as part of my job description as a staff developer in the institution is proof of that prescience.

However, having recognised that such development was necessary, I set about investigating how others had worked to develop research cultures in New Zealand. While I could find only Crotty's (1992) and Piggot's (1993) work on developing polytechnic staff as researchers in the first two years of my study, Wood's work in 1994 was helpful. In 1997 there was a flurry of reports emergent from a "Research and the New Tomorrow" conference held at UNITEC in Auckland. I discussed some of these in Chapters 5 and 6. The Australian and U.K. work that I also referred to in those chapters was useful. In early 1999, I received a paper from Tony Clear, Academic Leader in the Computing Systems and Technology Department at Auckland Institute of Technology. It provided some interesting and novel insights into how the micropractices of power may be used to classify (and exclude or devalue) the research that is starting to be done by polytechnic staff. Clear described how power/knowledge issues are used to limit who is recognised as an appropriate researcher, drawing on university perceptions and the NZQA and OECD

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definitions of research. This limitation can make the re-presentation of polytechnic staff as researchers difficult.

Elaborating on how the traditional academic research discourse can operate to exclude and limit new researchers, he mentioned the way that paradigm maintenance, restrictive definition of discipline boundaries, a desire to maintain traditional (and largely academic) foci in research topics, and the 'identity rules' maintained by members of the discourse community can be used. Here, the work of Bernstein would support Clear's contention. Bernstein suggested that challengers of strong boundaries between departmental curricula and identities, (such as people trying to re-present themselves as researchers in departments where this has not been part of the identity of that department), are perceived as polluters of the sacred. The resistance that Clear suggested may be experienced by new researchers in polytechnics is not, in the light of Bernstein's work, surprising. Not only do they challenge notions of 'what counts as legitimate work' in the local polytechnic environment, but in a broader educational context their research is judged against criteria that arose in academic, rather than a technical and vocational, institutions.

The micropractices of power, as they are applied to polytechnic researchers, may work as described above, and as follows. Clear suggested that the 'delegitimising [of] practitioners as researchers, since they are part of a different discourse community,' and the 'delegitimising [of] former practitioners turned educators [because they] lack formal credentialisation' (Clear, 1999:15) were stressed. The case of Joan, which was described at the start of my thesis, is an example of this 'delegitimising'. Clear discussed the ways that such norms may operate to make the conduct of research difficult for polytechnic staff as our research discourse develops. The discourse of academic research is, therefore, likely to continue to both influence and render contested the way that polytechnic research develops in the future.

Faced with this kind of contestation, why did I decide to intervene in my context? I have discussed my position as a specific intellectual, and the mandate that I held as a staff developer to help staff to re-present themselves as researchers as well as teachers. My perspective here is not uncommon - writers from both universities and polytechnics have stressed the importance of staff

development in situations like ours. Mary Melrose, a staff developer at the Auckland Institute of Technology, intervened in her context, using action research in her Ph.D study to assist polytechnic staff in their development as educational leaders (Melrose, 1995). Webb, an Associate Professor and Director of the Higher Education Development Centre at the University of Otago at the time, felt that staff developers should act in emancipatory action research projects to transform the inequity that he saw in staff development. He considered that

> It is the duty of the vanguard to lead the way…they are the ones with a clear view of the future. They must not shirk their responsibility. Thus, the staff developer leads and facilitates 'action' projects to improve learning, guided by the precepts of group-based activity, equality, democracy and emancipation. We are talking here of the role of the staff developer in 'action research' projects (Webb, 1996a:61).

My intervention as a specific intellectual and as a staff developer is not, therefore, novel; what is novel is the use of action research to help to develop a tertiary research culture.

Small changes in one's environment may not seem significant at the time, although they may be the most practical (and possibly even effective) intervention. Some writers of general texts on research support local initiatives – for example Denzin and Lincoln (1994:11) commented that 'The search for Grand Narratives will be replaced by more local, small-scale theories fitted to specific problems and specific situations'. To accept this change required me to reshape the hopes and expectations I held at the start of the study into more realistic goals. Even then, change takes time to come about. As Codling's research at UNITEC showed, 'the development of a strong research culture within the institute had a "long gestation period" and this could not be accelerated artificially' (Codling, 1997:81).

It would be easy for staff developers and other specific intellectuals operating in changing environments like ours to despair of accomplishing anything of significance. However a number of writers, both in New Zealand and elsewhere, give reasons why one *should* take action. Within the New Zealand situation, Bishop[20] (1996a:18), despite his strong support of the whakawhanaungatanga method for Maori conducting research, argued that

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Pakeha should also be involved, because 'for Pakeha researchers to leave it all to Maori people is to abrogate their responsibilities as Treaty partners'. Vercoe[21] (1997:46) also stressed the need for joint work, 'recognising that it is [Maori] who should be *among* the architects of the framework in which the research is to be conducted' (emphasis mine). This 'architecture' involving Maori and Pakeha working together is exactly what occurred at TWP throughout 1998, as the institution strove to develop appropriate protocols for the conducting of research with implications for Maori (White et al, 1998).

The action of specific intellectuals also arises out of the motivation of individual integrity. Laidlaw (1997:85), quoting Henry, 1993, said: 'There has always seemed to me an indefensible anomaly in advocating something for others which one is not doing oneself.' In this, Laidlaw reflected the comments of Whitehead, in his book *The Growth of Educational Knowledge* (1993:129):

> What I have in mind is the idea that each individual who wishes to contribute consciously to the future of humanity through education should offer his/her own educational theory in the form of an explanation for his/her own educational development, for public criticism.

Throughout his book and in other writing (e.g. Whitehead, 1992), Whitehead stressed the need for educators to turn the spotlight of what they advocate, onto their own practice. This was despite the very real threat of dismissal that his honesty in his practice had caused at the University of Bath, an honesty about which Blacker also warned. 'One might draw the lesson that honesty among intellectuals (especially "effective" ones) is very threatening to hegemonic power' (Blacker, 1998:365, footnote 5).

The work in this thesis has shown that, at times, I have felt my position of speaking out as a specific intellectual *has* threatened hegemonic power. But it has also shown that New Zealand's educational history has benefited from the enlightened action of specific intellectuals such as Hogben, Beeby, Renwick and Garrett; that TWP's history has also been changed by the action of specific intellectuals such as Crotty, Judd, Johnson and the HODs I have interviewed, and more recently, of Barnett, Chambers, Hill, Rawlence and White. Schaafsma (1998:257) described ways in which one can insert one's own perspective and

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[20] Towards the end of 1998, Professor Russell Bishop was made Professor of Maori Education in the School of Education at the University of Waikato.

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exercise one's own power in institutions. 'In addition to the cracks, ruptures, and failures in every system, the process of becoming "one's own subject" also involves strategies that are possible within existing power relations.' It is to the strategy I used – that of construing practising teachers as the subjects of their own research – that I turn now. I conclude the thesis by reflecting on the effectiveness of action research as a tool for helping to develop the research culture of The Waikato Polytechnic.

ACTION RESEARCH: A CATALYST FOR CHANGE?

Fendler used Foucault's analysis to explain how it is possible critically to analyse the functioning of power in her environment. I wish to commence this final section with her words, as they well illustrate the approach that I have used in this study, and link my work with the action researchers, with that of the overall project. While we may not be totally autonomous, we can gain insight into how our historical situation came to be, and what we might to do help to develop it. We can "collaborate" as action researchers to "co-liberate" ourselves in our current context. Fendler wrote:

> If current political projects in education continue to assume a traditional modern (i.e. autonomous) subject, then it becomes impossible to recognize or critique the subtle ways in which power currently is being exercised in the construction of educated subjectivity. It is only when research makes the constitution of the subject theoretically problematic that power, in its current forms of governmentality, can be critically analyzed (Fendler, 1998:60).

As I strove to help the staff at TWP re-present themselves as researchers, it seemed to me that the most appropriate way of doing so was to build on existing strengths and identities. Action research is a way of 'making the constitution of the subject theoretically problematic' in that it is one's own practice that one seeks to investigate, understand and transform, not that of anyone else or anything else, as in many other forms of research. The use of an action research approach has helped me to conceptualise my own position as a staff developer as 'theoretically problematic'; using the tools of Bernstein and of Foucault I have had to consider where I fit in the functioning of the polytechnic, and how I use and can misuse my power in this environment. But the approach

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[21] Andrew Vercoe is a doctoral student at the University of Waikato.

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has helped me to critically analyse both my own power, and the power that is exercised by others within and outside the polytechnic to render us all as subjects. I shall reflect now on how effective the action research approach has been for me as a 'doctoral subject' and in the construction and writing up of the thesis. Later, I shall look at its effectiveness for other members of the organisation, using their own words and official 'texts' to support my contention.

Perry (1997:46), quoting Perry and Zuber-Skerritt 1992, suggested that when one is writing up an action research PhD thesis, 'it is wise to consider the thesis as something distinctly separated from the action research project, that is, the candidate will have two projects – the *action research project* and the *thesis project* which uses data from the action research project.' He later suggested (ibid., 47) that the concluding chapter should include "Reflections on methodology.' Having carried out a study with action researchers using action research as my own methodological approach, I concur with Perry's comments.

Where standard action research diagrams (e.g. Kemmis & McTaggart, 1988a; Piggot, 1994; Stringer, 1996) follow a spiral of planning, action, observation and reflection presented in a systematic fashion, others, (e.g. Booth, 1997; McNiff, 1988; Rockwell, 1997) have proposed more varied diagrammatic representations of the process, allowing for 'side spirals' and additional incorporations which suggest that the approach may be messier than at first appears. Considering the 'meta' level issues I have had to try and present in this thesis, in that action research is both my process and my method of intervening, I have chosen to adapt an idea suggested by Bob Dick, who referred in a posting to the arlist-l listserv group in May, 1998, to the concept of 'circles within circles'. I have cleared my adaptation with Dick; in a personal e-mail dated 8 June 1998 he wrote: 'You are welcome to adopt whatever view of "cycles within cycles" works for you.'

My attempt to explain the progress and meta-level depiction of my work appears in the diagrams below (p.278). They show how my personal, theoretical and local work has proceeded in an orderly fashion following the standard action research progression. They justify my claim to be using action research as a methodological approach, while providing an additional way in which future researchers using action research might choose to present their work. Perry

(1997:33) recommended that 'development of a modified model of the classification or analytical models [presented earlier in the thesis] is an excellent summary of how the research has added to the body of knowledge, and is strongly recommended'. These diagrams have presented a modification to the models taught on the course, and show how I have applied action research principles throughout the work. The implications I draw about the theory of action research as a result of this work, then, are that the approach is valuable in the conduct of a study such as mine has been, but that the complexity of this study has necessitated the development of meta-level diagrams which better represented the multiple layers of the work.

The diagrams show how I have striven to combine the action research approach with my own personal narrative. Morris Matthews (1993:270) described in the concluding chapter to her doctoral thesis how, 'as a "knowledgeable insider"...[I] made known how I knew what I knew as I began the study'. Paechter (1996:81), too, advocated an increasing acknowledgement of 'the influence on the [research] situation of the particular attributes of the researcher', an acknowledgement that is explained through the use of personal narrative. I have shown through these diagrams and my narrative how I am positioned within my study, simultaneously with examining how I have striven to affect my context. The diagrams, combined with this thesis in its entirety, show how I have answered my three research questions – how I have understood and accounted for changes affecting my institution and New Zealand education more broadly; how institutions develop research cultures; and whether action research can be used effectively in the development of a tertiary research culture. Further, they show the reflexivity to be expected of a specific intellectual who is complicit in the environment she is investigating.

I used the theoretical distinctions of technical, practical and emancipatory action research to assist my action researchers and myself in our understanding of our motivation for carrying out the work we have, and in locating the initiative and outcomes of the research projects we have carried out. This framework has provided a useful tool for these purposes, but one that should be exercised with care.

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PERSONAL

Observe: Past history
suggests that I work better
in disciplined ways.

Reflect: Institution
needs higher credentials
and I need imposed
discipline. I'm going to need supervision
need supervision skills skills also.

LOCA

Observe:
Joan's situation.

Reflect:
**Unfair.
What can I
do?**

| 1 |

| 2 |

| 6 |

| 4 |

Act: Get course
through academic
processes, start
teaching it. Later,
interview ARers.

Plan: Decide to offer AR
courses as a way of getting
staff publications records
and the acquisition of
research skills.

| 3 |

| 7 |

Act: Enrol and commence
acquiring supervisory skills
experientially.

Plan: To enrol in doctoral
study at University.

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PERSONAL / REFLECTIVE

Observe: How does dialogue with
critical friends challenge my practice?

Reflect: How can I
adapt my course
assessment to   prevent panoptic gaze?

Do my students work   as
perceive my   oppressive?

THEORETICAL

Observe: The situation is much
more complex than I had expe

Reflect: I need a broader concept
wer than I currently have, and

HISTORICAL

 of analysing TWP   a way of analysing
TWP's functioning.

Can my AR
course act as
a research
approach that
weakens framing in
my institution?

Observe: My knowledge
of my own institution is
too limited to account for
what I am observing .

Reflect: How can I
extend my
knowledge?

| 1 | | 2 | 6 | 10 |

| 4 | | 3 | 7 | 11 |

Act: Access minutes,
reports, library
resources, interview
HODs, foundation staff,
key informants.

Plan: To extend knowledge
through document analysis
as well as books / journals,
talk with staff.

Plan: Changes
to course
assessment.

Act: Get into
post-modernism,
eventually eventually settling on Foucault;
find Bernstein's schema useful.

Plan: To extend my reading via
discussion with supervisors and
others.

Check out
"oppressive"
possibilities with
students.

Start to note whether
framing shows signs
of weakening.

To listen to ARers' talk for
shared research approach
perspectives.

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While I discussed where the technical/practical/emancipatory distinction has been used in other contexts, some action researchers resist such categorisation. In an interview with Jack Whitehead (20/9/94) I tried to ascertain whether my 'reading' of the Bath group's work as predominantly emancipatory was correct. Whitehead clarified my interpretation:

> What I've been trying to say is, look, what we should be doing primarily, I think, is trying to create different forms of educational theory. Otherwise, your stress on action research methodology can actually be constraining, can be counter-productive.

I felt that Whitehead was challenging my attempt to 'pigeonhole' his work in the technical/practical/emancipatory framework, in this statement. In terms of action research theory, then, the lesson from this research is to operate eclectically, to selectively use the action research tools that assist one in one's work, without attempting to prescribe them as any kind of 'Grand Narrative', to quote Denzin and Lincoln, for others.

My use of action research has been rendered potentially problematic, theoretically, by the solitary use of it that my inability to attract co-researchers from among my peers has caused. I have discussed this among the paradoxes that the study has raised. At the conclusion of the thesis, I am comfortable with my position, while recognising the greater potential for change that is possible in joint projects. As Henry and Rodostianos wrote (1993:10), 'action research thus has an individual aspect – action researchers change themselves – and a collective aspect – action researchers work with others to achieve change and to understand what it means to change.' This pragmatic recognition is important for staff developers in polytechnics to appreciate, as it is likely for some time that the workloads and time constraints expressed by my action researchers and in the studies on research culture development will restrict the joint projects that action research considers ideal.

My research is rendered potentially problematic theoretically, also, by the location of the course within an assessed and certificated programme. This has also been discussed and investigated openly. In my visit to the U.K. in 1994, I interviewed Jean McNiff (28/11/94). As part of the interview, I discussed the possibly subversive effects on true emancipatory action research of such location. Her response was helpful to me not only in terms of my course, but in

terms of my coming to grips with the academic imperialism imposed on this thesis in terms of structure and expression. McNiff said:

> It seems pretty contradictory when the whole agenda is to liberate people's thinking and action so that they can question what they're doing and at the same time, you're imposing structures. But that's simply the way of the world. We're working within an academic structure and if you're going for a certain status, in the sense of the conferring of an award, well it's rather like playing football. You have to abide by the rules of football. If you're going to play the academic game, then you have to agree to the academic rules.

To return to the quote from McWilliam to which I referred on page 262, McNiff's comment helped me to 'understand the power relations…in which [I] as [a] student study…without being defeated by them'. It has helped me to make sense of the normalising and controlling constraints of the environment within which I practice, as I try not to be 'defeated' by my anxiety about requiring my students to produce normalised texts which I, as assessor, mark.

Has action research worked effectively as a way of introducing staff to the research skills now required by the institution? Has it raised awareness of practitioner research as an acceptable area for research, considering the positivistic research that dominated the polytechnic in the past? Comments by staff in Chapter 8 indicate that it has done the former. With regard to the latter, an analysis by title of entries in the polytechnic's Research Registers of 1996 and 1997, compared with that of 1993 (see Table 6, Appendix C) showed a sharp rise in research relating to teaching practice. While not many of these are action research projects, the listings do show an increased appreciation of the possibilities of researching *teaching practice* as well as *content areas.* This approach has been advocated in other New Zealand polytechnics also; Clear (1999:9) recommended as a key point, 'an understanding of how best to validate the skills of existing practice-versed staff, and how best to introduce a complementary and appropriate conception of research'. Buckeridge (1997) and Codling (1997) both advised working from the familiar, i.e. one's teaching practice, when one is introducing polytechnic staff to research. Research approaches based on reflective practice, such as action research, would therefore seem to be both theoretically and practically a sound way of developing a tertiary research culture.

It will, however, take some time to determine whether the use of action research as a research approach will start to break down the strong pedagogical framing that has so far inhibited much cross-departmental research. I am currently Faculty representative on a group that is working on strategic directions for research across the polytechnic, and cross-departmental research is being warmly supported in this group's initial deliberations. It will be interesting to continue to investigate whether the common interest in teaching improvement that action research encourages, will help this blurring of departmental boundaries to occur.

CONCLUSION

In the work above, I have discussed how my intervention as a specific intellectual in my own context has been accomplished, using action research as an approach. I have demonstrated how the approach has been promoted by other staff developers as a way of bringing about change and improvement in tertiary contexts. I have referred to the work of other polytechnic writers who suggested the linking of research with existing strengths as a positive way of helping staff to develop the research skills that our environment now requires.

Popkewitz and Brennan linked action research with Foucauldian concepts in their writing:

> We suggest that it is more fruitful to discuss the issues of governance less in terms of pros and cons about specific policies and more in terms of the conditions by which practices such as site-based management, "the reflective teacher," or "action research" are constructed as plausible (Popkewitz & Brennan, 1998:20).

In this identification, the writing of these authors seems highly compatible with the approach that I took to intervene in my context. They suggested action research (which I have demonstrated is based on the notion of the reflective practitioner) as a way of investigating 'the issues of governance' in institutions. My action researchers and I have done just this. Some of us have investigated our 'governance' of our students; some of us have also investigated governance in wider educational contexts (e.g, Ramesh's use of espoused but ignored

practice at the prison; one tutor's consideration of the culture of his department; my own work). We have striven to show how we are developing our understanding of our specific and wider contexts in our work. We have, as McNiff's definition quoted on page 20 suggested, attempted to "share the passion, the awe, the wonder, the beauty, the delight" in our own lives, as well as the lessons we have learned from our "mistakes", with fellow educators, as we show how we have striven to change our own contexts.

Both local (e.g. Codling, 1997) and international (e.g. Schein, 1995) writers have commented on the need for individuals to take action to change their organisational context. Schein, a recognised expert in organisational development, wrote that

> If one studies cases of successful organizational transformation, i.e. major system wide learning, one finds that in every case the organizational learning first began in an individual, then diffused to a group, and only gradually diffused from the group into the main body of the organization (ibid., 2).

This comment is important, because it both recognises that individual action is important in bringing about organizational change, and that the effects of that action take time. My action research has been largely individual, as has been the work of my course participants. But we have influenced others to consider involvement in research. In discussing ways of changing cultures, Professor Robin McTaggart (1995:35) suggested that 'it is possible (and wise perhaps) to start small, because social life is manifold – not complex or made up of separate bits – to change one aspect inevitably means changing others'. It may therefore be some years before the full impact of the action research courses as a way of introducing polytechnic staff to research skills is able to be measured in an effective way.

Blacker warns that 'one who aspires to articulate emancipation must acquire a certain theoretical modesty' (Blacker, 1998:357) so I must be cautious about claiming any significant effect of the course *across the polytechnic as a whole*. It is possible to claim some catalytic effect *within* some departments; increasing numbers of staff have attended the course from the Departments of Office Technology and of Community and Continuing Education. There have

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been some ongoing enrolments in the course from other departments once a member has completed the course, although not on as consistent a basis as in the two departments mentioned.

But the course is not the only exercise of action research pertinent to this thesis that is relevant to the development of our research culture. Musgrave et al's action research project developed partly as a result of my enthusiasm for the approach (see Musgrave et al, 1996; Musgrave 1997), together with support from their HOD Rosanne Matheson. The 1997 Research Register presented this group's work (Musgrave, 1997) in a full one-page spread, which included the statement below.

> During 1996 and 1997 a team of nine ESOL [English for Speakers of Other Languages] tutors co-ordinated by Jill Musgrave and funded by grants from the TWP New Entrants and Contestable Research Funds used the action research model to obtain data on teaching practices from their classrooms. This study was conducted with the dual goals of modifying classroom practices to better accommodate the needs of people of other cultures, and to aid in developing a research culture in the Department. In addition to increasing the number of staff gaining research experience, the relatively large size of the research group increased both shared experiences and the range of the data (1997 Research Register, page 12).

As this entry shows, a large group of staff had used the action research approach to investigate improvements to their practice. They had been successful in attracting Research Committee funds on an ongoing basis (the project started in 1996, and continues in 1999), and the work is recognised as helping to develop the research culture of their Department. While none of the participants had attended my course, their department is one in which several staff – e.g. Anne O'Brien - have been participants. It is possible that hearing of the work of these action research course participants alerted the ESOL staff to the potential of the approach as a way of developing their research culture and learning to carry out research under the supervision of a leader (Musgrave) who was herself mentored by me.

Furthermore, my work to help to develop our research culture has been an action research project in and of itself, as the diagrams on page 278 and 279 showed. I have declared throughout the thesis how I have contributed to the development of our research culture, and it is valid to claim that this intervention

is also evidence that action research has contributed effectively to the development of the research culture at TWP. The personal enthusiasm of individuals can have impact, perhaps as much as that of larger groups at times, as my analysis of the work of reflective practitioners showed. It certainly has an impact on the researcher herself! As Clear (1999:20) expressed it,

> The development of the author as a researcher, learner and teacher...has been a challenging, absorbing, exhausting and at times frustrating and disappointing experience. For the author it has been quite subjectively a great learning experience, and has been largely driven by personal enthusiasm.

Having been through nearly seven years of reading, writing and action in the production of this thesis, I have to agree with Clear!

Was it all worth it? For myself, I have to say yes. Despite the pain which has shown through this thesis at times, the skills of supervising (and surviving supervision!) I have acquired are standing me in good stead in our changing environment. I have been disciplined into more focused ways of both writing and of communicating generally. I have learned some very effective ways of locating and using information (and learned to discard some very ineffective ones). I have extended my knowledge of computer programmes to help produce this thesis, and provided information and training sessions for other staff in the acquisition of such knowledge. I have worked as an 'irritant' to encourage the polytechnic to make useful thesis-shaping programmes such as NUD*IST and Endnotes available to other staff on our computer network. The use of structured interviews with the foundation staff, semi-structured interviews with the action researchers, and fairly open interviews with the HODs and key informants has provided a rich source of data. This data, added to the research literature I have studied towards my doctorate, has provided me with a balanced yet multi-faceted view of my institution and of how different 'actors' within the institution see its operation.

I stress the novelty of my use of action research specifically to develop a tertiary research culture. This approach has been used widely to improve teaching effectiveness and to bring about change in practitioners' practice, but I have been unable to find any examples internationally or locally of its use

specifically to help to develop a research culture. This is my strongest contribution to the theoretical and practical applications of the action research approach, particularly in a context such as ours. The study has been entirely compatible with the aims of action research – to bring about positive change in one's own environment by critically investigating one's own practice. That it has had this effect for the action researchers is shown in this quotation from one of them:

> It has made me think, yes, I can do research. That it is not such a thing reserved for the very high and mighty, but the little common tutor can hop in there and dabble their feet...It wouldn't be so daunting the next time.

This quotation indicates that my initial intuition was correct; that action research provides a way for the 'little common tutor' to acquire research skills, to find the courage to think about doing research again in the future. I commend it as an effective way of helping to develop a tertiary research culture.

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GLOSSARY

Auaki	a survey
Hapu	subtribe, usually linked to a common ancestor
Hui	ceremonial, ritualised meeting
Iwi	a tribe
Maoritanga	pertaining to things Maori, including one's "Maori-ness"
Marae	ceremonial meeting place
Raupatu	land confiscations
Tangata whenua	indigenous people (in New Zealand, the Maori)
Te Reo Maori	the Maori language
Treaty of Waitangi	a treaty signed in 1840 between most Maori tribes and the British Crown

Whakawhananungatanga: establishing relationships

Re: appendices

Unfortunately the appendices for this thesis are not available electronically. If it is important for scholars to access any material in the appendices, please contact Pip directly by e-mail on ferguson@xtra.co.nz