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Alternative Futures: Cultivating a new management paradigm in vocational education and training

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ABSTRACT

This study occurred during a period of intense social change in society as a new means of production - informational technology - was transforming production and the social relations of that production. The study encompasses eight years of experience by the researcher and her colleagues working in the context of the automotive and component manufacturing industry in Australia. It documents the model of workplace education they introduced and the organisation they developed to support their work. The particular focus of the study was the search for alternatives to the dominant discursive practices of economic rationalism and managerialism that were rife in the public technical and further education system of the 1990s. These policies have affected public education, particularly in the TAFE sector, by producing a rigid standardised system of competency based training that is more suited to Taylorist production than meeting the needs of the future. It is contended that the managerialist organisation of TAFE institutes has left them at a disadvantage in responding to these needs.

A Marxian theoretical framework was adopted for the study, complemented by the work of Foucault and other theorists selected from the fields of organisational development and institutional design. A heuristic approach combined with critical reflexive practice provided insights into the work of teachers, the effects of outside influences on an 'independent' organisation and the struggle to find ways of managing that challenged the dominant managerialist paradigm.

Although it was not expected that the experience of one organisation would be significant in itself, or that the findings could be directly transferred to other contexts, it was possible to conclude that alternatives to managerialism can be achieved and a new management paradigm cultivated. Further, that the dominant discourse of managerialism, and the economic rationalist policies that underpin it, is an anachronism from the past that does not meet the demands of the new means of production for creative solutions, innovation and new industries. It is argued that new futures depend on changing the consciousness of people to incorporate other possibilities and alternatives.

STATEMENT

This thesis contains no material which has been submitted for examination in any other course or accepted for the award of any other degree or diploma in any university and, to the best of my knowledge and belief, contains no material previously published by another person except when the due reference is made in the text.

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ACRONYMS

ACAL	-	Australian Council for Adult Literacy
ACFEB	-	Adult Community & Further Education Board
ACSA	-	Australian Curriculum Studies Association
ACTU	-	Australian Council of Trade Unions
AIA	-	Automotive Industry Authority
ALAN	-	Adult Literacy & Numeracy (scales)
AMES	-	Adult Migrant Education Service
AMI	-	Australian Motor Industries
AMWU	-	Australian Manufacturing Workers' Union
ANTA	-	Australian National Training Authority
ASLPR	-	Australian Second Language Proficiency Rating
BLIT	-	Breathing Life Into Training
CAD	-	Computer Aided Design
CAE	-	Computer Aided Engineering
CAM	-	Computer Aided Manufacture
CBT	-	Competency Based Training
CIM	-	Computer Integrated manufacturing
CNC	-	Computer Numerical Control
EBA	-	Enterprise Bargaining Agreement
EMS	-	Environment Management System
ESL	-	English as a Second Language
EWP	-	English in the Workplace
FMS	-	Flexible Manufacturing Systems
GBE	-	Government Business Enterprises
GT	-	Group Technology
HACCP	-	Hazard Analysis Critical Control Points
HEC	-	Holden's Engine Company
ISO	-	International Standards Organisation
ITB	-	Industry Training Board
JAW	-	Japanese Automobile Workers' Union
JIT	-	Just-in-time
LNA	-	Learning Needs Assessment
MAG	-	Manufacturers' Advisory Group
META	-	Management Enhancement Team Approach
MRPII	-	Manufacturing Resources Planning
MS	-	Management System
NAITB	-	National Automotive Industry Training Board
NALLCU	-	National Automotive Language & Literacy Coordination Unit
NCP	-	National Competition Policy
NCVER	-	National Centre for Vocational Education Research
NESB	-	Non-English Speaking Background
NPDC	-	National Parts Distribution Centre
NPM	-	New Public Management
NRF	-	National Reporting Framework
NTRA	-	National Training Reform Agenda
OPT	-	Optimised Production Technology
OTFE	-	Office of Training & Further Education
PMV	-	Passenger Motor Vehicle

QAS	-	Quality Assurance System
QETO	-	Quality Endorsed Training Organisation
QMRC	-	Quality Management Review Committee
QMS	-	Quality Management System
QS	-	Quality System
QWL	-	Quality of Work Life
RCC	-	Recognition of Current Competence
RMIT	-	Royal Melbourne Institute of Technology
RPL	-	Recognition of Prior Learning
RS&R	-	Retail Services & Repair
RTO	-	Registered Training Organisation
SACS	-	Social and Community Services
STB	-	State Training Board
TAFE	-	Technical & Further Education
TQC	-	Total Quality Control
TQM	-	Total Quality Management
VA	-	Value Analysis
VAITB	-	Victorian Automotive Industry Training Board
VET	-	Vocational Education & Training
VIC	-	Vehicle Industry Certificate
VMTC	-	Victorian Manufacturing Training Council
URCOT	-	Union Research Centre on Organisation & Technology
WELL	-	Workplace English Language & Literacy (Program)

INTRODUCTION

When this study began, in 1991, it was to have analysed the effects of award restructuring on the education of workers in the automotive manufacturing industry in Australia. In what was to be a decade of immense change, it evolved from this topic to become an analysis of the politics of change, based on the experience of a small group of workplace educators who conducted training within the vehicle manufacturing industry in Victoria, Australia. The study spans an eight-year period and three different organisational contexts – state and national automotive industry training boards and a private training company that was formed to continue the work started under the auspices of the national board. The research occurred during what Castells (1996) termed the 'Information Technology Revolution' of the late twentieth century. Within this context of massive change, work was being reorganised, societal institutions were being redesigned and accompanying social relationships revolutionised to reflect the move from a welfare state to a 'managerial state' (Clarke & Newman, 1996) in a form of neo-liberalism. Grounded in the activities of the particular group of workplace educators, this study theorises change as a political process and poses the question – is there an alternative to managerialism?

In the last two decades of the millennium large numbers of vocational education and training (VET) teachers in Australia have felt the effects of the application of the 'managerial state' (Clarke & Newman, 1996) to their work. Teachers in Technical and Further Education (TAFE) Institutes have had their employment conditions reduced, their work intensified and the control of the teacher-learning process in their own classrooms taken from them. Little or no value is attributed to the understandings of the educational process that formed the basis of their profession. At the same time the work of their 'managers' has been promoted as the solution to virtually every problem, with the remuneration, status and role of this group contrasting sharply with their own relative deskilling and professional downgrading. Amalgamations of TAFE Institutes have exacerbated the situation as hundreds of teachers and middle managers have been made redundant and fewer high profile managers have attracted even higher salary 'packages' and status. Traditional career paths for teachers have been eroded as professional managers take the few promotional positions available.

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The privatisation and marketisation of TAFE saw a steady flow of teachers from TAFE Institutes taking roles outside of the public system. The concurrent restructuring of industry, and the high profile given to training in industry as a means of assisting this process, saw many of these refugees from the TAFE system turn to industry training, utilising the marketisation of TAFE as an opportunity to provide an alternative to their former employment. Amongst these teachers were many that were products of the former 'welfare state' and in particular the 'access' and 'equity' agenda of the 1970s in Australia. They moved from a marginalised add-on area within TAFE into an area of work that could potentially provide access to educational opportunities for workers who had previously had only limited experiences of formal training. From operating around the fringes of traditional TAFE courses they were able to utilise their skills within the mainstream of accredited industry training programs. Into this arena they brought their knowledge and experience of teaching and learning and a healthy disregard for the managerialism they had escaped. The availability of public funds for private providers to deliver VET courses within industry, under the competitive tendering process, made it possible for these teachers to compete for work in the private sector against their old employers, the TAFE Institutes. Coming from a public system that they had believed in, and that no longer existed, they brought with them a set of values and understandings of the teaching-learning process that had become unfashionable in the era of competency-based training (CBT) and assessment. They also carried with them notions of a better way of working than the managerialism that was rife in the public system.

This dissertation is grounded in the experiences of one group of these teachers as they struggled to maintain their values and to apply their understandings of the teaching learning process, within the context of the vehicle and component manufacturing industry in Victoria, in a way they believed was both ethical and sustainable. Working from the base of these values and understandings, they proceeded to demonstrate the value of locating the *education* back into VET through an holistic interpretation of 'competency' and the development of integrated and contextualised training programs for shop floor workers. Utilising the contradictions inherent in enterprises, whose rhetoric of the 'learning organisation' (Senge, 1990) was often at variance with their practice, they provided interesting, experiential learning experiences and practical training that opened up the whole production process to workers, giving them back

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the knowledge that had been appropriated from previous generations of workers through automation and the Taylorist (Taylor, 1911) organisation of work.

Working at the cutting edge of industry training from within the private sector created its own set of contradictory requirements of teachers. Firstly it was necessary to present an exemplary organisational front in order to attract government funds. This meant conforming to quality criteria, complying with financial and program auditing arrangements, keeping accurate statistical records, and working within company law. Second, in order to win contracts with enterprises the training that was offered had to be relevant to their needs. This included increasing the motivation and involvement of workers in solving problems, improving production, cutting costs and increasing productivity. These demands needed to be balanced against those of the union for formal recognition of the skills of their members in transferable qualifications and equal access to higher wages through training. For training to be relevant to the union it needed to contribute to a safer work environment and a more humanised form of work organisation. Thus, it needed to occur within an industrial framework. Added to this network of sometimes contradictory requirements was the teachers' own agenda of providing a meaningful learning experience for workers: one that valued their life experience and diverse backgrounds; one that allowed space for groups of workers to celebrate and share their various experiences at work and knowledge of the processes. This was summed up in the words of one teacher: 'We teach to showcase the abilities of the workers'.

The Focus of this Study
The development of the educational practice that is described in this study has been the subject of many publications, research reports, journal articles, conference papers and unpublished papers and reports (see chapter 2, p 37). It was the untold story of the organisation and management of this educational practice that formed the basis of the current study. Thus, it was the about the development of an organisation whose members consciously rejected the dominant paradigm of managerialism in public institutions and who wanted to work cooperatively and collectively. It was about developing a role for managers that valued and supported the work and educational goals of teachers whilst building the capacity of the organisation to meet the challenges facing it within a tough competitive world. It was about seeking spaces to

operate and creating opportunities. It was about the choices that were made and the reasons for them. The research question was: **'Is there a viable and sustainable alternative to managerialism in the vocational education and training system of the 1990s in Australia?'** In addressing this question a number of subsidiary questions were also explored:

1. What are the spaces that exist within the redesigned institution of vocational education and training in Australia that allow the development of a more progressive education for workers?

2. What role can workers' education play within the class struggle that is played out daily in workplaces? Is there an intrinsic value in education for workers, or does the traditional 'reproductive' (Bowles & Gintis, 1976) role of education mean that it will only serve to intensify work and meet the current needs of capital for a subservient and involved workforce? Is it possible to produce a progressive model of workplace education that might point to different futures?

3. What effect has this model of workplace education had on the work of teachers? Have they been de-skilled and de-professionalised, or does the 'new' workplace require a new set of skills from teachers?

4. Will the automotive industry eventually settle from its current restructuring phase into work-intensified sweat-shops, with workers coopted into the production process body and soul? Or will the conditions be such that the struggles of the union for a more humanised workplace can become a reality?

5. Is the rise of neo-liberalism, with its concomitant economic rationality and managerialism, the inevitable result of the emergent new means of production or a reactionary movement against the dominant trend of history?

6. To what extent does an economic rationalist and managerial agenda in public institutions impinge on the operation of an 'independent' organisation? Will it be possible to remain 'independent' over the longer term, or will the organisation become 'normalised' (Foucault, 1979a) and be absorbed? Is it possible that a small organisation can in any way affect the directions of a large public institution at a time of intense change, or is the resilience of such institutions, even during a period of redesign, such that many views can be accommodated without altering its 'new' foundation?

Significance of the Study

As this study commenced government policies were founded on a form of economic rationalism, described by Marginson (1993) as,

> ... the form of political rationality in which (paradoxically) the market economy is substituted for democratic politics and public planning as the system of production and coordination and the origin of social ethics (Marginson, 1993: 56).

Preoccupied with a 'free market hegemony' and economic objectives, education was seen as a branch of economic policy 'rather than a mix of social, economic and cultural policy' (p.56). The direct control of education by government ministers emphasised managerial efficiency at the expense of public service. Corporate managerialism was based on market competition, a focus on 'outputs' rather than 'inputs' and the commercialisation of the public sector through privatisation or,

> ... the simulation of markets within the public sector: internal exchange and pricing between different public sector institutions; competitive bidding for funds; planning on the basis of contracts; 'productivity incentives'; corporate executive structures; and so on (Marginson, 1993: 57).

The managerialist ideology which underpinned these corporatisation strategies had two basic tenets, that efficient management could solve all problems and that private sector management practices were suitable for public sector services (Rees, 1995: 15). These technocrats were not neutral.

> They derive their cues and their scripts from a set of policies which contend that an economy needs to be run like a market with as little interference as possible, that human effort can be counted a commodity, and that in the conduct of organisations financial accountability is the criterion to measure performance (Rees, 1995:16).

Embedded in these discourses of the neo-liberalism of the late twentieth century is the notion that 'history is dead'. In the introduction to their book on 'The Managerial State', Clarke and Newman (1996) observed that,

> ...moving forward has become more important than understanding where you have been, and practical action more important than reflection and analysis. Managerialism itself provides a substantial part of this momentum, being oriented towards means rather than ends, and towards action rather than reflection. The 'can do' culture of management has a strong preference for practical prescriptions over mere academic analysis (p. xii).

If for no other reason this indicates the importance of a study which takes the time and makes the effort to reflect on and analyse some of the events that have occurred in recent history and to do so within an historical and theoretical framework.

There is an air of fatalism abroad that events are happening around people over which they have no control. Castells in his massive work on the Information Age (1996, 1997, 1998) described the effect of this period on individuals,

> Bewildered by the scale and scope of historical change, culture and thinking in our time often embrace a new millenarism. Prophets of technology preach the new age, extrapolating to social trends and organization the barely understood logic of computers and DNA. Postmodern culture, and theory, indulge in celebrating the end of history; and, to some extent, the end of Reason, giving up on our capacity to understand and make sense, even of nonsense. The implicit assumption is the acceptance of full individualization of behaviour, and of society's powerlessness over its destiny (Castells, 1996: 4).

This study seeks to counter this sense of powerlessness by contributing to a grounded theoretical debate on the political nature of change. The point is not just to understand the nature, and history, of these changes, but to use these understandings to affect the changes that are happening during this revolutionary period, and to look to new futures. While the struggle against managerialism in one small organisation, within a fairly narrow context, cannot be considered important in itself, the theorising of this struggle combined with similar efforts by others operating in different contexts can help to lend direction to a much larger struggle taking place in many quarters. It is as part of this larger struggle that this study hopes to contribute to some small extent.

Organisation of the Study

Chapter One provides a broad analysis of the global and specific context of the study. Thus it examines the information technology revolution and the consequent effects of globalism, the rise of neo-liberalism, the state of automotive manufacturing industry in Australia in a period of industry restructure, and the response of the national vocational education and training system to meet the demands placed on it by the state and industry. It also reviews the rise of managerialism in public administration and the advent of the 'learning organisation' in management lore.

Chapter Two explores the methodology employed, making note of the various modes of gathering data, and analyses of these data, that were embedded in three major research projects that were conducted over the eight year period of the study. Published reports, various journal articles and other documentation, both published and unpublished, were drawn on extensively as a primary source of data. This study could be described as a type of meta-analysis as it takes another cut through exiisting data and uses a process of 'reflection-in-action' (Schön, 1987) as a collective and individual reflexive process (Neville, 1994) to narrate a story that had remained largely tacit (Polanyi, 1967, 1969, 1983; Gelwick, 1977). The role of the researcher was one of participant observer and therefore this chapter also explores her personal stance as it might be seen to affect the study. The form of analysis that was adopted for the study was based on 'Marx's methods' (eg. Sayer, 1979; Johnson, 1982).

Chapter Three details the theoretical framework adopted for the study, which was informed by a number of theoretical perspectives within a traditional Marxian framework. A Marxist analysis of the current historical period of an information technology revolution, where education is treated as a 'commodity' within the economic activity of the 'education market', was seen as essential (Marginson, 1997). Situating these trends within a broader economic and political framework assisted in understanding both the directions of and reasons for the current policy shifts, and in analysing the points of resistance and opportunities exposed by such shifts. Marx's concepts of the dialectical nature of historical materialism and the materialist basis of consciousness were key factors in the analysis. Foucault, who described himself as a Marxist (Foucault, 1975a: 52-53), also provided a number of useful insights. His notion of governmentality (Foucault, 1977b: 125), for instance, focused on an historical shift from domination of the body to the 'soul' through dominant discourses, new forms of discipline and different rationalities of organisation and management. His conceptualisation of the 'microphysics of power' in the institutions, organisations and everyday life of people, the relationship between power and knowledge and the power of 'normalisation' were also utilised. Theories of institutionalism and institutional design (Goodwin, 1996; Brennan, 1996; Cammack, 1992; Offe, 1996) helped to analyse changes that have taken place in institutions under neoliberalism in terms of their internal processes, and resistance to them,

although these theories fall far short of analysing what is driving these changes (Cammack, 1992).

The body of the thesis is contained in chapters four, five, six and seven. Rather than adopt an historical sequence, a thematic approach to the data was assumed whereby a number of threads were drawn through the historical sequence for analysis. Thus chapter four examines the development of the educational practice that evolved through a process of reflection-in-action across the whole of the eight-year period. This details the educational project undertaken by the group including underpinning theories of learning, educational practice and the politics of that practice within the environment of the automotive manufacturing industry.

Chapter five examines the way that teachers' work was affected by this educational practice, much of it based on their own words, describing the complexities, the challenges and the rewards associated with this type of work. This chapter provides a number of insights into an area of teachers' work that has largely been ignored in the academic literature and contests the view that teachers' work has been deprofessionalised, indicating that industry based training places higher demands on teachers' skills.

Chapter six extracts one part of the neo-liberal and managerial agenda, that of 'quality' and 'best practice', for attention and analysis. In particular it examines the degree to which an 'independent' organisation is subsumed into the status quo, or 'normalised' (Foucault, 1979a) through the power of outside institutions to affect internal organisational development.

Chapter seven examines the organisation and management of the educational practice of the group of workplace educators through the lens of power/knowledge (Foucault in Gordon (ed) 1980), interrogating the administrative systems and management structures that were developed to support the work of teachers, build the capacity of the organisation to respond to new challenges and present a respectable front to both industry and government funding bodies. Also addressed are the difficulties of organisational growth where the culture and practice of the organisation was built on such an intricate structure of understandings that needed to be passed on to new

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members of staff. A multi-dimensional framework for decision-making is proposed that places the emphasis on educational and other relevant considerations rather than solely on economic factors.

In Chapter Eight these threads are brought together and linked to the broader context. Tentative answers to the research question are explored, and to the subsidiary questions that were raised. The contribution of this thesis to the theoretical debate surrounding neo-liberalism, and managerialism in particular, is reviewed, the value of the Marxian framework of the study estimated and areas of possible future research are explored.

CHAPTER ONE
The Context – A Decade of Change

Introduction

This study took place during the 1990s, a decade of immense change in Australia and elsewhere in the world. In order to establish the context for the study it was necessary to look both globally and nationally in examining changes in production processes and in the automotive manufacturing industry in particular, and the concomitant implications for the education of workers. This chapter looks briefly at these broad areas of change to set the scene for what follows.

Information Technology and Globalism – A Revolution in Progress

Writing in 1996, Manuel Castells described the birth of a new economy in the last two decades of the twentieth century, an economy that he called both 'informational' and 'global'.

> It is *informational* because the productivity and competitiveness of units or agents in this economy (be it firms, regions or nations) fundamentally depend upon their capacity to generate, process, and apply efficiently knowledge-based information. It is *global* because the core activities of production, consumption, and circulation, as well as their components (capital, labor, raw materials, management, information, technology, markets) are organized on a global scale, either directly or through a network of interaction. And it has emerged in the last quarter of the twentieth century because the Information Technology Revolution provides the indispensable, material basis for such a new economy (Castells, 1996: 67) (emphases in original).

By information technology Castells referred to the converging technologies in micro-electronics, computing, telecommunications, optoelectronics and biotechnology (pp 30-34) and he likened the effects of these phenomenon to those created by the steam engine or electricity, thus the 'Information Technology Revolution', whereby information becomes both the raw material of production and a commodity in its own right. He described five main features at the centre of the 'information technology paradigm' as being: technologies that act on information with information being the raw material; the 'pervasiveness of effects of new technologies' on all aspects of life and all people; the way in which the new information technologies are formed into systems or sets of relationships in a 'networking logic'; the notion of 'flexibility' that is basic to the paradigm; and the increasing 'convergence of specific technologies into

a highly integrated system' that absorbs all the separate technologies of the past (Castells, 1996: 61-62)

Manufacturing Production Systems

The application of these new technologies to production provided the means to develop new efficiencies in the exploitation of labour to increase productivity (the extraction of surplus value). Thus new ways of organising work were developed and universalised, new management techniques devised and the global organisation of production became more evident. New methods of organising work were hailed as the end of the old Fordist regime of mass production. A new era of 'post-fordist' production was expected by some people to herald in a new ideal world of class harmony in a democratic workplace (eg. Mathews, 1989). 'Post-industrialists' said that it marked the 'end of the working class' (eg. Gorz, 1982, 1985). Others (eg. Hampson et al, 1994; Parker & Slaughter, 1988a, 1988b; Holloway, 1994) saw it rather as a means of extracting more surplus value from labour through work intensification.

> There is a widespread belief, on both the Left and the Right, that capitalism has managed to resolve the crises which beset it in the 1970s, and that changes in the 1980s have laid the foundations for a new 'Post-Fordist' regime of accumulation based on new 'flexible specialist' methods of production which combine new technologies, new patterns of demand, and new forms of the social organisation of production (Clarke, 1990: 131).

Baker (1990) described the integration of information technologies into production systems as 'integrated manufacturing', whereby each enterprise develops its own long term strategy based on an integrated system of several technologies chosen from a wide array of possible choices (eg. Computer Numerical Control (CNC), Robotics, Computer Aided Design (CAD), Computer Aided Manufacture (CAM), Computer Aided Engineering (CAE), Computer Integrated Manufacturing (CIM), Just In Time (JIT), Total Quality Control (TQC), Optimised Production Technology (OPT), Flexible Manufacturing Systems (FMS), Value Analysis (VA), Manufacturing Resources Planning (MRPII) and Cellular Manufacturing or Group Technology (GT)). He maintained that the success of the introduction of any or all of these systems, in any combination, depended on the skills of the workforce and the way work was organised (Baker, 1990: 15).

Sayer (1986) drew attention to a number of changes in the social organisation of management and described, in particular, the changes in attitudes and ways of working required by the 'Just-in-time/Total Quality Control' system of work process organisation developed in Japan

> ... that involves new types of relationships among workers, between workers and management and between firms and their buyers and suppliers (Sayer, 1986: 43).

`Just-in-time' (JIT) has been defined as a ' ... philosophy directed towards the elimination of waste, where waste is anything which adds cost, but not value to a product' (Turnbull, 1988: 8). With JIT the exact quantity of defect-free raw materials, parts and/or sub-assemblies are produced and delivered 'just in time' for the next stage of the production process so that '...work is only done when needed, in the necessary quantity at the necessary time' (Sayer, 1986: 59). Key targets were the reduction of set-up times of machines, progressive reduction of buffer stocks towards zero and total quality control to save costs and time associated with reworking parts, warranty claims and customer complaints. Under JIT production,

> ... all processes and all shops are kept in the state where they have no surplus so that if trouble is left unattended, the line will immediately stop and will affect the whole plant (Parker & Slaughter, 1988a: 18).

One claim was that JIT would enable the manufacture of small batches of a product 'while retaining the advantage of mass production' (Turnbull. 1988: 9). This claim has not been verified in practice (Cooney, 1999). Skills of workers were said to be vital in this 'pull' not 'push' system which depended on a more cooperative, flexible and involved workforce. Oliver (1991: 19) maintained that there was another way of analysing JIT as both a way of reducing costs through reducing inventory and of simultaneously creating and maintaining the pressure for the 'continuous improvement' of processes. This pressure for continuous improvement came from the need to maintain quality because, as Conti and Warner (1993) argued, the use of unbuffered flow was only feasible when quality was consistent. In an unbuffered flow situation component parts of a poor quality had the capacity to stop production. Also consistent quality in the production process could only be assured when the work processes were totally standardised. The result could be described as a form of 'super-Taylorism'. As Conti and Warner observed,

> The job design process employed, however, conflicts with 'Scientific Management', since it features a degree of worker participation...The result is a mediated form of 'Scientific Management', with Taylorist job designs developed in a very non-Taylorist manner (Conti & Warner, 1993: 40).

The forms of work organisation employed to ensure worker 'flexibility' to meet the needs of the production process included job rotation (to ensure that workers could be moved across work stations) and team-working (for applying pressure to conform for the sake of the 'team', and often inter-team rivalry for production targets). These techniques were 'the very tools of work intensification under the JIT system' (Turnbull, 1988: 8). It is this type of reorganisation of the workforce that led to the need for multi-skilling of the workers, or as Delbridge et al (1992) more accurately described it, 'multi-tasking'. In their analysis of the work intensification that results from the JIT/TQM manufacturing system, a system in which workers have 'responsibilities without rights' (p. 103). They concluded that

> ...workers must have the flexibility to perform whatever task is required of them ... ideally *each worker is interchangeable and none is irreplaceable*...any empowerment takes place only in the context of their accountability to a managerial elite made possible by an efficient system of surveillance (Delbridge et al, 1992: 101) (emphasis in original).

Unterweger (1992) identified a number of consistent themes in the labour relations that underpin lean production all over the world:

> ... a hierarchical and militarized organizational structure; the pressure to introduce the lean version of team work; the reduction of classifications to as few as two; the virtually or actually compulsory suggestion plan; the attempt to instill a company culture, and to get employees to accept the company's goals and values as their own (Unterweger, 1992: 18).

The nature of management/labour relations was crucial to the success of the JIT system which relied heavily on 'learning by doing' and constant reappraisal, adjustments and innovations to obtain optimum results. For this reason, Japanese companies preferred non-union sites if possible, otherwise they sought single-union agreements and binding arbitration (preferably with a no-strike clause) if they could obtain it. Permanent employment, often put forward as a major advantage of the Japanese JIT system, was really only an illusion, even in Japan. The reality was that

> ...only around 25% of all Japanese workers have life-time employment status...while 65-70% are non-permanent workers employed by the smaller/subcontractor firms...(and)..an estimated 3.5 million workers are

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employed/unemployed on a daily basis. (In fact this) ... economic dualism is vital to the operation of JIT and the economic success of large corporations (Turnbull, 1988:18).

The Automobile Workers' Union in Japan (JAW) reported that the lean manufacturing system within the automotive industry was wearing out its workforce and that labour shortages and high workforce turnover were threatening the JIT system. They maintained that workers were becoming exhausted from overwork. There was even a Japanese word coined to describe 'death from overwork: *karoshi*' (Unterweger, 1992:8). The JAW called for drastic changes such as

... reducing the number of models; shortening working hours; developing a new socially sustainable manufacturing concept; and changing relations between companies and the workforce (Unterweger, 1992: 20).

At the same time, doubts have been cast on the competitive advantage enjoyed by Japanese companies (and others) that have employed 'lean production' processes, which may not be as great as first thought (eg. Berrgren, 1992; Jacobi et al, 1992). Unterweger pointed out that all measurable differences in manufacturing effectiveness between so-called 'lean production' (Womack et al, 1991) and the 1980s version of mass production could be explained by the,

... massive outsourcing of parts and final assembly, combined with low supplier industry wages, better manufacturability of the product, high capacity utilization, and work intensification (Unterweger, 1992:20).

He also noted the detrimental effects to the economy and society such as the frequent deliveries from component suppliers that were required for JIT production which caused additional road congestion and pollution; the frequent model changes which encouraged wasteful consumption; and demands for infrastructure costs and concessions from governments that placed strains on the economy (p. 21).

Another problem with this system was the stress placed on smaller component manufacturers, many of whom found it difficult to provide the quick response time required by the larger companies. Some had to dedicate space to storage of extra stock of finished products for a buffer, so that they could meet the deadlines imposed on them. Thus the demand that they be more 'flexible' by their customers (the bigger companies) was really a way of forcing the component manufacturer to carry the inventory (and the costs) for the large companies (so that they could be more

'flexible' and lean). Many of the large vehicle manufacturers also insisted that component manufacturers 'join the family' and adopt their production systems, standardised work processes and training regimes, if they wished to maintain their contracts to supply components. This in turn created problems for small component manufacturers who often supplied to more than one of the local manufacturers and exported to others in different countries.

The 'Learning Organisation'

An integral feature of 'lean manufacturing' was the notion of 'continuous improvement' of the production process. This required workers to take part in activities that would continually increase productivity and profits by reducing waste, adding value, saving time, increasing the quality of the products and the efficiency of production. Thus workers who had been required, under a Taylorist work organisation, to 'leave their brains at the door', were suddenly asked to provide the information and ideas to improve structural efficiency and achieve international competitiveness. Changes in work practices were required and there was almost universal agreement that workplace training was essential (see for instance ACTU/TDC, 1987; Dawkins, 1992). This was consistent with the large body of organisational development literature that advocated the development of the 'learning organisation' (eg. Senge, 1990; Watkins & Marsick, 1992, 1993; Flood, 1994; Dodgson, 1993; Kofman & Senge, 1993; Macfarlane & Lomas, 1994; Garvin, 1994; Sharratt & Field, 1993; McGill et al, 1992; West 1994). A useful definition of this concept was provided by Watkins & Marsick (1992) who described a learning organisation as

> ... one that has embedded a continuous learning process and has an enhanced capacity to change or transform. This means that learning is a continuous, strategically-used process – integrated with, and running parallel to, work – that yields changes in perceptions, thinking, behaviours, attitudes, values, beliefs, mental models, systems, strategies, policies and procedures (p.128).

Much of the literature stressed the need for organisations to transform the way they work in order to become, and remain, internationally competitive. The first step in this transformation, maintained Garvin (1994) was

> ... to foster an environment that is conducive to learning ... (with) ... time for reflection and analysis, to think about strategic plans, dissect customer needs, assess current work systems and invent new products ... open up boundaries

and stimulate the exchange of ideas ... (and) ... create learning forums (Garvin, 1994: 28).

It was the rhetoric of 'empowerment', 'transformative learning', 'creativity', and so on, combined with images of different ways of working, that created a space for the type of workplace educational programs that are described in this study.

A Global Economy

Alongside these changes to production, and symbiotic to the development of new manufacturing methods, was the development of a global economy, which Castells described as ' ... something different: it is an economy with the capacity to work as a unit in real time on a planetary scale' (Castells, 1996: 92). In the search for higher rates of profit, large amounts of capital were transformed from the bricks and mortar, plant and social relations of production to its liquid form of money. With new technologies, this global capital, in the form of money, could now move around the world in seconds, using information technology, thus making it possible to deal all over the world in 'real time'.

After the Second World War, economic relations between nation states were founded on relative stability and international finance agreements such as the Bretton Woods agreement. These agreements fixed rates of exchange, regulated the flow of capital and allowed the development of welfare states based on a Keynesian economic model in a number of western nation states, such as Australia. The end of the long post-war boom in the mid-1960s, however, created instability. Costs of production rose, labour demands and militancy increased, the rate of profit dropped and the restrictions of the post-war settlement made the investment of capital in production less secure. The crisis of production relations led to capital moving from production to a liquid form (Holloway, 1994: 39-40).

> Money, instead of appearing to be subordinate to production, now appears as an end in itself. Inevitably, the shift in the forms of capital means a change in the relation between the territorially fixed national states and the global movement of capital. This is not an 'internationalisation' or 'globalisation' of the economy, as it is often called, but a change in the form of the global existence of capital. The flow of capital, previously relatively stable, turns into a fast-moving torrent and this torrent sweeps away the institutions and assumptions of the post-war world (Holloway, 1994: 41).

As Holloway pointed out, the application of new technologies to the movement of money has had dire effects on national states that seek to entice and trap some of the flow of this capital into their own states and territories. In order to achieve this end states must bend to the demands of capital. A graphic example is provided by an advertisement placed by the Phillipines Government in *Fortune* magazine to attract business investment in their country,

> To attract companies like yours ... we have felled mountains, razed jungles, filled swamps, moved rivers, relocated towns ... all to make it easier for you and your business to do business here (Cited in Waterhouse, 1999b: 281).

Martin & Schumann (1997), in their book *The Global Trap,* describe their research into the dark side of the globalisation process. Supported by a wealth of statistical and other information they demonstrate that globalisation is a multi-dimensional process that is being 'consciously driven by a single-minded policy' (p.8) and that it lacks a mechanism of sustainability. They point to statistics such as, 'a total of 358 people' own as much wealth as '2.5 billion people own together – nearly half the world's population' (p.23). As Seyf (1998), in his review of this book, pointed out this gave 'a ratio of 1 to 6,983,240!' (p.173).

On the other hand there have also been examples of the utilisation of informational technology as a weapon by internationalising local struggles and community campaigns. One such example was documented by Cleaver (1998) on the struggle of the Zapatistas in Mexico, where every communique, all documentation and decisions made by the group were translated into dozens of languages and placed on the world-wide-web, creating an international network of active supporters who have made this struggle difficult to suppress. Massimo De Angelis (1998) wrote of the Second Meeting For Humanity and Against Neo-liberalism (also known as the second *Encuentro*), held in Spain in 1997, the first meeting of which was called by the Zapatistas in Chiapas, Mexico in 1996. Thus the new means of production, while providing international finance capital with the means to do business on a global scale in real time, has also provided a mechanism with the potential for accelerating the internationalisation of labour, community issues (eg. environmental campaigns) and liberation struggles.

The Rise of Neo-Liberalism in Australia

As a microcosm of the global scene, this period also was a turbulent time in Australian politics. A move from the welfare state of the 1970s to a neo-classical economy based on rational choice theory had occurred. Introduced by the Hawke Labor Government in the guise of a mixed economy in the 1980s, with some safety nets kept in place, it was extended, championed and enforced by the Liberal-National Party Coalition Government in the latter half of the 1990s in the form of neo-liberalism. This saw the wholesale privatisation of state enterprises and services and the introduction of quasi markets in many government agencies. Policy directions in vocational education and training (VET), like other government institutions in the 1990s in Australia, were predicated on 'user choice' and the encouragement of a quasi market with government funds being made available to private providers in competition with state institutions on a compulsory competitive tendering basis. A 'not-quite-level' playing field was constructed with VET providers placed in competition with one another. Market forces were presented as having some logic in themselves that could be applied to all fields of human endeavour without prejudice. Issues of equity, ethics and 'the common good' were overturned in favour of individuals making rational choices (about their own education and training as an investment in their own future among other things) and being 'free' to do so. Along with the principle of 'user choice' came the principle of 'user pays', a necessary adjunct to privatisation and essential if government spending and the size of the public service bureaucracy were to be reduced.

In their discussion of the ascendancy of neo-liberalism in Australia, Fairbrother, Svenson and Teicher (1997) examined four areas of government economic policy in the 1980s and 1990s: trade; the creation of a 'managerial' state; marketisation; and the formulation of a national competition policy. They traced the actions of both Labor and Coalition Governments of the 1980s and 1990s and posed the question 'Do elections matter in the neo-liberal world of the antipodes?' Whilst acknowledging the different approaches to social issues, such as Native Title, the environment, health care, education and women, they concluded that successive governments of both political hues have followed the same *economic* policies in order to 'recast and reposition' the Australian state in the global economy.

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Successive Labor Governments, through a number of policy changes, laid the foundation for an internationalised economy. In 1983 the Government floated the dollar, abolished exchange controls and resumed the reduction of trade protection barriers, the first steps of which dated back to the Whitlam Labor Government that began reducing tariffs in 1973. They followed this up with so-called 'micro-economic reforms' exemplified by the restructure of the public sector, the move to privatisation of state owned enterprises and the development of a comprehensive competition policy. The brokering of the Accord between the Hawke Labor government and the Australian Council of Trade Unions (ACTU) formed the 'lynchpin for union acquiescence to radical restructuring of the Australian economy' (Edwards, 1996: 437) with the ACTU agreeing to wage restraint, deregulation of the economy and the abandonment of trade protection. In return the Labor Government agreed to Medicare and the introduction of tax cuts and reform, the latter being put on hold using the excuse of the current account deficit.

The *Australian Public Service Reform Act* of 1984 was the first step in the restructure of the Public Service into the 'New Public Management' (NPM). This 'managerial' model of state restructuring utilised private sector managerialism (eg. efficiency, delayering and down-sizing) with the explicit purpose of enabling the public sector to underwrite particular economic reforms and to increase the profitability of the private sector, strategies that were expected to ensure increased international competitiveness. Under the Federal Coalition Government (1996 -) managerial reform accelerated. Its economic policy differences with the former Labor Government lay in emphasis rather than direction, with greater stress being placed upon individualised patterns of work and employment and the transfer of service provision to the private sector. Under the Coalition Government, despite pre-election promises to retrench no more than 2,500 (2%) federal public servants, the Federal Public Service was decimated, with 13.2% being retrenched in their first year of office and a further 10.3% in the second year, a total of 27,700 in their first two years of government (Fairbrother et al, 1996: 4-5).

The development of NPM formed the foundation for the transfer of state owned enterprises to the private sector (eg. Electricity, Telstra, Commonwealth Bank) and the formation of a 'proxy market' within the remaining public domain through

contracting out key aspects of state controlled activity. Despite opposition from a number of Labor politicians and the ACTU, the Labor Government started to privatise some state owned businesses (Williamstown Dockyards, 1987; Commonwealth Bank, 1990; QANTAS, 1995), and corporatised Australia Post and Telecom readying them both for privatisation so that by the 1996 election the policies of the two parties on privatisation were practically identical, except that Labor promised not to privatise Telecom (Fairbrother et al, 1996:6).

With the bipartisan support of the National Coalition and the Business Council of Australia, and in league with all states and territories, a National Competition Policy (NCP) was formulated by the Keating Labor Government in 1995. Based on the recommendations of the Hilmer Report (Hilmer et al, 1993), this policy aimed at ruling out any anti-competitive conduct that was deemed to be 'against the national interest'. Clearly part of the agenda for the internationalisation of the Australian economy, 'open competition' was named as the driving force for efficiency and international competitiveness. New discourses of markets and economic rationalism accompanied these policy changes,

> What were previously 'utilities' became 'government business enterprises' or 'GBE's'. Such entities had been transformed from 'public ownership' to 'market participants' under some form of 'business ownership'. The end user of these services was no longer 'the public' or 'the citizen', but 'the consumer' (Fairbrother at al, 1996: 6).

Corporatised public services and utilities were managed by a new breed of managers whose role it was to cut back on government spending, reduce the size of the public sector, open up markets for the private sector and demolish the welfare state (Pusey,1991; Vintila, Phillimore & Newman, 1992; Rees & Rodley, 1995). This was justified on the grounds that a changed role for the Public Service was required, one that demanded flexibility and an innovative capacity, if it was to take the country into the next century (Hoare, 1988: 51).

While this may have been the intention of the 'reforms', in reality administrative reform in state bureaucracies in Australia has been characterised by more centralised control and political senior appointments, with the legitimacy and power to ensure that government policies were implemented (Yeatman, 1987). In 1987 the Chairman

of the Public Service Board stated that he believed that the public service had taken rational business management even further than the private sector (Bryson, 1987: 363).

The remarkable feature of the introduction of these reforms in Australia was the lack of organised opposition by the working class. As Fairbrother et al pointed out

> The paradox of these developments is that they occurred with the support of a compliant and at times enthusiastic union leadership, mesmerised by the Accord and its Faustian promise of a 'social partnership' (Fairbrother et al, 1997: 7).

Traditionally industrial relations in Australia had been governed through a system of arbitration and conciliation and centralised wage fixing. But collective agreements were legalised in 1988 and, when the Keating Labor Government was re-elected in 1993, these new enterprise agreements were extended from being 'add-ons' to full substitutes for awards, taking the place of centrally fixed wages. Also non-union awards were introduced, although, under a Labor Government, the processes of ratification were unwieldy and unattractive to employers. In Victoria the Kennett Government enacted Industrial Relations legislation which foreshadowed radical deregulation of the Victorian labour market (Mitchell & Naughton, 1994). The election of the Coalition Government in 1996 saw the introduction of the *Workplace Relations Act* (1997) which took the reforms of the Labor Government much further. However, despite differences in degree, the thrust of the policies of both Governments policies were targeted to localised bargaining, with industrial relations reforms directly linked to the overall program of change, including privatisation, the national competition policy and the elimination of industry protection. As Fairbrother et al concluded,

> Taken together, these changes amount to a programme of continued restructuring of the state and the economy, with a view to establishing conditions for a malleable and compliant workforce to suit the current requirements of global capital (Fairbrother et al, 1997: 8).

This process is still continuing at the time of writing (1999) as the second wave of industrial reforms has been introduced into the Parliament by the Federal Coalition Government.

In Victoria the Kennet Government, according to Alford & O'Neill (1994), had moved one stage past the 'managerial state' to become more of a 'Contract State'. Based on the foundations that were laid in the 'managerial state', the 'contract state' combined a number of new features. First it sought to reduce the size of the public sector though privatisation, contracting out services, and by,

> ... focusing government departments on the core functions of government -
> policy development, resource allocation, specification of services and
> standards setting, monitoring and regulation (Office of the Public Service
> Commissioner, 1994: 1, cited in Alford & O'Neill, 1994: 4).

Relationships between core departments and service delivery (both public and private) were governed by contracts and those delivering the services were subject to competition with the focus shifting from *outcomes* to *outputs* and the separation between *steerers* and *rowers* (ie. between *purchasers* and *providers*) in an attempt to take the interest group politics out of decision-making. Also, within the public service contractual arrangements were introduced between and across all layers of the bureaucracy in individual performance and employment contracts. As Alford & O'Neill (1994) pointed out, many questions needed to be raised regarding the efficacy of these moves, and whether they will lead to good management or in fact only shift the politics to other realms. The model relied heavily on its assumptions about 'consumers' being motivated primarily by economic considerations, and of their inherent 'self-interest', both of which assumptions were questionable. Doubts must also exist on the ability of the new system to place the sort of value on goods and services that the public expects of government (Alford & O'Neill, 1994: 17-18).

Automotive Manufacturing Industry in Australia

Within vehicle manufacturing in Australia the globalisation of production was particularly evident in the 1980s and 1990s, with the development of flexible specialisation and lean production techniques. Component parts were manufactured on a global scale and assembled at strategic points of the globe to meet specific market demands. New technologies had allowed the production of high volumes to sit comfortably alongside the customised requirements of each market. Component parts were produced world wide, compatible to a micro-electronic precision quality as well as being available 'just-in-time' for flexible production to a customised market.

The Australian automotive manufacturing industry had developed out of the coach building industry of the 19th Century with the first Australian motor vehicle being built in Melbourne in 1897. In 1902 the first uniform customs duty was imposed on motor vehicles to protect the local body and chassis makers. By 1909 these numbered 720 factories and employed 6282 people. Although there were a few local vehicle manufacturers in the early days, on the whole the companies that established a manufacturing base in Australia throughout the 20th Century were multi-national firms. These included International Harvester, General Motors, Ford, Leyland, Standard Cars Ltd, Austin (later to become Leyland), Chrysler (later taken over by Mitsubishi), Volkswagon, British Motor Corporation, Toyota (under the guise of Australian Motor Industries initially), Nissan, and various truck and bus manufacturers.

Government regulation, tariff protection and other incentives to manufacture motor vehicles, including components, in Australia therefore had a long history including two motor vehicle Acts (1930, 1940) and Motor Vehicle Plans (1964, 1976, 1984), all of which were aimed at regulating and protecting the manufacture of motor vehicles (see Automotive Industry Authority (AIA) and Department of Science & Technology Annual Reports on the State of The Automotive Industry, 1984 – 1992). The 1984 Motor Vehicle Policy, known as the Button Plan, was modified in 1991 to introduce a gradual reduction of import tariffs up to the year 2000. Other targets included reducing the number of different models of passenger motor vehicles (PMVs) produced in Australia and the number of manufacturers down to four. This Plan, in its modified form, was in effect when this project began in 1991. It reflected the Government's policy of increasing the productivity and profitability of the locally manufactured PMVs through economies of scale and better capacity utilisation through rationalisation. At the same time the Plan called for quality improvements through the introduction of new technology, including automation, and new management practices, skills training and work organisation. These measures were expected to reduce the price of locally produced PMVs so they could eventually compete on a world market without tariff protection (AIA, 1994:7-8). When Nissan ceased production in Australia in 1992 only four manufacturers remained (AIA and Department of Science & Technology Annual Reports on the State of the Automotive Industry, 1984-1998).

Employment in the PMV manufacturing sector declined by 30% between 1990 and 1994 to 22,606 in 1994, with a similar pattern evident in specialist component manufacturing. This decline had multiple causes,

> Most of this loss was due to production cuts during 1991 and 1992 when production volumes fell by 26 per cent, due to a drop in market demand (13 per cent), a loss of market share due to increased competition from imported vehicles, a rationalisation of the number of models produced and the loss of Nissan as a manufacturer. A portion of the loss was also due to restructuring directly related to efficiency and productivity measures, largely by Ford in 1991.
>
> During the course of 1994 Ford closed its Laser plant at Homebush with a loss of some 400 jobs. The relocation of the Toyota Corolla plant (in 1994) also resulted in some job losses (Department of Industry, Science & Technology, 1995: 27).

While some of these losses were compensated by slight increases in exports, the 'remainder of the loss flowed from restructuring measures implemented by PMV producers in order to improve their efficiency and productivity' (AIA, 1994: 66).

One significant feature of this industry has been the evident intra-firm connections on a global basis, and the interdependence of these companies for component parts, often combined with joint financial connections and research and development, whilst remaining 'competitors' on the 'open' market. One recent example was the 1999 purchase by Renault of a 36.8% stake in Nissan and a 22.5% stake in the Nissan Diesel Truck division for a total of $8.5 billion. Under the deal, Nissan will be able to access Renault's Research and Development capability and Nissan will manufacture vehicles for Renault at its plants in South Africa and Thailand (Business Section of *The Australian*, 12 & 14 May 1999). At a more local level, Nissan Australia Casting Plant produces aluminium die-castings for Ford, Holden, Daewoo and many others. The cross-badging of complete cars was also commonplace in the 1990s (eg Ford/Mazda; Toyota/Holden).

Vocational Education and Training (VET) in Australia

The new discourses surrounding both 'lean production' systems and the development of 'learning organisations' opened windows of opportunity for workplace education. A Taylorist organisation of work (Taylor, 1911) was based on 'unskilled' workers

completing simple repetitive tasks, which represented the breakdown of former skilled craft jobs. Engineers dictated how these tasks were to be performed, and the moving line and related technology dictated how fast. Workers were expected to 'leave their brains at the door' and to work like automatons in the way directed, as an extension of the machines with which they interacted. Under the new rhetoric workers were expected to contribute their accumulated knowledge to the production process, thus refining and improving it. Arguably this required them to understand the whole of the process in which their small part was occurring. The big picture that had been systematically denied to them through the Taylorist method of work organisation could be re-integrated into their store of knowledge and understandings. The need to communicate with one another, when considered alongside the tying of wage-levels to training, meant that unions could demand access to literacy, numeracy and English language skills as a right, rather than as a 'social service' provided by the employers. The rhetoric of 'post-Taylorist' workplaces also relocated the need for literacy and English language skills across the workforce as a necessity; the existing workforce had the accumulated knowledge that the employer needed to access, therefore the means of communicating that knowledge had to be supplied. Theoretically this provided the potential to move the provision of literacy and language classes from the periphery to centre stage.

These opportunities were not grasped effectively by the VET sector in Australia where the application of the same 'lean manufacture' principles to VET in the public sector, in a form of economic rationalism, led to the development of standardised, competency based training (CBT). This was described by Brown (1991) as a Taylorist response while Scott (1991) named it as an engineering model. Consequently the content was atomised into small chunks, each the subject of a module of work designed to be 'delivered' in a pre-determined and prescribed way. The aim of this process was to 'take the teacher out of training' by the development of learning materials that were teacher-proof. Teachers' roles also changed from facilitating learning to 'delivering packages', hence de-skilling the teachers (Braverman, 1974: 405). Teachers were not required to design an educational curriculum or prepare learning activities. They could therefore teach longer hours for less money. This led to a situation where,

> The skills required by teachers in the planning, designing and presentation of an educational curriculum are lost and appropriated at some other level of the educational hierarchy (Watkins, 1992: 22).

These moves towards pre-packaged curriculum and centrally determined content were accompanied by teachers being subjected to increased centralised control and appraisal, leading to a reduction in their autonomy as teachers (Giroux, 1981; Apple, 1985b; Buswell, 1988). 'The separation of 'conception' from 'execution' is implicit in the control techniques employed in industry and education' (Watkins, 1992: 23).

This de-skilling of teachers, who became little more than deliverers of pre-existing programs in a standardised format, allowed the destabilisation of the teaching workforce and led to policies that were designed to move the public system away from permanent appointments and towards contract, part-time and sessional work for teachers so that they could be taken on and dismissed as required. Variously named 'flexibility in employment' 'numerical flexibility' (Ewer et al, 1993: 9) or 'informalisation' (Hadjimichalis & Vaiou, 1990), this type of employment for some is normally accompanied by

> ... a well-paid 'core' with secure employment conditions and internal career paths, (who provide) functional flexibility, or the ability to undertake a variety of tasks as market fluctuations demand. This form of flexibility has commonly been called 'multi-skilling' (Ewer et al, 1993:8)

This kind of 'flexibility' in employment conditions has led to lower wages and a band of teachers expected to be available to work at all hours of the day and night without penalty rates ('flexibility in work'). Anecdotal evidence suggested that in Victoria in the 1990's there were considerably less permanent teachers in TAFE Institutes and contract teachers were rarely employed full-time, a situation that the new Labor government have declared they will remedy in 2000 by declaring long-term contract staff 'permanent'. As Hadjimichalis & Vaiou (1990) observed,

> ... the kind of 'flexibility' that comes through informalisation is neither particularly new nor particularly helpful for the majority of the people involved. The problem largely lies in policy formulations..., which promote flexible specialisation, through certain forms of informalisation as an 'alternative' model of development (Hadjimichalis & Vaiou, 1990: 102).

At a VET system level, particularly in Victoria, issues of 'quality' became paramount. However, in a system dominated by economic rationalism, this term appeared to mean

good *financial* management, and the existence of a series of systems to monitor student progress, collect statistical information, maintain student records, and so on. The 'products' of the education 'production process' were therefore made up of statistics and measures of cost/unit output. As Marginson (1997: 125-6) pointed out, there has been a move to separate the issue of funding levels from the issue of quality. This indicated a system designed primarily for ease of management. Government policy of compulsory competitive tendering in some states (notably Victoria) drove the costs of industry training down (or in effect transferred those costs to industry). Thus on one hand internal officers in the Office of Training and Further Education (OTFE) worked to 'quality' performance indicators of obtaining more for less, while on the other hand demands for 'quality' of provision were made part of the contract between the state and providers..

The development of a 'training market' was accompanied by the development of a generalist approach to educational management. By appearing to be 'objective' and 'non-paternalistic' it removed all human considerations in favour of an impersonal 'quality' system based on 'market forces'. Concepts such as 'efficiency' were used as neutral terms, thus making it possible to justify a bureaucratic style of leadership that required no educational background or leadership. The VET system had virtually voided all educational content from its dictionary, practice and understandings leaving behind only 'educational effectiveness' as a measure of 'best practice', with the in-built notion that this could be tied down and defined and subsequently 'demonstrated' to teachers in simple 'how to' manuals and workshops.

Ball (1990) aptly described management as a 'moral technology'. He pointed out that management training had become '*de rigueur* for anyone who aspire(d) to high office in educational institutions' and observed that,

> The unchallengeable position of management effectively renders discussion of other possibilities for organization mute. But the profundity of the effects of management on the practice of teachers and other education professionals is rarely fully appreciated. Management plays a key role in the on-going process of reconstructing the work of teaching (Ball, 1990: 153).

Alongside the development of CBT, policies throughout the whole of the education system, including VET, laid the emphasis on testing, standards and standardisations. As Burke (1987) pointed out,

> The stress on the role of schooling in relation to the economy is leading to greater concern with standards and testing, and with a move towards more state intervention in the prescription of the curriculum. This is seen as ensuring an exposure to essential core elements that might otherwise be neglected. But it could hamper the movement towards local participation in the development of curriculum stressed in many reports in the 1970s and early 1980s as essential in making schooling relevant to less advantaged groups and in enhancing their capacity to control their own lives (Burke, 1987: 176-177).

This type of mechanical response to industry training needs was also evident in policies that emerged on the recognition of prior learning (RPL) which was based on a narrow and functional definition of courses completed, or part completed, and skills acquired. RPL gave people the right not to complete certain packages or parts of packages. Whilst this may have been a necessary aspect of RPL, it denied the importance of the learning that came from the opportunity to share one's learning and experiences (prior or current) in a well-conducted classroom, where individual skills and abilities could be celebrated and become part of the shared wisdom of the group.

In discussions with union personnel during the course of this study it was made clear to the researcher that the move to CBT was supported by the union movement on the grounds that workers should be judged by what they could do, not on the performance of meaningless classroom learning tasks that bore no relation to their everyday life on the shop floor. The standardisation of training was *meant* to provide a level playing field for their members across sites, and not-too-difficult hurdles for them to have their skills certified, and therefore access to higher wages. What was not recognised by these union officials initially was the negative effect this standardised form of training could have on workers whose skills actually exceeded by far the level of the training, who felt belittled by it, and to whom the language of the (simplified) programs was often inaccessible because it made little sense. This aspect is dealt with in more detail in chapter four.

Important, in terms of this argument, was the element of truth in the union position. Research conducted as part of this study and information gleaned from the practice of

workplace education in the automotive manufacturing industry, indicated that much of their schooling had been irrelevant to these workers, many of whom had rejected formal education as a result. It was found that a new approach was necessary if workers were to make use of the opportunities that existed, based on the intrinsic value of workplace education for the worker, quite apart from the (important) question of higher wages. On the other hand, employers stated that they wanted their workforce to be trained to be multiskilled and to take part in continuous improvement activities, but they also rejected an educational approach to that training. Thus, the idea of a group of teachers presenting an *educational* argument to unions as well as employers was daunting. It was also not assisted by the way that the national training reform agenda (NTRA) and the move to CBT had been interpreted by the VET system.

In the automotive manufacturing sector the content of the newly accredited Vehicle Industry Certificate (VIC) reflected what training managers from various companies agreed was needed and the compromises sought by the union in order to achieve a consensus. The development of training around manufacturing processes was to be developed individually by each company, as this was deemed to belong in the category of international competitiveness between companies. However, little account was taken of the development of a *learning* program, only what the expected outcomes would be. While this would have posed few problems to skilled teachers who were accustomed to taking a content-based curriculum or syllabus and turning it into a learning program, unfortunately it coincided with the mechanistic, Taylorist approach to curriculum development, previously mentioned, that tended to de-skill teachers. It should be noted that the context of this training included industry trainers and human resource managers who did not have an educational background. Even within traditional trade training in TAFE a mechanistic, modular approach to training was common, pre-dating the introduction of CBT. Not surprisingly, the development of learning materials for the VIC occurred exactly around the learning outcomes, rather than some logical progression through the content based on a learning model. The process of developing a set of generic learning materials was in place at the start of this study.

The traditional view of competencies and of competency based training (CBT) was based on a narrow definition of competency. As Scott (1991) observed, competence

was commonly interpreted as 'the application of the particular skills necessary to perform a series of set tasks to a set standard' (p.7). He preferred a definition that emphasised the importance of 'stance' or attitude of the employee to their work, with all its daily contingencies, their way of thinking and their ability to identify and 'construct' problems in order to find solutions. He maintained that the key to constructing problems was a creative process of reading meaning into the total combination of facts that made up the particular case. Job specific performance skills were only a part of this total picture (p. 8). He described the traditional response to CBT as a 'manufacturing view' of education where trainees were the 'raw material' and,

> The aim is to cost-effectively mould them into a standard job configuration, within prespecified tolerances ... Standardised teaching is valued and trainees are processed through standardised procedures and drilled to perform predetermined tasks to a set standard (Scott, 1991: 9).

He warned that this view of CBT may lead to

> ... worker education which is rigid, standardised, 'outside-in', prepackaged, modularised and behaviourist ... (that) ... may teach a stance and way of thinking which are the exact opposite of what we might seek in a clever worker (Scott, 1991: 10).

The new paradigm placed a great deal of emphasis on the production of 'flexible' learning packages. These were normally self paced, narrowly competency based, and designed to be completed 'in any order, at any time, and at any place'. They mostly denied the need for any developmental or sequential learning, were often reductionist in that they reached only to minimal competency levels, and rarely encouraged group interaction thereby tending to deny the positive aspects of group learning. No effort was made to specifically address the development of generic, transferable skills. Early 'flexible learning' options were often the same packages in a 'technology-enhanced' format, which tended to be expensive, and therefore less able to be changed, viable solely in a system of standardised learning, and 'cost-effective' only if used for very large numbers of people,

> The available evidence suggests that economies of scale begin to operate only when there are 3,000 or more external enrolments per institution and a minimum of 50 enrolments per unit, with 150 a desirable level (Dawkins, 1987:37).

Scott maintained that many of the difficulties that arose from the way in which competence was being defined may 'stem from not being aware of the alternatives'. He claimed that if something was not done about changing the agenda 'we will be saying one thing and doing another' (Scott, 1991: 12) (see also Brown, 1991). However, the rhetoric about flexibility pointed rather to a situation where it was necessary to ask - Is the 'flexibility' of the competency based, standardised, and pre-packaged education and training system just what the doctor (industrialist) ordered? Do employers, despite what they say, in fact only want workers who are 'interchangeable' and none of whom are 'irreplaceable' (Delbridge et al,1992:103)? Is the rhetoric of flexibility only a 'legitimatory tool' aimed at work intensification, 'a retreat from class politics' that heralds a 'new form of imperialism' (Pollert, 1988:43)?

It was into this highly contradictory and volatile context that the researcher and her colleagues plunged in 1991 at the start of this eight-year project.

CHAPTER TWO
Methodology

Introduction

This research was grounded in eight years of the researcher's experience, as a participant observer, researcher, project coordinator and manager of a private training company, working within the context of vehicle and component manufacturing in Australia. The methodology is post-positivist (Caulley, 1994) and based on qualitative methods (Tesch, 1990; Lincoln & Guba, 1985) and a heuristic approach,

> To immerse oneself wholly in one's own experience and that of others is the hallmark of heuristic research. The word heuristic is often used to describe a means by which someone is stimulated and helped to find more or learn more on her/his own. Heuristic research carries farthest the notion that the researcher is the research instrument (Tesch, 1990: 70).

In order to distinguish between the analysis of this study and those analyses that formed an integral part of each of the projects that were intrinsic to this study, the analysis could be called a form of meta-analysis in that it places another layer of analysis over and above those already undertaken. However, for the sake of simplicity this chapter refers only to 'analysis'. Thus the argument takes another cut through existing data to narrate a story that has remained largely tacit (Polanyi, 1967, 1969, 1983; Gelwick, 1977) throughout the projects.

Background

The eight years' experience covered projects conducted directly for the industry training boards, both in Victoria and nationally. It also covered the establishment of a private company, with a group of colleagues, to continue the same work in the industry as a registered training organisation (RTO) in the Victorian State Training System. Embedded within these main areas of work were three major funded research projects, the results of which were fully documented in published reports (Sefton & O'Hara, 1992; Sefton, Waterhouse & Deakin, 1994; Sefton, Waterhouse & Cooney, 1995). Also a 'best practice' project was conducted which generated a professional development kit (Virgona & Marshall, 1998), a video and a full case study (Virgona, Sefton, Waterhouse & Marshall, 1998).

Figure 1 illustrates the relationships between projects against a timeline to clarify their relationship to this study for the reader. These projects provided much of the data utilised within this study. In the sense that they provided data for this study, their respective methodologies also form part of the methodology of this study. Therefore it is relevant to visit briefly each of the project methodologies that were adopted, as background to this chapter.

Figure 1: Outline of Period of Study, 1991 - 1999

Year	Employer	Position	Research Project	Researcher's Role
1991	Victorian Automotive Industry Training Board	Project Coordinator	Work Placed Education Project	Coordinator/ Co-Researcher
1992	National Automotive Industry Training Board/ National Automotive Language & Literacy Unit (NALLCU)			
1993		Manager NALLCU	Action Research: *Breathing Life Into Training*	Project Manager
1994				
1995	Private Training Company		*Workplace Learning & Change*	Co-Researcher
1996		Managing Director/ Company Secretary		
1997			Best Practice Project: *Opening Doors - Enterprise Based Training in Action*	Project Manager
1998				
1999				

Research Methodologies of Projects

The first of these research projects (1991-2) consisted of an extensive survey of shop floor operators across Victorian car manufacturers, to determine their English language, numeracy and literacy requirements in relation to the newly accredited Vehicle Industry Certificate (VIC). The survey was based on a large formal questionnaire (see Appendix 1) that was developed after extensive workplace visits and research to ensure that the questions would reflect the realities of the workplaces, including the work of the operators and the language and literacies of their workplace. The questions included details of the background, ethnicity, first language, other languages, educational levels, previous attendance at any language and literacy classes, years of industry experience and any related training. The survey also included a test of literacy and language levels and basic numeracy, and questions relating to perceptions of learning needs. The survey was conducted by means of individual interviews between shop floor operators and a range of carefully selected literacy and English as a second language (ESL) teachers who were specially trained in the fair and equitable administration of the questionnaire. The stratified sample, which ensured a spread of employees from across all areas of work within the industry, was selected randomly from payroll numbers supplied by each company. A total of 603 employees were individually interviewed, giving a sample of 6.3% of the workforce in the automotive manufacturing sector in Victoria at the time. A detailed statistical analysis of the results was conducted and correlated with the qualitative data that had been collected. The final report (Sefton & O'Hara, 1992) documented these results, and their analysis, alongside the recommendations that were negotiated with the industry through the industry training board. At the conclusion of the project the original completed questionnaires were shredded, according to the methodology. However, it was agreed that the writing samples, with no means of identification, would be kept by the researcher for further analysis

The results of this survey were used by the industry to obtain federal government funds to establish a national project aimed at developing a coordinated approach to meet the needs for English language, literacy and numeracy skills across the industry. A National Automotive Language and Literacy Coordination Unit (NALLCU) was established to undertake this work. As part of this national project a major action research project was conducted in 1993. Aimed at developing an integrated model of

workplace education that would be inclusive of all workers, regardless of their literacy and English language levels, six case studies were undertaken across the industry nationally (see Appendix 2 for extract from project methodology). Through negotiations with companies, six sites were chosen and one area within that site was used for the action research project. Teachers worked on each site with managers, supervisors, the union, shop floor workers and technical staff to design and implement, in a pilot program, an integrated and contextualised training program that would meet both the demands of the accredited curriculum, the needs of the specific workplace and the learning requirements of the workers. One teacher was employed to act as scribe, to document all aspects of the design, development, and implementation of the training programs across the six sites and to assist with their evaluation by interviewing (on audio-tape) a range of the stakeholders in each program. The presence of this person at all negotiating and steering committee meetings meant that detailed field notes were kept for use in the final report. Teachers were cast in the role of project officers and researchers and their documentation and field notes formed a substantial part of the data collection. The project report placed considerable significance on the role of project management as an integral part of the methodology.

As a result of this project, which took a year to complete, an integrated model of workplace learning was developed and six case studies were documented in a major report entitled *Breathing Life Into Training: A Model of Integrated Training* (Sefton, Waterhouse & Deakin (eds), 1994). This model formed the basis of further work within the industry as it was applied in different contexts and honed through continuing reflective practice. The report has been cited frequently in this dissertation and is referred to throughout the remainder of the text as 'BLIT'.

The third research project was funded by the ANTA Research Council in 1995. Based on four case studies, it looked at workplace learning and change in four of the enterprises where an integrated model of training had been implemented, and analysed the degree to which a learning environment had developed. Two of the enterprises that had formed part of the previous action research project were re-visited and two others were chosen from subsequent sites. The methodology incorporated two surveys (see Appendix 3a & b) – one targeted to management of each enterprise,

asking for factual and statistical details relating to the enterprise, and an interview questionnaire for a stratified sample of people from across all levels of each of the four enterprises. The questions were based on a theoretical framework that was developed from the literature to indicate the essential features that were deemed to constitute a learning environment in a workplace (see Appendix 3c). The chosen indicators were adapted from work on company training by Laur Ernst (1993: 42-43) in which she identified guidelines for 'designing learning situations which are oriented towards ... sets of opposites'. She saw these sets of opposites emerging 'in a variety of strengths ar ...inutations in complex real-life situations'. In the same sense, the indicators that were adopted for this research were in pairs that were not intended to be mutually exclusive, nor was there necessarily any direction between them (eg. transformative learning/accumulative learning, dissension tolerated/concurrence expected). It was assumed that both might have their place in a workplace. This framework was discussed with the management of the various enterprises and the union prior to the conduct of the surveys and agreed as the foundation of the research methodology. The data that was collected was both quantitative and qualitative in nature and the resulting analysis was documented in a report entitled *Workplace Learning and Change: the workplace as a learning environment* (Sefton, Waterhouse & Cooney, 1995).

The 'best practice' project entailed the identification of a number of criteria for best practice in the educational effectiveness of industry-based training, and indicators of success in the specific program that was being assessed (see Appendix 4a). The video (see Appendix 4b for transcript), which was produced to replace an industry visit for professional development seminars and to accompany a professional development kit for VET teachers (Virgona & Marshall, 1998) and a full case study (Virgona, Sefton, Waterhouse & Marshall, 1998), required the video-taping of extensive interviews with stakeholders. All the original data, including copies of the unedited original video footage, with transcripts, minutes of steering committee and other meetings and field notes remained available to the researcher. This project was significant in that it explored notions of collective competence and team-based assessment.

Other Sources of Data

Apart from all the original data from the projects mentioned in the above section, a number of other sources of information have been utilised within this study. These sources included the relevant publications and conference papers of staff (Cooney, 1993; Waterhouse, 1994, 1996, 1999a, 1999b; Waterhouse & Miller, 1996; Waterhouse & Sefton, 1992, 1997; Virgona, 1996, 1999; Deakin, 1995, 1996; Thomas-Walsh, 1995, 1997; Sefton, 1993, 1996a, 1996b, 1998a, 1998b; Sefton & Waterhouse, 1996, 1999; Waterhouse & Deakin, 1995; Waterhouse, Wilson & Ewer, 1999; Virgona, 1996, 1999, 2000; Virgona & Marshall, 1998; Virgona, Waterhouse & Sefton, 1998;). Also various industry and government reports, discussion papers and industry training plans were utilised. Unpublished documentation from all projects remained available to the researcher. Comprehensive files were maintained with complete records of all official activities conducted over the eight years. These included:

- Minutes of, and papers for, meetings, including project steering committees in each site, advisory committees, management meetings and ad hoc committees formed for particular purposes;
- Copies of discussion papers, reports, internal newsletters, correspondence, action plans, confidential reports to companies, and notes for file;
- Results of learning needs assessments carried out in companies;
- Original data for research projects;
- Journal articles, conference papers and other publications that were produced as part of the various projects.

The bibliography lists the primary published sources. Unpublished sources and details of interviews conducted specifically for this study (ie. outside of those completed as part of the research and best practice projects mentioned earlier) are annotated within the text.

An Evolving Research Question – A Case of Emergent Design

When this study began in 1991 the researcher had formulated a research question that focused on the educational effects of award restructuring on shop floor operators in the automotive manufacturing industry in Victoria. Her short-term contract for the Work Placed Education Project was to have been followed by intensive research and

the writing of a dissertation. However, project followed project with no time between and the original research question gradually lost its relevance. As the educational practice within the industry by the group of teachers evolved a number of questions were raised, and to some extent answered. Through the action research project a new model of training emerged, which then became the focus of her research. However, the report of this research project (BLIT, 1994) was published and the practice of the group progressed. Another research project looked at workplaces as learning environments, and the published report (Sefton, Waterhouse & Cooney, 1995), informed the educational practice in a different way. Also individual teachers within the group concentrated on particular aspects of their work for personal research purposes. The results of their research, and research in progress, were fed back into the group and broadened the experience, understandings and educational practice of all. Journal articles and conference papers were written and published. All the stories, it seemed, were already written, except for one: the question of the management of these projects. One teacher, on secondment from a TAFE institute, exposed the need for this question to be addressed when he commented 'This project belongs to this organisation. I could never have done it as part of my College. They have never supported me doing it and they shouldn't get any recognition for what I have done while I am working here.' So what was it about this organisation that made it different? Was it really different or only smaller? To address questions of this nature required a new approach and a different 'mind-set'. Caulley (1994) talks about the 'emergent design' of a piece of 'postpositivist' research in which the design emerges rather than being constructed in advance,

> ... it is inconceivable that enough could be known ahead of time about the phenomenon being studied. What is learned is a function of the interaction between the inquirer and phenomenon and is largely unpredictable in advance (Caulley, 1994: 11).

This notion of 'emergent design' is appropriate for this study because the research design and research question, as they were finally constructed, evolved as a result of experience and analysis in a range of projects. Thus they were 'unpredictable in advance'. Indeed, apart from a conscious attempt to find an alternative to managerial ways of operating, the management function grew out of the need to support staff members in their roles within projects and the need for organisational development in the different contexts. In each of these projects the role of management was

documented, analysed and acknowledged as being important (see for instance: Virgona, Sefton et al, 1998: 7-11; Sefton, Waterhouse & Deakin, 1994: 46-48). As the management role affected the work of teachers, it was also a contested issue and subject to continuous discussion, negotiation and improvement over the eight years. The joint ownership of the private training company provided a type of collectivity. However, the implicit management knowledge (Polanyi, 1967, 1969, 1983; Gelwick, 1977) that existed needed to be made explicit if the organisation was to become more democratic, be sustainable and remain viable in its current form. It was also necessary for those in management positions to be fully conscious of how their role affected teachers and other staff, if they were to resist the dominant discourse of managerialism with which they were surrounded in the broader context. The researcher, and others in the organisation, possessed 'a great deal of tacit knowledge that (was) germane to the phenomena (being) studied' (Caulley, 1994: 11). To unravel this knowledge required looking at the same data with a different lens, and a different theoretical focus. As Lincoln & Guba explained,

> A major distinction must be made between types of studies in which the investigator 'knows what he or she doesn't know', and therefore can determine in advance more clearly the means of finding it out, and situations in which the investigator 'does not know what he or she doesn't know', in which case a much more open-ended approach is required (Lincoln & Guba, 1985: 209).

This study falls into the second category. Both the research question and the educational practice that underpinned it emerged as a result of the investigation.

Uncovering Tacit Management Knowledge

It became clear as the study progressed that the reasons for the project management decisions made by the researcher on a daily basis were not always clear to staff. While they admitted that they (mostly) agreed with the decisions, they were not sure that they would have made the same decision if it had been theirs to make. They asked the questions of 'Why?' and 'How?' these decisions were made. The complexity of finding the answers to such questions lies in the fact that

> ... knowing is a type of tacit integration of clues into meaning ... all knowing, from practical routine tasks to highly skilful theoretical teats, shares in this process of integration (Gelwick, 1977: 60).

In order to answer these questions the researcher had to reflect on and document her own implicit management and decision-making knowledge. A large number of documented decisions was available, including the rationale for these decisions, over a period of a number of years. This documentary evidence was gathered from project files and field notes. A conscious effort was made to analyse and document decision-making in progress to add to the data collection. The researcher also used a process of reflection to recall a range of decisions that she had made in the past, in different situations, and the reasons she thought they were made. These decisions were listed and grouped, with their rationale. Patterns of similarities and differences were noted, in order to sort, crystallise and analyse the findings.

A Multi-Dimensional Framework for Decision Making

In an analysis of the theory of a convergence of academic and vocational content in the post-compulsory school curriculum, Smith (1997) used a multi-dimensional conceptualisation. He developed a matrix that used the two dimensions of content (academic and job-specific) and pedagogy (skills and drills versus reflective processes) to identify four important domains of learning: academic content ↔ skills and drills; job-specific content ↔ skills and drills; academic content ↔ reflective processes; and, job-specific content ↔ reflective processes. In this manner he was able to tease out the issues, to note that each of these domains have their place in certain circumstances, and to provide,

> ...a framework for thinking and planning which can act as an impetus for
> creative and effective curriculum implementation...(and to demonstrate
> that)... The current conceptualisation of convergence are simply too simple to
> accommodate the necessary complexity of these demands (Smith, 1997: 5).

This multi-dimensional conceptualisation provided a useful way of analysing all the data gathered regarding decision-making. The results of this analysis are explored in chapter seven. Having analysed these results, the analysis was presented to interested staff to see if it answered their questions or was helpful in any way. It was clear to the researcher that, in the words of Polanyi (1969),

> *Tacit knowledge* (and) *explicit knowledge* ... are not sharply divided. While
> tacit knowledge can be possessed by itself, explicit knowledge must rely on
> being tacitly understood and applied. Hence all knowledge is *either tacit* or
> *rooted in tacit knowledge*, A *wholly* explicit knowledge is unthinkable
> (Polanyi, 1969: 144) (emphases in original).

The exploration, documentation and analysis of tacit management knowledge as it related to management decision-making, and the subsequent trialing of the resultant framework, formed an important part of the methodology of this research.

Negotiated Outcomes

The process of uncovering and making explicit the management knowledge and the politics of that knowledge was not just the result of the thought processes and analysis of the researcher. It involved others in the organisation, particularly those playing a leadership role, in reflexive processes of discussion, trialing new practices, analysing results, learning from mistakes, and consciously applying theories in practice. In this sense it could be likened to a participative action learning project (Kemmis, 1985) based on processes of critical reflection, and with outcomes that were negotiable. In terms of the analysis of this process by the researcher this precept also applied. Members of management within the organisation were consulted regarding the way in which their activities, words and ideas were interpreted within this study and their agreement sought that this representation was fair and reasonable. As this study also took the work of other members of the group, particularly unpublished material, and placed it under a specific lens, their agreement to the use of their work in this manner was sought. In this sense the outcomes of this study were negotiated.

> By the phrase 'negotiated outcomes' is meant to imply that both the facts and interpretations that will ultimately find their way into the research report must be subjected to scrutiny by respondents who earlier acted as sources for that information, or by other persons who are like them. Of course, not all negotiations can end in agreement and one cannot expect an inquiry to produce findings that everyone could or would accept. But everyone does have the right to provide input on the subject of what are proper outcomes, and the inquirer has an obligation to attend to those inputs and to honour them as far as possible (Lincoln and Guba, 1985: 211).

Critical Reflection, Reflective Practice and Participatory Action Research

Boud, Keough & Walker (1993) defined reflection in terms of experiential learning, that is

> ... those processes in which the learners engage to recapture, notice and re-evaluate their experience, to work with their experience to turn it into learning (Boud et al, 1993: 9).

They considered that the reflective process consisted of three components: returning to the experience, attending to feelings and re-evaluating the experience. They identified four elements of re-evaluation,

> ... singling out an aspect of the experience and relating it to previous experience and learning (association), integrating the new experience with previous learning (integration), testing its validity (validation) and making it one's own (appropriation) (Boud et al, 1993: 73).

Kemmis (1985) took a more political stance in relation to what he identified as 'critical reflection', which he claimed was an action-oriented and historically embedded social and political process which should serve human interests - a political act. He described it as being a mode of practice that expresses people's power to reconstitute social life by the way they participate in communication, decision-making and social action.

> We are inclined to think of reflection as something quiet and personal. My argument here is that reflection is action-oriented, social and political. Its 'product' is praxis (informed, committed action), the most eloquent and socially significant form of human action ... Reflection is a dialectical process: it looks inward at our thoughts and thought processes, and outward at the situation in which we find ourselves; when we consider the interaction of the internal and the external, our reflection orients us for further thought and action. Reflection is thus 'meta-thinking' (thinking about thinking) in which we consider the relationship between our thoughts and action in a particular context (Kemmis, 1985: 141).

He called this engagement in critical reflective practices, carried out by both the individuals and the group as a whole, participatory action research. In this form of research the participants orient themselves as agents of change within an historical and ideological context which they need to understand. He further maintained that critical reflection is both shaped by and shapes ideology in a form of dialectical relationship.

> ... dialectically, ideology is created and sustained through definite patterns and practices of communication (language), decision-making (power) and production (work) which create expectations and sustain meanings for people as they relate to one another in the whole matrix of social life (Kemmis, 1985: 147).

When he linked ideology with reflection in this manner, Kemmis was referring to the way in which individuals undertaking critical reflection either consciously challenge,

and perhaps transform, the dominant discourse (Gee, 1990; Foucault, in Gordon (ed) 1980) or sustain and reproduce it,

> As 'meta-thinking' (thinking about the relationship between thought and action in a particular context), reflection expresses quite definite ideological commitments, taking certain aspects of social life for granted or treating them as problematic, and revealing an orientation to the social world and social order (Kemmis, 1985: 147).

Used in this sense, this linking of ideology to critical reflection was relevant in this research, although other terminology such as 'power/knowledge' (Foucault in Gordon (ed),1980), 'hegemony/counter hegemonic' practices (Gramsci, 1971) and 'dominant discourse' (Gee, 1990) was used in preference to the term 'ideology'. This was evident in relation to the critical reflective process of the group evolving a set of common understandings and a shared 'way of knowing' that acted as a guide to future action and provided the philosophical foundations of organisational development.

> The insight that reflection is ideological in the sense that it is ideologically shaped and contributes to the shaping of ideology (by sustaining or challenging taken-for-grated modes of social relationship) asserts our agency as the makers of human history. It denies that we are merely determined as 'products' of our history and development; it also denies that we are entirely free to produce the world and the history we desire, regardless of the historical circumstances in which we find ourselves (Kemmis, 1985: 148).

Since reflection is action-oriented (the dialectic of thought and action), Kemmis maintained that it must be studied and analysed in action. He spoke of 'the spiral of self-reflection' and the value of collaboration with others in the process of self-reflection as this offers a check on self-deception, although he warned that collective deception is a possibility (Kemmis, 1985: 153). Aware of this possibility, it became the practice to welcome various academics to undertake their own research in sites where this organisation was conducting training programs, including within the organisation itself. While the results have been published in each case, both the sites and the organisation have remained anonymous. However, this process provided a useful triangulation for ensuring that collective self-deception did not occur.

Much of the data that have been utilised for this study have arisen through a process of critical reflective practices as described by Kemmis and others (Grundy & Kemmis, 1983; Carr and Kemmis, 1983). But to describe this study as being a participatory action research project would be a misnomer as the participants were not

always conscious at the time that the results of their reflective practices would be used for this analysis, although they were later consulted, and the study was not established as such a project.

In practical terms these reflective activities took a number of forms. Sufficient funds were built into the NALLCU project budget to enable regular meetings of all staff, across sites and states, for one day each month. These gatherings were designed primarily to share experiences, ideas, methods, approaches, materials, frustrations and successes and to reflect on this practice in order to develop a coordinated approach to language, literacy and learning issues within workplaces across the industry. In-service professional development activities were also conducted that connected their practice to relevant theory and assisted with the development of common understandings. Meetings were rotated around various companies and the union office, with the participation in each site of relevant personnel from these organisations in part of the day's proceedings. Tours of the company and discussions with the local personnel were designed to broaden the experience of staff and deepen their understandings of the complexities of the organisation of work, different work practices, and the range of cultural and historical factors that affected their work.

Between meetings a newsletter was produced, with contributions from staff, copies of various journal articles, book extracts and items of general interest. The newsletters were designed to reduce the isolation of people working on-site across companies and inter-state, to add the latest theoretical and pedagogical perspectives to their repertoire, and to keep everyone informed of latest developments. In the three years of the NALLCU project, these newsletters filled several large folders.

In addition, as part of the *modus operandi* of NALLCU (1992-1995), and later the private training company, teaching and administrative staff were encouraged to maintain a journal of their activities. Each was provided with a hard covered red minute book for this purpose. These came to be known as their 'red books', in which they documented all their work activities, from phone conversations to meetings, and used freely as personal journals. Use of 'red books' became a habit of long standing for most individuals involved. Although some used them only to record their work activities, others also used them as personal journals and for reflective pieces of

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writing about their work. In particular they became part of the process of reflective practice as well as providing a rich source of information. Staff members were encouraged to use this information as the basis of various publications such as journal articles (eg. Cooney, 1993; Waterhouse, 1996; Virgona, 1996, 1999; Deakin, 1995, 1996; Thomas-Walsh, 1995). While these 'red books' were intended as personal journals, staff members were generous in sharing their contents and extracts have been used extensively in research reports, for personal research and in this dissertation.

These activities also helped to raise the consciousness of staff about the actual work they were performing, its range and diversity, so that they could explain it to others. This was a necessary first step in what became formal action plans, which were used as a legitimating process for facilitating the sort of changes that were possible in workplace training. This process of defining their own work was expected to help them to focus their activities towards the achievement of these changes. Thus the process of reflection was dynamic and continuous, more a way of being than a conscious occasional activity.

Research as the Production of Useful Knowledge

In a study on a staff development strategy for supporting research priorities in the State Training Service, commissioned by the Office of Training and Further Education (OTFE) in Victoria, Seddon (1998a) provided a definition of research as the production of 'useful knowledge',

> Research is a process of producing useful knowledge for public purposes (not simply for individual enlightenment or opinion formation) that includes:
> - Processes of knowledge production that are purposeful (oriented to investigation), principled (oriented to developing the best understandings as a basis for action) and plural (in purposes, participants and procedures)
> - Processes of actioning research findings so that the knowledge-based outcomes of research can be recognised and disseminated to various (defined) publics for purposes of knowledge sharing and application, research recognition and accountability and validation
> - Processes of validation which lead to judgements about the worth of knowledge-based outcomes of research, made by (defined) publics against explicit criteria of useability and usefulness, that enable the endorsement and authorisation of 'useful knowledge' within and between the validating publics (Seddon, 1998a: 30).

This definition was found to be useful. It defined research in a way that legitimated the sort of practical research often undertaken by practitioners as a normal part of their work and validated in practice within their own closed circles. It argues that such work is worthy of record and exposure to a wider research community. As already documented here, the research projects that underpin this study have been so exposed to the research community and practitioner colleagues and validated in the way described, as have parts of this study (eg. Sefton, 1998b).

The Researcher as Participant/Observer

As a participant/observer within and throughout the period of this study, the researcher occupied roles that gave her the power to affect the directions taken and the outcomes of the various activities. She was also able to affect which research projects, activities, and professional development initiatives were undertaken and which were not and where the emphasis would be placed. While an attempt has been made to distance herself from the data by adopting a presentation in the third person and using the recorded words of others, it would be ludicrous, and untrue, to maintain that her personal stance and political bias were not significant factors throughout. However, the researcher would maintain that even in research that is considered 'scientifically neutral' such biases are evident through the selection of topic and the questions that are asked and those that are not,

> ... scientists firmly believe that as long as they are not *conscious* of any bias or political agenda, they are neutral and objective, when in fact they are only unconscious (Namenwirth, 1986: 29) (emphasis in original).

Prigogine and Stengers (1984) claimed that a new view of scientific research has emerged because scientists have lost confidence in the 'reason' of nature and that their 'vision of nature is undergoing a radical change toward the multiple, the temporal, and the complex' (Prigigine & Stengers, 1984: 292). They maintained that 'the epoch of certainties and absolute oppositions is over' (p. 299). They quoted from the sociologist Merleu-Ponty (1960) who had stressed the importance of what he termed as a 'truth within situations',

> So long as I keep before me the ideal of an absolute observer, of knowledge in the absence of any viewpoint, I can only see my situation as being a source of error. But once I have acknowledged that through it I am geared to all actions and all knowledge that are meaningful to me, and that it is gradually filled with everything that may be for me, then my contact with the social in the

finitude of my situation is revealed to me as the starting point of all truth, including that of science, since we are inside truth and cannot get outside it, all that I can do is define a truth within a given situation (cited in Prigogine & Stengers, 1984: 299).

Foucault took this notion further by suggesting, not that the bias of the researcher should be identified, but that the researcher should be involved in the struggles surrounding their area of research if the results were to be meaningful,

... if one is interested in doing historical work that has political meaning, utility and effectiveness, then this is only possible if one has some kind of involvement with the struggles taking place in the area in question (Foucault, 1976a: 64).

For the purposes of this study the researcher believed that it was necessary to acquaint the reader with sufficient details of her view of the world to locate the study within the chosen theoretical framework and to understand the choices that were made at various stages along the way.

The researcher's background included a childhood within a family that all earned their livelihoods in their own small businesses. This provided her with a sound knowledge of managing in a small business environment. Her first job, in the public service in New Zealand for seven years, provided her with experience of large bureaucracies. In Australia she entered the teaching profession, working briefly in a Christian Brothers' College in Queensland before entering the Victorian education system where she spent the next 22 years in secondary, technical and TAFE education. At the time of this study she had had a long-term association with, and commitment to, the provision of basic education for people who were disadvantaged through class, ethnicity, disability, gender or lack of opportunity.

On entering the context of the automotive manufacturing industry in Australia, the researcher based her actions on a number of assumptions and convictions related to class struggle and the role of education within that struggle. Firstly, she had a belief that the relations between capital and labour were inherently antagonistic, resulting in the on-going class struggle inherent to a capitalist system, and a conviction that industry training could not alter that fact. Furthermore, she believed that the role of workplace education within capitalism, while it could be of intrinsic value to workers, was not a revolutionary role (Bowles and Gintis, 1976), although it could help to

move the struggle forward, or to hold it back, in the short term. Thus there was no expectation that training, in itself, could change the world. Rather it was expected that the window of opportunity that made this study possible would probably close over time. There was, however, an appreciation of the possible negative role that could be played by workplace educators in assisting the exploitation of workers and the intensification of work. She was committed to ensuring that this did not happen in the realms over which she had control/influence. These understandings meant that the events that unfolded, the directions taken and the decisions that were made during the study were analysed in the broader context of class struggle.

An underlying, and more positive view of workplace education, was based on the assumption by the researcher that education had an intrinsic value to workers that no employer could take from them (quite apart from increased wages, access to work and other material gains). It could help open up opportunities for workers and new visions of different futures beyond capitalism. In Sayer's (1979) seminal work on 'Marx's Methods' he examines Marx's view of an ideal (communist) society which was 'solidly grounded in the potentialities of the present' (Sayer, 1979: 10). Marx acclaimed victories of the working class, such as the ten hour day in 1864 and the existence of cooperative factories as 'proof "by deed instead of by argument" of the viability of "social production controlled by social foresight" (Marx, 1864: 346)' (Sayer, 1979: 10). Thus, while employers cynically invoked new methods of work organisation to increase productivity and a higher rate of profit, the researcher believed that employees would be able to glimpse the positive aspects of some of the new work order rhetoric and envisage a better way of working in future realities. The fact that these new methods, as interpreted by employers under capitalism, would not work because of the very nature of capitalism and the on-going class struggle, did not alter the possibilities opened up by the rhetoric, if not the reality. It was expected that some managers would believe the rhetoric and opportunities would then exist for workers to improve their work situation, even if this did mean giving some increased productivity. If this could occur through working smarter rather than harder, employees could also benefit.

Having experienced first-hand from a teaching and managerial perspective within a TAFE context, the dire effects of economic rationalism and managerialism on people

and programs, the researcher had developed a firm opinion that these policies were neither economically sustainable nor rational. Further, that they alienated good teachers and other staff rather than motivated them. She believed that there was a better way of managing and harboured the desire to change the system, if not from inside, then from outside. Believing that there was no point in understanding the world if one did not apply this knowledge in order to change it, she was far from being a neutral observer in the events that unfolded but rather was an active and committed participant with her own agendas.

Analysis and Presentation

A Marxist style of analysis has been employed in this dissertation similar to that described by Johnson (1982). He defined this type of analysis as one that follows the circuit of *concrete - abstract - concrete* with five main aspects or stages ('moments') through which a practice must pass to be fully developed. Firstly, he maintained that it is necessary to appropriate the material in detail and then conduct an historical analysis of its different forms of development. Thirdly one should track down the inner connections through a structural analysis before the presentation of the real movement. Finally the life of the subject matter is reflected back in ideas, validating the analysis. Johnson maintained that this ... 'form of "analysis" which is both historical and structural might be better termed, as Marx termed it "dialectical"' (Johnson, 1982: 157). This movement from research to analysis represented a movement from a concern with dense and specific particulars to relatively abstract thinking, whereas

> ...presenting the real movement (was the process of) moving in thought from abstraction of different kinds to something like the complexity of the world which we are trying to understand (ie. 'concentration') (Johnson, 1982: 159).

The Afterword to the second German edition of *Capital* Volume 1 contains a description by Marx of his materialist form of dialectical thinking which

> ...includes in its comprehension and affirmative recognition of the existing state of things, at the same time also, the recognition of the negation of that state, of its inevitable breaking up; because it regards every developed social form as in fluid movement, and therefore takes into account its transient nature not less than its momentary existence; because it lets nothing impose upon it, is in its essence critical and revolutionary (Marx, 1867: 29).

By way of contrast to this rational form of dialectical materialism, he describes the 'mystified form' that became the fashion in Germany because it seemed 'to transfigure and to glorify the existing state of things'. This dissertation will attempt a materialist analysis by providing a sense of the transient nature of organisational structures, societal institutions, the nature of teachers' work within the particular organisational paradigm and type of educational practice, and describing their evolution over a period of time.

Marx (1879) wrote in a letter to Danielson about research being a necessary but not sufficient condition for producing knowledge, citing the need to observe the whole of a phenomenon before finalising an analysis.

> It is ... necessary to watch the present course of things until their maturity before you can 'consume' them 'productively', I mean 'theoretically' (Marx, 1879: 296).

A process of attempting to analyse lived experience as it was being lived, particularly at a time of enormous change, provided its own challenges for the researcher, not least of which was making a judgement about the point of 'maturity'. It finally became clear that a suitable point of closure had been reached and, for the purpose of this dissertation, a line was drawn with the knowledge that it may not represent the point of 'maturity' when looked at in hindsight.

In order to make sense of the whole it was necessary to simplify by teasing out the individual threads, before an attempt was made to represent a more complete picture that did some justice to the complexities of the real world. Thus, for presentation purposes, the data has been divided into particular strands that together provide the complete picture. Chapter four studies the evolution of the particular educational practice that became the *raison d'être* of the organisation. The remainder of the data has been divided into the strands of: teachers' work (chapter five); the analysis of the effect of a particular outside discourse, that of quality/best practice, on the organisation (chapter six); and project management (chapter seven). Johnson maintained that this

> ... *temporary* simplification of the social world in order to render it intelligible ... is not reductive, because each set of determinations is abstracted in turn and then, as it were, recomposed (Johnson, 1982: 162) (emphasis in original).

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Marx saw abstraction as a normal part of the thought process, a feature of systematic thought that is independent of the conscious awareness of the thinker.

> Men (sic) who establish their social relations in conformity with their material productivity also produce principles, ideas and categories, in conformity with their social relations (Marx, 1847, p 166).

As Johnson explained,

> ... what matters is not the *fact* of abstraction (which happens anyway as the medium of thinking) but a self-consciousness of this process and *the choice of the forms of categories, and their derivation* (Johnson, 1982:162) (emphases in original).

Further, although Marx based his research, analyses and abstractions on the 'concrete', in the *presentation* of his ideas he did not start with the concrete but with the 'abstract' which he then grounded in the 'concrete',

> ...the initial movement of the method is from the concrete to the abstract, from the complex 'material' already appropriated in research to the simpler abstractions and distinctions. Only later, having understood how key processes may work, is it possible to return, in thought, to a complexity that resembles the real world (Johnson, 1982: 163).

In its presentation, this dissertation starts with the 'abstract', by locating the argument within a theoretical context (chapter three). It then moves to the detail, in separate strands, of the 'concrete' material. In chapter eight the strands that were separated for the purpose of discussion and analysis will be reunited and connected to current events and the theoretical discussion in chapter three for an analysis of trends and possible directions and futures.

CHAPTER THREE
Theorising the Politics of Change

> The philosophers have only *interpreted* the world in various ways; the point is
> to *change* it (Karl Marx, 1845: 5)(emphases in original).

Introduction

This research was grounded in the work of a group of practitioners and its concerns
were those of this group. It is argued that the point in understanding the world in
which they worked was not simply an academic exercise, but one of necessity.
Critical practitioner research is often about creating spaces, analysing the possibilities,
envisaging better futures, utilising opportunities that exist and welcoming change
because change creates new opportunities. The enemy of progressive practitioners is
apathy and stability, particularly the stability of a regime they oppose (eg. racist,
sexist, inequitable, based on class distinctions). In such times of stability, *creating*
change becomes the project; in times of change the project changes also. It is argued
that in each case a correct and useful analysis is critical in order to both create and
manage change productively and effectively.

While philosophers, sociologists, psychologists, economists and other educational
researchers argue over social, economic and learning theories, educational
practitioners tend to examine existing theories looking for practical solutions. They
take the analyses and theories of academics and put them to the test of practice. Thus
while some academics analysed the marketisation of TAFE (eg. Marginson, 1997;
Anderson, 1996), some practitioners simply opposed the marketisation of TAFE
programs (the 'dinosaurs', Seddon, 1997a), others grasped the opportunities with little
thought or critical appraisal (the 'cowboys', Seddon, 1997a) and a third group of
practitioners tended to accept markets as a reality and examined ways to use them to
further their own educational agenda. While some academics investigated the
reductionism of competency based training (eg. Brown, 1991; Gribble, 1990; Field,
1990; Scott, 1991; Jackson, 1993) others attempted to replace the term 'competency'
with a broader concept such as 'capability' (Stephenson & Cairns, 1999; Hase, Cairns
& Mallock, 1998); progressive practitioners, however, looked to redefine the meaning
of the term 'competency' through a style of practice that encompassed a broader
perspective. In this sense they have the potential to close the research loop, or more

accurately to push the spiral of research to continue. It is argued that if practitioners undertake practical research in a reflective and thoughtful way, and theorise what they are doing, they have the potential to complement the academic project and *vice versa*.

Chapter one described the context of this research as one of continual and significant change. Chapter two examined the methodology of this study as a meta-analysis of the work of a group of practitioners during this period of change, work that was characterised by reflexive and committed practice, or praxis. The current chapter utilises a range of social theories to crystallise a theory of change that underpins this practice. The four chapters that follow detail the educational practice from different perspectives and the final chapter attempts to consolidate the study and identify new questions.

A Marxian Framework

The starting point for this thesis is Marx whose theories provided a foundational framework for the study both in guiding the activities of the researcher and in analysing the results. This is consistent with the theoretical perspective adopted by the researcher in her masters dissertation (Sefton, 1989) and justified therein. It also reflected her practice over many years.

Marx defined capitalism as the social relationship between classes of people – those who own the means of production and those who have nothing to sell but their labour. Those who own the means of production, the 'ruling class' (Marx & Engels, 1846: 59), also produce the dominant ideas of society, creating a belief that the current systems, ideas and social relations are immutable and inevitable. However, ' ... these ideas, these categories, are as little eternal as the relations they express. They are *historical and transitory products*' (Marx, 1847: 166) (emphasis in the original). As Marx explained, productive forces are continually evolving and consequently the social relations are being destroyed and new ideas forming. The only immutable thing is the 'abstraction of movement' or the inevitability of change.

When Marx talked of the 'social relations of production' he was talking of the complex dialectical relationship that exists between a person's life experiences, and

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the formation of an ideology and consciousness which determines how he or she will act and think:

> Social relationships are closely bound up with productive forces. In acquiring new productive forces men (sic) change their mode of production; and in changing their mode of production, in changing the way they earn their living, they change all their social relations. The hand-mill gives you society with the feudal lord; the steam-mill society with the industrial capitalist.
>
> The same men (sic) who establish their social relations in conformity with their material productivity, produce also principles, ideas and categories, in conformity with their social relations (Marx, 1847: 166).

Castells (1996) provided a useful distinction between the notion of the existence of 'industry' in society and the 'industrial society'. This distinction incorporated the ideas of Marx about the way in which the mode of production permeates the ideas and consciousness of people,

> An industrial society is not just a society where there is industry, but a society where the social and technological forms of industrialization permeate all spheres of activity, starting with the dominant activities, located in the economic system and in military technology, and reaching the objects and habits of everyday life (Castells, 1996: 21).

It may appear that Marx placed all the emphasis on the productive activities of people, which could be interpreted narrowly as meaning only the economic factors that exist within the world of work. But Marx recognised the complex nature of these relationships and the myriad ways in which a person's consciousness develops. Also that a person may enter into other relationships to production within different contexts,

> It goes without saying, by the way, that direct labour time itself cannot remain in the abstract antithesis to free time in which it appears from the perspective of bourgeois economy ... Free time – which is both idle time and time for higher activity – has naturally transformed its possessor into a different subject, and he (sic) thus enters into a different production process as this different subject (Marx, 1858: 712).

As a person moves between contexts and roles, his/her relationship to the means of production differs accordingly. The basic underlying tenet is the material basis for all thought processes undertaken by an individual. Thus their consciousness results directly from their actual experience of life, in all their different roles, contexts and

relationships and from the knowledge provided through their various sensory perceptions,

> Life is not determined by consciousness, but consciousness by life. In the first method of approach the starting-point is consciousness taken as the living individual; in the second method, which conforms to real life, it is the real living individuals themselves, and consciousness is considered solely as *their* consciousness (Marx & Engels, 1846: 37) (emphasis in the original).

Foucault (1975) also distanced himself from the model of consciousness favoured by classical philosophy, considering it more materialist to first study the effects of power on the body before posing questions of ideology and power,

> ... what troubles me with these analyses which prioritise ideology is that there is always presupposed a human subject on the lines of the model provided by classical philosophy, endowed with a conscieusness which power is then thought to seize on (Foucault, 1975b: 58).

The materialist basis of consciousness was important in this study as it was a basic assumption that the process of teaching, while not revolutionary in itself (Bowles & Gintis,1976), could provide the basis for different futures by raising awareness, through experiential and transformative learning activities, of possible different futures. It is argued that the development of a better future depends on a consciousness of different ways of working and that every small step in changing people's consciousness through experience is significant in the longer term.

From a practical perspective, this short description of the Marxian framework cannot do justice to the work of Marx in such a restricted space. This study is permeated with understandings and analyses that could be directly attributed to Marx, but only a few aspects have been discussed in this section. Marx's theories were helpful in providing the theoretical framework for this study, however, at a less abstract level of analysis other resources were introduced, provided they spoke to Marxism and were not in contradiction to this theoretical framework. Foucault (1975a) for instance, whose work has been used throughout this study, maintained that he often used the 'concepts, texts and phrases' from Marx, without feeling the need to identify them,

> As long as one does that, one is regarded as someone who knows and reveres Marx, and will be honoured in the so-called Marxist journals ... (however) ... because people are incapable of recognising Marx's texts I am thought to be someone who doesn't quote Marx. ...It is impossible at the present time to write history without using a whole range of concepts directly or indirectly

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linked to Marx's thought and situating oneself within a horizon of thought which has been defined and described by Marx. One might even wonder what difference there could ultimately be between being a historian and being a Marxist (Foucault, 1975a: 52-53).

In a similar fashion, much of Marx's work was assumed within this study. The aspects that were of greatest import in this context were those that related to the material basis of consciousness, the historical nature of materialism, the concept of continual change, and the dialectical nature of historical materialism.

Modes of Production, Modes of Development, Production, Experience and Power
It is an established tradition within sociological analyses of post-industrial society to differentiate between modes of production and modes of development. Modes of production in the twentieth century have been capitalism and collectivism (Bell, 1973), alternatively called statism by some theorists (eg. Touraine, 1969). However the mode of development in the same period has been one of industrialism. Castells (1996) postulates that a new mode of development, informationalism, has emerged towards the end of the century.

> This new social structure is associated with the emergence of a new mode of development, informationalism, historically shaped by the restructuring of the capitalist mode of production towards the end of the twentieth century (Castells, 1996: 14).

Castells differentiated between industrialism and informationalism as distinct modes of development based on structurally determined performance principles, economic growth distinguishing industrialism, and with technological development, or knowledge accumulation combined with greater complexity of information processing, defining informationalism. He maintained that

> ... modes of development shape the entire realm of social behaviour, of course including symbolic communication. ... It follows that we should expect the emergence of historically new forms of social interaction, social control, and social change (Castells, 1996: 18).

That society in the late twentieth century was experiencing a period of accelerated change was not in doubt. The nature of these changes were discussed in chapter one. The contested terrain lay in the seeming inevitability of a neo-liberalist, and therefore managerialist, outcome. Looked at in retrospect the statist mode of production was not well placed to survive a new mode of development, but did that mean that

collectivism could not provide an alternative to the capitalist mode of production? It was contended by the researcher that the capitalist mode of production, while it might have appeared to be in the ascendancy was beginning to hold back the wheels of progress.

Castells based his argument on the theoretical perspective that societies are organised on 'human processes structured by historically determined relationships of *production, experience* and *power*' (emphases in original). By 'production' he meant the process of transforming matter, or nature, to produce a product which is either consumed or accumulated to create surplus value, a process organised in class relationships, based on their relation to production and who decides on the sharing of the product. By 'experience' he referred to the human search for fulfilment of needs and desires and the 'interaction between (people's) biological and cultural identities'. He saw 'experience' as being structured around the family, gender power relationships and sexuality. 'Power' was the relationship, based on class and experience, that allows some people to impose their will on others, generally based on the state and institutional violence (Castells, 1996: 14-15). Foucault, however, redefined the concept of power. He focused on the power that was embedded in all the institutions and organisations of society, what he called 'the microphysics of power'.

> ... one of the first things that has to be understood is that power isn't localised in the State apparatus and that nothing in society will change if the mechanisms of power that function outside, below and alongside the state apparatus, on a much more minute and everyday level, are not also changed (Foucault, 1975b: 60).

This study was not concerned with the macro-level questions, which it could not affect directly. It was, like Foucault, concerned with the 'microphysics of power' as it was exemplified in the everyday life of institutions and organisations in each specific context. In concentrating on this micro level there was a belief that the analysis of change at this level was significant to building a basis for macro level change in the future. Thus, while a Marxian framework was essential to the study, a Foucauldian analysis was useful in unravelling the threads of this research at the micro grounded level at which it occurred.

Information, Knowledge and Power/Knowledge

In the period of the informational technology revolution during which this study occurred, understanding the relationship of knowledge and information to the changes that were taking place was pivotal. Castells (1996) had found it necessary to provide definitions of 'knowledge' and 'information' to explain his use of the term 'informational'. He chose to use Bell's (1973: 175) definition of knowledge as

> A set of organised statements of facts or ideas, presenting a reasoned judgement or an experimental result, which is transmitted to others through some communication medium in some systematic form (cited in Castells, 1996: 17).

He also chose Porat's (1977: 2) definition of information: 'Information is data that have been organized and communicated'. In utilising the term 'informational' to describe a specific mode of development Castells was referring to 'the action of knowledge upon knowledge itself as the main source of productivity' (1996: 17); that is, knowledge as both a means of production and a commodity in its own right. This placed 'knowledge' at the centre of the changes that were taking place in society, making it the focus of productive activity.

The notion of knowledge as the 'new means of production' was adopted by the business community and often referred to as such in management texts (eg. Drucker, 1993) and the popular media. Management theorists such as Drucker talked of a 'set of knowledges'. He labelled all technical knowledge as 'techne', which, he maintained, was not the key knowledge of the 'knowledge economy'. The key knowledge, he said, was the knowledge of 'what to say and how to say it',

> Value is now created by 'productivity' and 'innovation', both applications of knowledge to work. The leading social group of the knowledge society will be the 'knowledge workers', knowledge executives who know how to allocate knowledge to productive use (Drucker, 1993: 8).

It would appear that what was meant by knowledge in the business literature, and the practice of management, was not 'techne' knowledge, but rather some form of 'critical' (ie. important), reflective and creative thinking and acting which led to innovative solutions for business. This was reflected in terms such as 'continuous improvement' (of the production process), 'problem solving' and 'learning organisations'; that is knowledge that was acquired through reflection on practice,

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applied in practice and disseminated amongst a community of practice to increase the knowledge base and provide an on-going spiral of innovation and enhanced productivity (see for instance Hage et al, 1993).

> The knowledge we now call knowledge proves itself in action. What we mean by knowledge is information effective in action, information focused on results. These results are seen outside the person – in society and economy, or in the advantage of knowledge itself (Drucker, 1993: 46).

In organisational development circles the concept of the 'learning organisation' (eg. Senge, 1990; Watkins & Marsick, 1992, 1993; Flood, 1994; Garvin, 1994; Dodgson, 1993; West, 1994; Calvert et al, 1994; Attwood & Beer, 1990; Hodgetts et al, 1994; Mills & Friesen, 1992; Pedler et al, 1989) had become widely accepted as a way for business to move into the future (see Sefton et al, 1995: 43-59 for comprehensive literature review). Information about learning organisations abounded, along with advice on how to achieve this status, as was evident in the large mass of literature that was written about them. Morrigan (1996a) identified over 500 journal articles about 'learning organisations' published between 1987 and 1994 and concluded that

> Most writers link four major contextual issues with the Learning Organisation:
> * Modern capitalism has a global future in which the Learning Organisation 'is heralded as the optimum organisational form for this stage of capitalism'.
> * The Learning Organisation is the key to economic survival and renewal of business in the West.
> * The Learning Organisation is the key for effectively managing the organisational change necessary in the current economic climate.
> * The Learning Organisation is linked to the overall social change processes: 'economic transformation will bring about an epiphany within the larger society' (pp 6-7) (cited in Taylor, Jones, Meredith & Wheelens, 1996: 10).

Morrigan (1996b) differentiated between traditional organisational learning, 'learning that occurs within a sub-system of the whole', and the learning organisation, 'it *is* the whole',

> Knowledge creation (or organisational learning) is as much a product of the learning organisation as the goods and services that any company produces (p. 26) (cited in Taylor et al, 1996: 11).

Foucault described what he saw as a 'return of knowledge' that was evident at a superficial level in expressions such as 'not theory but life that matters, not

knowledge but reality, not books but money, etc.' He maintained that arising out of these themes was what he called an 'insurrection of subjugated knowledges' by which he meant two types of knowledge. First a body of historical content of struggles that had been 'disguised within the body of functionalist and systematic theory' and second a number of 'naive knowledges, located down the hierarchy, beneath the required level of cognition or scientificity',

> ... a popular knowledge (*le savoir des gens*) though it is far from being a general commonsense knowledge, but is on the contrary a particular, local, regional knowledge, a differential knowledge incapable of unanimity and which owes its force only to the harshness with which it is opposed by everything surrounding it – that it is through the re-appearance of this knowledge, of these local popular knowledges, these disqualified knowledges, that criticism performs its work (Foucault, 1976b: 82).

These 'naive knowledges' within workplaces had been disregarded by scientific, technical and engineering personnel under a Taylorist regime. Under the 'new work order' this 'naive' knowledge of workers suddenly gained credence and enterprises sought access to it as a means of gaining a 'competitive advantage' in the marketplace. Whereas, under the 'scientific management' of work (Taylor, 1911) employees were expected to work as automatons and allow the engineers to do the thinking, in the new work order workers were asked to invest much more than their labour into their work. They were also expected to invest their thinking, creative powers and accumulated knowledge of the production process. As Gee, Hull and Lankshear (1996) observed,

> While this offers a less alienating view of work and labour, in practice it can also amount to a form of mind control and high tech, but indirect coercion (p. 7).

The tensions within this dynamic, and how they affected workplace education and workplace educators, formed a critical part of this study. It is argued that the dilemma these tensions created for workplace educators had its origin in the normative and reproductive role of educators in all spheres, including schools where children are socialised for the world of work (eg. Bowles & Gintis, 1976; Sharp, 1986; Apple, 1985a; Connell, 1977, 1983; Gee, 1994; Watkins, 1992). Whilst the power relations and contradictions underpinning their role in workplaces were more directly evident, the basic role of workplace educators was the same. It was this 'indirect coercion' with which Foucault was concerned. He spoke of a new form of power that started to

emerge in the seventeenth and eighteen centuries when different forms of production and service were required and the old relationships and loyalties of the feudal system became irrelevant,

> It becomes a matter of obtaining productive service from individuals in their concrete lives. And in consequence, a real and effective 'incorporation' of power was necessary, in the sense that power had to be able to gain access to the bodies of individuals, to their acts, attitudes and modes of everyday behaviour ... these new technologies of power needed to grapple with the phenomena of population, in short to undertake the administration, control and direction of the accumulation of men ... hence there arise the problems of demography, public health, hygiene, housing conditions, longevity and fertility (Foucault, 1977b: 125).

Foucault problematised a view of power that was wholly repressive in nature and posed the question, 'If power were never anything but repressive ... do you really think that one could be brought to obey it?' He saw power as being both positive and negative, as a productive force that also produces knowledge, brings pleasure and creates discourses, and he believed that it needed to be considered 'as a productive network which runs through the whole social body', rather than solely a negative repressive function (Foucault, 1977b: 119). He was also critical of analyses that concentrated on the state as the source of all power,

> ... one cannot confine oneself to analysing the State apparatus alone if one wants to grasp the mechanisms of power in their detail and complexity. There is a sort of schematism that needs to be avoided here – and which incidentally is not to be found in Marx – that consists of locating power in the State apparatus, making this into the major, privileged, capital and almost unique instrument of the power of one class over another. In reality, power in its exercise goes much further, passes through much finer channels, and is much more ambiguous, since each individual has at his (sic) disposal a certain power, and for that very reason can also act as a vehicle for transmitting a wider power. The reproduction of the relations of production is not the only function served by power. The systems of domination and the circuits of exploitation certainly interact, intersect, and support each other, but they do not coincide (Foucault, 1976a:72).

This analysis of power allowed the examination of the multi-dimensional aspects of power relationships within given contexts, including the problematic concept of the 'empowerment' of workers inherent in the rhetoric.

Foucault named the combined product of his 'subjugated knowledges' a 'genealogy' and identified the main object of such a study to be a struggle against the power of

so-called 'scientific discourses'. He believed that to imbue Marxism with the label of 'scientific' was to isolate it from the 'discontinuous forms of knowledge that circulate about it' and reduce it to the same sort of bounded discourse and constraints that had hindered science. In what he called his 'genealogical approach' Foucault chose to remove the human subject from historical analysis, as the subject that evolved through the course of history, in favour of an analysis that looked at the constitution of the subject within an historical context. Thus he looked at phenomena such as psychiatric internment, the mental normalisation of individuals, and penal institutions rather than madness and criminality.

> One has to dispense with the constituent subject, to get rid of the subject itself, that's to say, to arrive at an analysis which can account for the constitution of the subject within a historical framework. And this is what I would call genealogy, that is a form of history which can account for the constitution of knowledges, discourses, domains of objects etc., without having to make reference to a subject which is either transcendental in relation to the field of events or runs in empty sameness throughout the course of history (Foucault, 1977b: 117).

This approach is consistent with a Marxist materialist view in that the consciousness of people is related to their experience, within a given context, and is formed by not only their relationship to the means of production but also to the ideas, knowledge and discourses that have been created as a form of hegemony to ensure its reproduction and continuance.

Organisational Analysis

The body of knowledge and the discourses that surround organisations and their management have been the subject of a vast array of literature, much of which resemble 'recipe books' (Ramsay, 1996: 157). As one would expect in a period of dramatic change, management solutions or 'fads' abounded,

> The proclamation of the management panacea is nothing new, as aficionados of human relations writings in the Mayovian or Maslovian traditions would readily confirm. The sales pitch has grown more clamorous and hyperbolic in recent times, though; the packaging more sophisticated, the dismissal of past models more scathing and complete, the tone more edgy, the pace of the product cycle more frantic (Ramsay, 1996: 153).

Ramsay concluded that failures outweighed successes with subsequent disillusionment, forms of passive resistance and even sabotage by organisational

members. Gill & Whittle (1992) argued that the 'organizational life-cycle' for management ideas had shortened and Huczynski (1993a, 1993b) observed that a more sceptical approach to the new 'guru' schools of thought, linked to the 'entrepreneurial period' in business culture had emerged. Ramsay (1996) commented on the lack of critical research and evaluation in this area, a lack he attributed to the political constraints inherent in the 'new right worship of market-driven and private enterprise sponsored research' (p. 167). From a practical perspective (in terms of creating and managing change) and examined within the theoretical stance provided by the Marxian framework of this study, the accelerated occurrence and demise of these management fashions were indicative of the crisis of the capitalist mode of production. The constant drive for greater efficiency and higher productivity was forcing managers to attempt to apply strategies more suited to a collective mode of production, contradicting their traditional methods of controlling workers and creating a situation that was destined to fail. The importance of the literature surrounding these new 'fads' lay not so much in the 'magical thinking' of some of its proponents as in the discourses generated by this type of thinking. These discourses, many of which emanated from the automotive industry, and the practices that surrounded them, were important to this study as they provided the space, legitimation and rhetoric that allowed progressive workplace educators to work creatively and effectively. However it was expected that the contradictions inherent in the discourse would be exacerbated by such work, particularly where the enterprise commitment was only to the rhetoric and not the practice that it espoused. It was also expected that teachers would find the work demanding and difficult as a result of these contradictions.

In their book *The Politics of Management Knowledge*, Clegg and Palmer (1996) analysed management theory as a discourse that is both political and formative,

> Management theory, as a body of knowledge, is thus a political discourse *par excellence*. It is not only knowledge pertaining to power in terms of complex relationships between individuals and corporate agencies, between one organization and another organization, those relations that frame the everyday intrigues, disclosures and dramas of everyday life. It is also political knowledge in the ways that its theory legitimates some practices while it marginalises others, in the way that its rhetoric provides not just a legitimation but the *raison d'être* for what it is that some people are able to do to some other people (Clegg & Palmer, 1996: 3).

The Contribution of Foucault to Organisational Analysis

In his exploration of the applicability of Foucault to organisational analysis, Burrell (1988) pointed out that a Foucauldian approach,

> ... allows for both the search for generic principles and for detailed empirical investigations of strange local events in single organizations. What the approach is loathe to permit is the segmentation and classification of organizational 'types' (Burrell, 1988: 231).

Foucault (1979a) believed that normalisation is an instrument of great power that reduces all organisations to variations of the same through scientific classification schemes:

> In a sense, the power of normalization imposes homogeneity; but it individualizes by making it possible to measure gaps, to determine levels, to fix specialities and to render the differences useful by fitting them one to another (Foucault, 1979a: 184).

As Burrell noted, the rise of information technology 'knowledge engineering' and computer networks has created new forms of surveillance that may be used as management tools. Therefore,

> ... it is important to know that the reality of organizations is that they reflect and reproduce a disciplinary society. But to talk about them, to develop discourse and classification schemes for their analysis actively contributes to the reproduction of this discipline. Reality, and our discourse about reality, are ever more closely confining. Thus we are imprisoned by our knowledge and made freer by our ignorance. Only to the extent that we stop talking about types of organizations do we succeed in not reproducing the disciplinary society. Only to the extent that we speak of 'the Same *and* the Difference' rather than 'the Same *in* the Different' can we hope to develop a 'discursive ferment' in organizational theory without developing discipline (Burrell, 1988: 234) (emphases in original).

In his famous and carefully worded statement, Foucault (1979b: 83) maintained that 'Prisons resemble factories, schools, barracks, hospitals, which all resemble prisons'. This was a useful concept for this study as a small organisation attempted to work with the new 'norms' that were established by the neo-liberal institutions of society in Australia, with the result that organisational members sometimes felt imprisoned by the bureaucracy imposed from outside. Thus even an organisation formed collectively by its members was the 'same' as other organisations. Rather than analyse the alternatives to managerialism in the form of a 'different' organisation, this study

looked at the 'same *and* the difference' between it and other organisations, recognising that basically all organisations are the 'same' in a Foucauldian sense. The strength in this approach was in the acceptance of basic organisational realities and the concentration instead on analysing what needed to be 'different' in order to 'make a difference' to its members and the way in which they related to the world outside the organisation. From this perspective bureaucracy and forms of internal organisation ceased to be the enemy and became the 'servant', rather than the 'master'; serving, as opposed to becoming, the *raison d'être* of the organisation. Significantly this approach also provided the potential for the results of this study to form part of the 'discursive ferment' in organisational theory as they could theoretically be applied in any organisation.

A 'New' Management Paradigm?

In their study of management in 'embryonic industries' Clegg, Barrett et al (1996) maintained that a new management paradigm had emerged. By 'embryonic industries' they referred to new and emergent industries, often based on new technology,

> The novelty of embryonic industry lies in the application of distinctive practices to production, service or problem resolution in ways that are discontinuous with existing technologies, values and knowledge (Clegg, Barrett, et al, 1996: 190).

They concluded that embryonic industry required 'postmodern organizations', utilising the term 'postmodern' in the sense of being different from, and superseding, so-called 'modern' organisations rather than as part of the theoretical debate surrounding post-modernism *per se* (p. 231). They maintained that these 'postmodern organizations' have different management requirements,

> ... proponents of the new paradigm distinguish themselves not only by incipient feminization but also new approaches to learning, to structure, to leadership, to communication, to life-cycles, to competence, to people, and to knowledge' (Clegg, Barrett et al, 1996: 204-205).

They summarised the 'old' and 'new' paradigms of management in the following table (Table 1, see next page).

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Table 1: 'Old' and 'New' Paradigms of Management

Old Paradigm	New Paradigm
• Organizational discipline	• Organizational learning
• Vicious circles	• Virtuous circles
• Inflexible organizations	• Flexible organizations
• Management administrators	• Management leaders
• Distorted communication	• Open communication
• Hierarchies	• Markets
• Strategic business units drive product development	• Core competencies drive product development
• Strategic learning occurs at the apex of the organization	• Strategic learning capacities are widespread
• Assumption that most organization members are untrustworthy	• Assumption that most organization members are trustworthy
• Most organization members are disempowered	• Most organization members are empowered
• Tacit & local knowledge of most members of the organization must be disciplined by managerial prerogative	• Tacit & local knowledge of all members of the organization is the most important factor in success, and creativity creates its own prerogative

Source: Clegg, Barrett, Clarke, Dwyer, Gray, Kemp & Marceau, 1996: 205

Whilst one could be critical, in a Foucaudian sense, of the notion that embryonic industry required a different form of management than traditional industry, the two lists in Table 1 provided a useful comparison of the new management discourse compared with the traditional or 'old' discourse of management by right. The lists also provided a useful reference of what needed to be 'different' in an organisation. Interestingly the new managerialism, whilst nominally situated in the 'new' paradigm, based many of its tenets on the 'old' paradigm. For instance, its reliance on methods of surveillance, performance measures and assessment strategies belied the assumption that organisation members are 'trustworthy'; the disempowerment of employees through 'flexibility' of employment (discussed in the chapter one); the importance placed on 'managerial prerogative'; and the concept that management is all-important. The notion of a 'new management paradigm' was consistent with much of the literature surrounding 'learning organisations' (see for instance Hodgetts et al, 1994) and concepts of management 'gurus' such as that of 'intelligent leadership' (Mant, 1997).

Performance Appraisal and Evaluation Processes

One of the bastions of managerialism lay in its systems of performance appraisal, a process which it is maintained in this study not only disempowered organisational members, but also alienated them and created an atmosphere of distrust leading to low

morale. Lonsdale (1998) provided a useful discussion of the 'evolution of performance appraisal and performance management ... (systems)... through successive generations' in a higher education environment. He identified four generations. The first of these 'generations' comprised the conventional approach of formal assessments of staff by supervisors using a structured form and providing feedback. Essentially authoritarian, it reflected a control-oriented approach to management and Lonsdale reported that evidence did not support its effectiveness for enhanced organisational performance. What he described as a 'second generation' approach was related to a new industrial award for higher education staff that was determined in 1992. Ostensibly the form of appraisal embedded in this award was designed for developmental purposes but, as it was also used to make decisions in relation to promotion, salary, tenure, performance pay, and study leave, the contradictions proved insoluble and evidence showed that it was also largely unsuccessful.

In a third attempt, based on recommendations in the Hoare Report (Higher Education Review Committee, 1995), and also advocated by the Karpin Task Force (Industry Task Force on Leadership and Management Skills, 1995), staff performance was linked to the direction of the institution and assessments were made in the context of the overall performance of the area in which they worked. While this process was supposedly designed to foster career development and skills enhancement, results were also used for decisions on probation, contract renewal, pay increases, incentive schemes and the 'management of diminished or unsatisfactory performance'. Although the rhetoric was of the team, the focus remained on the individual staff member, with appraisals or 'performance management' being conducted by others.

The 'fourth generation' appraisal regime, proposed by Lonsdale, was described as 'managing *for* performance rather than the management *of* performance'. This process was to be aimed at enabling and encouraging high performance through providing an organisational culture in which individuals feel good about their work (pp 305-311). These characteristics included:
- The encouragement of experimentation and risk taking,
- A non-judgemental psychological climate,

- Empowerment and the encouragement of individual autonomy and responsibility within the framework of collective action,
- The development of a trusting environment in which difference is valued and new ideas welcomed,
- An emphasis on cooperation rather than competition,
- Clarity of purpose and of individual roles and responsibilities,
- An emphasis on the provision of frank and constructive feedback, joint problem solving, positive reinforcement, and the recognition of achievement, and
- Acknowledgment of the importance of intrinsic and socially derived satisfactions as key sources of motivation, as well as extrinsic rewards and sanctions (Lonsdale, 1998: 311-312).

This approach was consistent with what Caulley (1993) characterised as the 'fifth generation' of approaches to evaluation. In this analysis, Caulley builds on the work of Guba & Lincoln (1989) on 'fourth generation evaluation'. The first generation was solely about scores on standardised tests; the second generation focused more on objectives but failed to affect program development; the third generation w.; more concerned with informing program development, supporting decision-making and improving delivery of programs; and the fourth generation involved the stakeholders in the assessment processes in a democratic way to ascertain what information is needed. Fifth generation evaluation processes built on this more democratic approach but also recognised the power relations inherent in the evaluation process and that different stakeholders may hold different values and expectations of a program, that there was 'no single value'. Caulley suggested that this approach was most appropriate for the new industrial relations and the development of workplaces as effective learning environments.

> *Fifth generation evaluation is an integral part of the Beta management style.* Beta managers share power, have a collaborative relationship with their staff and encourage two-way (win-win) communication with them to achieve maximum productivity. Beta managers influence their staff by being assertive rather than controlling and aggressive. Their skills include *negotiating* – persuading rather than directing. A tolerance for error will be required as employees learn to make decisions resulting in greater motivation, responsibility, quality control and productivity. The fifth generation approach involves the combination of a certain evaluation approach with a certain management style (Caulley, 1993: 132-133) (emphases in original).

Lonsdale's (1998) concept of 'managing *for* performance' and Caulley's (1993) 'Beta management style' have much in common with Clegg, Barrett et al's (1996) 'new management paradigm'. All point to an approach to and style of management that

resembles those promoted by 'learning organisation' management theorists and bear no resemblance to the managerialist discursive practices that predominated in the public sector in Australia in the 1990s. This raised the question of the suitability of managerialism as a form of management practice for the 'informational age' of the future. Could it be that managerialism, and the economic rationalism that underpinned it, were a reaction against the revolutionary changes that were taking place and not an inevitable foundation for the future?

The New Institutionalism

Traditional institutionalism was concerned with the ways in which customs and practices became 'institutionalised' or 'normalised' (Foucault, 1979b). The questions that were raised related to how much the old rules needed to be retained or modified,

> Virtually coterminous with political science, the old institutionalism was preoccupied with how to square the circle between innovation and stability by means of a dynamic equilibrium and an open politics (Apter, 1991: 463).

Steeped in, and legitimated by, parliamentary democracy, institutionalism was about ensuring that democracy operated smoothly and 'to reform it so that it becomes functionally as well as morally self-sustaining' (Apter, 1991: 464). Apter identified two critical alternatives that have emerged to challenge the 'old' institutionalism: behaviouralism or developmentalism and the 'new' institutionalism. Each of these had in common an interest in the empirical examination of democracy.

> One might say that the old institutionalism was preoccupied with *libertarianism* and *egalitarianism* and how these can best be realized in and by the state. Political development theory was more concerned with establishing new democratic societies in terms of the conditions necessary for them to prosper. The new institutionalism derives from that part of economics which was once called institutional economics (now virtually disappeared) with an emphasis on labour, social security, fiscal policy, taxation, and social overhead costs, i.e. the activities of the interventionist state (Apter, 1991: 464).

Institutional design social theorists (eg. Goodwin, 1996; Pettit, 1996; Brennan, 1996) have analysed the *minutiae* of institutional change, the forces for and against such changes and the dialectical process of both shaping and being shaped by the mores and context of the larger society which the institutions of society reflected and of which they were an integral part. The result of a multiplicity of forces, these changes have generally been gradual, sometimes unintentional, and seldom the result of grand

designs. The 'new institutionalism' was concerned with a variety of approaches including theories of institutional redesign derived from rational choice theory and behavioural studies. In a review of two of these approaches to institutionalism Cammack (1992) concluded that

> ... while the new institutionalism has opened up a number of promising avenues, and merits serious consideration, there is as yet little to justify the larger claims made for it; and in particular that as it stands it cannot of itself provide the basis for a theory of long-term social change (Cammack, 1992: 397-398).

Offe (1996) adopted an active approach to institutional design. He talked of the emergent problems of 'hyperrationality' and 'mental residues' whereby new institutions tended to imitate one already in existence and 'working'. He stressed,

> ... the importance of a pre-existing mental and cultural capital as a source of social integration and most promising starting point of a bottom-up process of institutional founding (Offe, 1996: 212).

Offe introduced a notion of 'institutional gardening' whereby an existing 'rich vegetation' of institutional patterns could be 'cultivated' and 'harvested' for the successful design of a new institution. He argued that, if these new institutions were to persist there was a dual necessity for perceived 'functionality' sitting alongside the criteria of congruent socialisation (hegemony). He warned of the effect of the 'long arm of the past' that can cause unexpected outcomes in institutional design and identified the failure to inculcate the norms and preferences in members as one of the challenges that can cause breakdown and survival responses from institutions. Other prime factors that he saw as creating challenges included the emergence of viable alternatives and failure in functionality.

In their quest to make believe that history is dead, the 'ruling class' have ignored the tendency of people to recreate the past and to promote their ideals in a new situation,

> Men (sic) make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves; but under circumstances directly encountered, given and transmitted from the past. The tradition of all the dead generations weighs like a nightmare on the brain of the living. And just when they seem engaged in revolutionising themselves and things, in creating something that has never yet existed, precisely in such periods of revolutionary crisis they anxiously conjure up the spirits of the past to their service and borrow from them names, battle cries and costumes in

order to present the new scene of world history in this time-honoured disguise and this borrowed language (Marx, 1852: 103-104).

In the neo-liberal project of redesigning the Australian institutions during the 1980s and 1990s notions of learning from, or even taking account of the past appeared to have had little place. Instead, faith was placed in contemporary endeavours in other western countries where similar economic rationalist policies were introduced, regardless of critical analyses of these efforts.

Chapter one described the rise of neo-liberalism in Australia and its affect on the institutions of society through the radical restructure of the context within which these institutions existed. In her analysis of English research on contemporary educational restructuring, Seddon (1997b) was critical of a research agenda that was limited to that which is defined by markets in education. She proposed the utilisation of institutional design theory to move beyond research on the neoliberal marketisation of education and

> ... tackle the empirical *and* normative work of assessing probable futures and the possibilities of preferred futures in the practical work of educational transformation (Seddon, 1997b: 167) (emphasis in original).

She noted the 'institutional orientation' of neo-liberal restructuring, particularly in education where the context within which educational practice occurred had been revolutionised. This was achieved by measures such as the creation of quasi markets through compulsory competitive tendering for funds, the design of outcome measures and targets, quality requirements and other policies in relation to industrial relations and styles of management. While deploring the application of neo-liberal reforms, Seddon acknowledged the powerful use of an institutional orientation to reform and suggested that this could be harnessed towards a different educational agenda such as the democratisation of education and society and the promotion of

> ... an educational provision and practice which sustains sociality, tolerance in diversity and a capacity for collective choice over the dog-eat-dog individualism of market liberalism (Seddon, 1997b: 169).

The importance of Seddon's work in this field of institutional design is at the macro-level of educational reform. The research that forms the basis of this dissertation fits within the micro-level of the same agenda. As Seddon pointed out,

> Participants subject to these changing institutional contexts experience a different space for action and can choose whether, and how, they will act within it (Seddon, 1997b: 168).

This study analysed the 'space for action' created by the changing institutional design and broader social context and attempted to find an alternative way of working within that context. While it was accepted that one small organisation could not change the larger institutions of society, it was hoped that some pointers to alternative futures might emerge. In terms of the larger research agenda, there was recognition that even small advances in practical applications may assist other researchers whose ability to affect the macro-level is greater.

The significance of institutional design for this study lay in the need to understand the changes that were taking place, to identify the spaces that these changes provided for action and to analyse the dialectics of the changing nature of these spaces. It was also useful to identify the inevitable pockets of resistance that could be exploited. While proponents of the new institutionalism made grand claims regarding theories of social change from within their respective disciplines, for the purposes of this study the argument was that the basis of broad social change was to be found within a Marxian analysis, the result of the introduction of a new means of production. That neo-liberalism and the consequent managerialism were the inevitable outcomes of this change was contested.

Conclusion

While there were some aspects of organisational analysis and institutional design theory that were potentially useful, it was not the purpose of this study to develop one line of argument from within these disciplines or to promote one management fad over others. Rather it was to stand back and attempt an analysis from within the broader perspective of a Marxian framework. Thus theoretical perspectives from within these disciplines that could add to the Marxian framework and analysis were utilised, others that contradicted the framework, were manifestly part of the 'old management paradigm' (Clegg, Barrett et al, 1996), or provided no new insights, were ignored in this instance. This chapter has attempted to blend these theoretical perspectives into a coherent world-view within a Marxist tradition whilst simultaneously conveying that the research was grounded in practice and experience.

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CHAPTER FOUR
Breathing Life Into Training

You can't write the life into training – you have to breathe it in (BLIT, 1994: 316).

Introduction

This chapter traces the development of the educational practice that became the *modus operandi* of the organisation. In so doing it provides a broad canvas to assist the reader to navigate the chapters that follow, each of which takes a particular strand for analysis. Thus chapter five examines teachers' work in light of this educational practice, chapter six takes one aspect, the institution of 'quality', and studies the effects of this discourse on the organisation and its people and chapter seven examines issues relating to project management.

At the time of writing, the educational practice of the organisation comprised the synthesis of the experience of its teachers. This experience had been gained from their years in adult education, including literacy, numeracy, English as a second language, women's and unemployed access programs combined with designing, developing and implementing workplace education programs and conducting a number of research projects over the eight years of the study. Constant reflection-on-practice and responses to changes in the external environment, such as the emergence of 'training packages' to replace old curriculum documents, ensured that it continued to evolve.

This chapter describes both the journey towards these educational understandings and practices as they developed over the eight-year period, the principles and theories that underpinned them, and the key features of the educational understandings and practice at the conclusion of this study. The internal developmental process raised within the group all the differences and contradictions that existed in the world outside. Thus the journey was rough at times and some relationships became fraught with difficulties as roles diverged. This aspect is examined in more detail in chapter five on teachers' work.

In the Beginning

Initially, shared understandings of the group of ESL and literacy teachers were based on an acceptance of current theories of andragogy (Knowles, 1978) or adult learning. These included commitment to the notion of negotiated curriculum (Freire, 1971; Boomer, 1982, 1988; Nunan, 1988, 1992; Knowles, 1990), whereby learners are involved in the process of planning the curriculum,

> Andragogy is a process whereby learners become aware of significant experience, when they know what is happening and what importance the events have. Learning for adults makes education coterminous with life. Student experience counts as much as the teachers' knowledge. This two way learning is also reflected in shared authority in which learners assist in formulating curriculum (Burns, 1995: 233).

This view of adult education runs counter to a 'banking' model of education inherent in the attitudes of some educators that 'knowledge is a gift bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing' (Freire, 1971: 58). Freire proposed the need for genuine communication based on 'authentic thinking' that does not take place in isolation from the real world (p. 64). Learners then become teachers and teachers become learners, and learning is based on joint reflection on reality and the co-production of knowledge through the identification and solution of real-life problems.

> Whereas banking education anesthetizes and inhibits creative power, problem-posing education involves a constant unveiling of reality. The former attempts to maintain the *submersion* of consciousness; the latter strives for the *emergence* of consciousness and *critical intervention* in reality (emphases in original) (Freire, 1971: 68).

Most of the teachers who became involved in the projects that constituted this study subscribed to such notions of critical education. It predisposed them to an attitude of respect for, and awareness of, the knowledge, skills and experience that workers brought to the learning experience. All were adult educators accustomed to working with people from culturally diverse backgrounds and most had practised within workplaces to develop the cultural awareness of managers and supervisors. Thus they brought to the study a wealth of understanding of the ways in which educational practices can disadvantage groups of individuals and how curriculum that is not sensitive to such issues as gender, class and ethnicity can alienate and marginalise certain people.

Some teachers had also employed peer tutoring techniques within the context of workplace education, using mentors from within the workplace to support the learning of individuals. Virgona (1991) reported on the use of these techniques within workplaces and their value for engaging workers in training programs with the help of a trusted 'other'.

> The peer tutoring process facilitates an integrated system of learning which responds easily to workplace issues. The tutors provide support for learners as they apply their learning to their work situation and, as a result, peer tutoring becomes a force on the shop floor (p. 29).

In the area of assessment of literacy and language levels of workers, the common practice within the field was to assess workers from a non-English speaking background (NESB) on the Australian Second Language Proficiency Rating (ASLPR) scale. At the start of this study the new Adult Literacy and Numeracy (ALAN) scales (Griffin & Forward, 1991) had recently been developed for use with English speaking students who were perceived to be lacking in these skills. While the ASLPR scales had been in general use for years, and every ESL teacher was trained in their application, the ALAN scales were contested strongly in literacy circles. A considerable debate (eg. ACAL, 1992) regarding the efficacy of the ALAN scales raged at the time of the Work Placed Education Project and the scales were later formally discarded in favour of a competency-based approach to these skills in the form of a National Reporting Framework. The use of some form of testing was prevalent at the start of this study in 1991. There was however a growing understanding of the dangers of standardised tests and some studies had shown how seemingly 'neutral' tests were in fact 'blind' to gender, ethnicity or cultural issues (Edelski, 1991; Smith, 1988) and notions of collaborative assessment (eg. Lytle & Schultz, 1990; Kearney, 1992) and new evaluation approaches (eg. Caulley, 1993) were becoming more recognised. These new ideas provided a backdrop to the study.

The Work Placed Education Project

Initiated by the Victorian Automotive Industry Training Board and funded by the Victorian Education Foundation, the objectives of this project were to:

1. Research and report on the scope and nature of the literacy and numeracy needs in the automotive manufacturing environment. The focus was to be

primarily on the operator level employee in the context of the Vehicle Industry Certificate.

2. Establish a framework for the conduct of literacy training in the industry
3. Recommend an ideal model for general application (Sefton & O'Hara, 1992: 1).

A national survey of adult literacy and numeracy had been conducted (Wickert, 1990) and the results had raised concerns regarding the extent of literacy and language needs within the Australian workforce, particularly in light of the perception of the need to 'work smarter' and the newly developed training for shop floor workers in the automotive manufacturing environment. Expectations of the industry representatives on the Industry Training Board were that a similar survey of non-trades employees should be conducted to ascertain literacy and language levels across the automotive manufacturing industry workforce. Results were to be used to formulate a set of recommendations, in collaboration with the industry parties on the Board (union and company representatives) for general application across the industry.

The survey methodology (see Chapter Two and Appendix 1) that was adopted for this project included testing of individuals for English language 'levels' on the basis of the ASLPR self assessment version (Ingram & Wylie, 1991) and for literacy and numeracy skills on the basis of the ALAN scales. Involvement of a range of expert users of these scales in the design of the survey, and others versed in the latest academic literature on the effects of testing, ensured that the questionnaire provided the best possible opportunity for workers to demonstrate their skills within the context of an industry-specific survey. Great care was taken to provide information and briefing sessions to workers, in a number of languages and with full union support, prior to conducting the survey. Interviews were conducted by skilled and experienced literacy and ESL teachers under controlled conditions and results subjected to careful statistical analysis.

The survey was finally conducted across 10 different sites in Victoria and 603 non-trades employees were interviewed in the space of 12 working days, across all shifts, by a group of 37 trained interviewers. The profile of the workforce that was gleaned from the results of the survey was:

- 13.8% Female

- 23.5% born in Australia
- 71.3% from NESB
- 52.4% between 20 –35 years of age
- 34.1% of immigrants arrived in last 5 years
- 46.7% of immigrants had been in Australia more than 10 years
- Immigrants came from a total of 53 countries and spoke a total of 67 languages other than English
- One third spoke English at home
- 65.2% claimed English as a second, third or fourth language
- 9.5% spoke four languages (Sefton & O'Hara, 1992: 3).

The random sample represented 6.3% of the total automotive manufacturing operators in Victoria, and therefore could be expected to give a statistically reliable picture. Unlike previous results of literacy and language testing that were based on those who volunteered for English language or literacy classes, the results of the testing from this survey provided figures from a sample that was representative of a cross-section of the workforce (selected randomly from payroll numbers). Results of the testing were grouped into five groups A to E respectively with Group A consisting of those who had demonstrated that they were unable to recognise familiar work-related symbols and common words or to write familiar single words correctly. Group E could read and write adequately to enable them to take part in the VIC training without support. Groups A - C were considered to be dependent learners. The results are given in Graph 1.

GRAPH 1: Reading & Writing Skills by Groups
ESB/NESB Employees
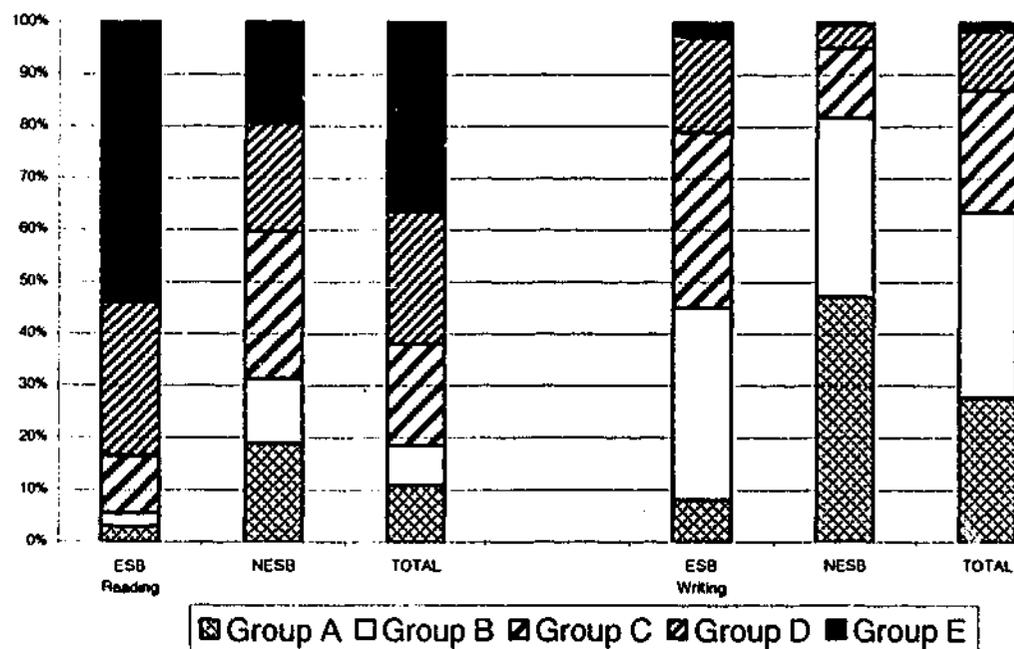
Source: Sefton & O'Hara, 1992: 54.

Several things followed from these results. Firstly, it had to be recognised that the problems were endemic and could not be hidden in a few remedial classes. Therefore, if access and equity considerations were to be taken in any way seriously, the Vehicle Industry Certificate (VIC) would need to be developed into a learning program that took account of these needs, with appropriate assessment methods that were not reliant on English literacy skills, and all trainers would need to be culturally aware and able to respond appropriately to learning needs. Secondly, the linking of training to wage outcomes through awards meant that all of these employees needed direct access to their accredited training program in order to gain access to higher wages. Thirdly, a range of responses was necessary, in the short term, to meet immediate needs while longer term responses were negotiated and trialed.

A number of strategies were proposed. In the short term it was suggested that language and literacy teachers should be involved in teaching the VIC, particularly to those in Groups A – C. This would enable access to accredited training by the huge majority of non-English speaking migrants (71.3%) employed in the industry and those from an English speaking background who had been identified as dependent learners (Groups A-C). The suggested approaches included the development of graded learning materials and the provision of literacy and language support in the form of peer tutoring, learning centres within enterprises, and the development of support materials for the VIC. To support these short-term strategies an industry-specific audit instrument was proposed so that employees could be streamed into appropriate training programs. In the longer term, an integrated approach was recommended and the re-development of the VIC proposed, in a format that would provide a 'developmental approach' to learning with language and literacy skills integrated throughout (Sefton & O'Hara, 1992: 98-101).

All of these recommendations were negotiated with, and adopted by, the industry representatives on the Industry Training Board, which included all the major car manufacturers. They formed the basis of a submission for funding from the Commonwealth Workplace English Language and Literacy (WELL) program. This submission was successful, providing significant levels of funding over three years to implement all of the recommendations.

However, the survey methodology, and in particular the testing process, created its own problems. Such a methodology pre-determined the outcomes in terms of a 'deficit model', which refers to approaches to education and training that assume that learners are in some way inadequate (BLIT, 1994; Gowan, 1993; Hull, 1993). This became much clearer in hindsight and as a result of trialing different approaches in subsequent years. Thus, while every care had been taken to adopt an approach to this task that would give the best opportunity for workers to demonstrate their skills and abilities (Sefton & O'Hara, 1992: 23 – 41; 109 – 149), the results, which framed the workers as inadequate, were inevitable.

Later work demonstrated conclusively that the results still largely missed many of the workplace-specific understandings of the workers and failed to tap into their ability to communicate effectively in the *lingua franca* of the shop floor. This was apparent at one interview at which the researcher was present, when a worker was having difficulty answering relatively simple questions, but burst into a long tirade when the interview was interrupted by his supervisor who wanted an answer to a work-related question. It was apparent that he could make himself understood in the actual work environment. The survey methodology also failed to recognise the degree to which workers were able to interpret data from their immediate environment, but failed to transfer this knowledge to other similar data in a neighbouring plant of the same workplace. Later experience also indicated that many workers make judgements regarding the knowledge of the person asking the question and answer it accordingly. Thus, the answer to a particular question was likely to elicit a detailed response if a teacher was known to have a good working knowledge of the technology, work processes, systems and work practices, whereas a stranger might receive either a very brief or simple response to the same question. These factors and others became apparent in a later project and will be discussed in more detail in the next section of this study.

Nevertheless, despite the misgivings and shortcomings of the survey methodology, without the survey it is doubtful if the remainder of this study would have proceeded, at least not in the way it did. The importance of this initial research project was that it provided a starting point for the industry to implement training for a workforce that was in excess of 70 per cent from an NESB (in Victoria), and the data on which to

base an industry application for government funds to move to the next stage. The training framework that was developed (Sefton & O'Hara, 1992: 91) represented the agreed position of the industry, providing a pragmatic solution to what they saw as a potentially difficult situation and building on structures already in place. They stated that they did not wish to lose their experienced workers who had both high level skills and extensive knowledge of the processes.

However, probably the most negative outcome of this project, exacerbated by general awareness of literacy and language 'deficiencies' through media campaigns and the International Literacy Year (1990), was a change in recruiting methods. Extensive tests were introduced in most large companies ensuring that new recruits to the industry had basic English literacy and numeracy skills. This effectively closed off new employment opportunities within the larger manufacturers for NESB migrant workers and placed responsibility for the development of literacy and language skills back into the community.

National Automotive Language and Literacy Coordination Unit (NALLCU)
NALLCU was established in mid-1992 under the auspices of the National Automotive Industry Training Board (NAITB) with funding from the federal Workplace English Language and Literacy (WELL) program. NALLCU was given a three-fold brief: to develop a coordinated approach to meeting literacy and language needs of workers across enterprises nationally; to develop and refine an industry-specific 'audit instrument' to stream workers into various programs for their VIC training; and the development of materials and resources to enhance the learning modules that had been developed for the VIC.

At the time the VIC training was introduced, enterprise representatives on the Industry Training Board believed that English language, literacy and basic numeracy skills were 'enabling' skills and their acquisition a necessary preliminary to undertaking formal study. Thus the notion of combining the development of literacy and language skill development with formal industry training was initially considered a radical step by the industry. The union position was that all their members should have equal access to the formal training and the concomitant wage rises. By the conclusion of the Work Placed Education Project, and the extensive discussions and negotiations that

accompanied the development of the recommendations from that project, both the union and the enterprises were committed to the short and long-term strategies proposed. Once Commonwealth funds were procured NALLCU was established to coordinate the achievement of these objectives across the automotive manufacturing industry nationally. The generic modular learning materials for the VIC, which had been developed for use across the industry, were to be supplemented with new learning strategies and modified to meet the learning needs of employees.

Initially NALLCU, in consultation with industry, appointed a range of enterprise-based coordinators to undertake the development of the agreed short-term strategies. Mostly these were ESL or literacy teachers who were already working within the particular workplace conducting classes. Thus they were known to the enterprises and acceptable to them. One was placed within the union (Vehicle Builders' Employees Federation, VBEF, later the Australian Manufacturing Workers' Union (AMWU - Vehicle Division) to work on the same strategies within the context of the union training programs for shop stewards and occupational health and safety representatives. All the coordinators reported directly to the manager of NALLCU for the development of a coordinated approach to meet the needs for English language and literacy skills across the industry. Their specific role within each context was negotiated with the particular enterprise/union, but generally included coordinating existing literacy and language classes, most of which became VIC classes, establishing learning centres, and working with industry trainers to develop their skills in working with NESB employees. The terms of their employment included one day a month to meet together for professional development and coordination purposes. Most were only part-time, with the remainder of their time spent teaching, often in the same workplace. The defining feature of these coordinators was that they were all chosen by the particular organisation for this work. They were highly experienced and mostly familiar with the particular workplace and its personnel.

Coordinators each worked with a team of ESL and literacy teachers, from Adult Migrant Education Services (AMES) English in the Workplace (EWP) and TAFE, planning and coordinating classes, establishing support structures and testing workers to place them in relevant training programs. Some of this team of EWP and TAFE teachers found the notion of combining their ESL and literacy teaching methodologies

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with the technical content of an accredited course a daunting task. The content of the course initially overwhelmed the teaching methods in some cases and a few teachers were reluctant to become involved. Others tried to find examples from the workplace to enhance their teaching and a few went to considerable effort to develop learning strategies that were embedded in the workplace. It was the work of these latter that inspired the longer-term strategies adopted by NALLCU.

A small working group was formed to examine issues related to identifying learning needs and design the required 'audit instrument'. Also a much larger reference group was established to act as a sounding board and to be part of the process. They met three times throughout the project and provided valuable feedback and suggestions. Individuals were also contacted on an ad hoc basis to provide particular input.

In 1993 the automotive industry, through its National Industry Training Board, formally adopted a stance that was opposed to the proposed incorporation of separate literacy and language competencies in its industry standards. In a letter to the then Minister for Employment Education and Training, Kim Beazley, they gave the reasons for this decision as being that:

- These may create barriers to successful participation in the VIC by establishing mandatory requirements for particular literacy and language skills at each level. It was the experience of enterprises that employees with varying levels of language and literacy can participate successfully when the focus is on understanding and demonstrating the practical application of complex content and concepts;
- Stating minimal levels for literacy and language skills may have a reductionist effect on the teaching of these skills by limiting it to completing tasks such as 'is able to complete a simple form';
- Placing literacy and language hurdles in levels of the VIC may devalue evidence of thinking skills and understandings of content simply because these are not expressed in a standardised form of English as specified in language and literacy competencies (cited in BLIT, 1994:20).

The process of literacy and language assessment that was finally adopted by the Industry Training Board, on recommendation from NALLCU, was a 'Learning Needs Assessment' (LNA) based on a guided self- assessment, with only those who were at an extremely basic level of spoken and written English proceeding to a full assessment of literacy and language levels. The purpose of the guided self-assessment was to:

- identify learners wanting or needing a full assessment
- gather background information about learners
- inform learners of learning options
- identify need/demand for learning options/types of classes (Waterhouse & Sefton, 1992: 10).

The information that was gathered was to be used to provide support structures that met the identified needs and the expressed desire of the workers to access such support. The decision to attend special classes was intended to be left largely to the individual, however in some companies the practice was to stream people solely on the basis of testing, giving no choice to the individuals. The actual test items that were used in each plant were designed by the teachers working in the particular enterprise, with guidelines and training assisting them to select appropriate material from the immediate environment of the workers being assessed. This approach was consistent with 'learner-centred' assessment (Lytle & Schultz, 1990) and also with what Caulley (1993) characterised as the 'fifth generation' of approaches to evaluation, a democratic model that recognised the different values of various stakeholders, the power relations inherent in the evaluation process and that there was no 'single value'.

The LNA approach adopted by NALLCU proved to be a versatile methodology that was subsequently adapted to different purposes such as selection of group leaders, trades progression interviews and a survey of needs of employees who had failed a number of VIC modules. In practice, however, over time less and less workers were given a full assessment. Following the demise of NALLCU, the practice became only to conduct the guided self-assessment and to work towards building an environment where every individual felt free to ask for whatever assistance they wished and as required. Thus literacy and language classes were sometimes an outcome of training, a result of increasing trust by the employee of both the trainer and the company in which they worked and recognition of genuine opportunities for advancement within the company.

The guided self assessment process survived to the time of writing as a means of informing the curriculum development and undertaking the process of recognising prior learning and current competence. It provided an opportunity for teachers who were new to the particular workplace to form a relationship with potential learners, to

learn about the workplace and to discuss training in a non-threatening environment that promoted the eventual participation in that training. In addition the results of the LNA, in the form of a report to the company, provided the basis of a training plan and an agreed set of strategies to conduct training in the workplace. It allowed the use of enterprise people, rather than teachers trained in the expert use of literacy and language scales, to administer the process following an in-service training program. More importantly, it legitimised and promoted the use of a self-assessment process in the on-going skills assessment that was integral to the training.

Longer-term strategies were initially developed by the curriculum planning officer who was appointed to NALLCU in 1992 to work across all companies and the union. Her own concurrent work in industry training had indicated the efficacy of a different approach to VIC training, and her work, along with a that of a number of her colleagues at the same company, broke the ground for others. Her investigations soon revealed that, despite the provision of government funds to develop generic learning modules, each company was already modifying the training to meet their own objectives and none of the major companies were using the generic modules that had been produced. At the time NALLCU coordinators were still working within a framework of a 'deficit model'.

> The term deficit model is here used as a shorthand way of referring to models or approaches (to education and training) which assume that learners – particularly those not succeeding in the system – are in some way inadequate, incomplete or deficient. Typically, within the deficit model, various remedial, compensatory or bridging programs are proposed to address the learners' deficiencies (BLIT, 1994: 21).

The VIC had been developed by the industrial parties in conjunction with TAFE and accredited in 1990. It was divided into three components – core knowledge, elective knowledge and on-the-job skills – and was not then in a competency-based format. The core knowledge units, apart from the unit entitled 'Manufacturing Processes', were accepted as being generic across-industry units, but the skills and the manufacturing processes were to be developed in-house in each enterprise. These were seen as being non-shared components as they represented the competitive edge of each enterprise. Nevertheless, these components were defined in general terms within the curriculum documentation for accreditation purposes. At the request of industry, learning materials were developed by TAFE, in consultation with industry,

for all the shared units. The content of the knowledge units of the VIC provided generic learning outcomes related to communications, working in groups, problem solving, occupational health and safety, job instruction, employee relations and an overview of the vehicle industry. These were intended to provide a basis for changes in the workplace in line with the restructuring that was taking place and the need for international competitiveness. The elective areas consisted of the specialist streams such as foundry, warehousing, assembly, press shop, and so on, and were designed to provide relevant knowledge and skill for workers within these areas. The skills were analysed on-the-job at enterprise level and organised in groups that suited each specific enterprise. The range and number of tasks that were required in each context was negotiable at enterprise level. The purpose was to encourage multi or cross-skilling within and across areas depending on the needs of the particular enterprise. Systems of job rotation ensured that workers had access to a range of tasks in order to obtain sufficient skills to warrant the issue of the skills units. Training was to be organised for both the on-the-job and off-the-job components and the VIC required completion of 400 hours in total made up equally of skills and knowledge. While this framework provided the opportunity to develop dynamic and innovative learning strategies, this opportunity was lost when the translation of the knowledge units to learning materials became fragmented into traditional modules designed to stand alone and to be delivered in any order. These took little account of how people learn and provided few, if any, links to the particular workplace and its work practices. Also, despite their simplistic format, the modules posed literacy and language barriers because of their abstract nature and linguistic focus. Although each company developed its own learning materials around the enterprise-specific units, they mostly did so in the same modular format. For instance, at Ford each 'unit' was 10 hours in duration and all were totally stand-alone.

In an unpublished discussion paper for industry, Deakin (1992) unveiled the myths incorporated in this view of training, regarding the way in which people learn. Firstly, it seemed to be assumed in the curriculum documentation that skills and knowledge could be taught separately, and that this would become somehow synthesised on the job. Secondly that the knowledge units could be merely related to theory and need not relate to on-the-job competencies,

For example, in Topic 3.5 'Active Listening Techniques', the performance is measured in terms of rote learning – 'the participant will be able to identify (name) four key active listening elements ... when following instructions'. The assessment is concerned with theory not with demonstrating listening and comprehension in a real workplace context (Deakin, 1992: 2).

Many other modules repeated the same words – 'name', 'identify' and 'explain' rather than 'demonstrate'. Another myth that was implied in the curriculum document was that the abstract theoretical language of the textbook is the same language that is used in workplace communication. In relation to one performance criteria – 'identify (name) key factors which limit group effectiveness and ... indicate how each key barrier may be overcome' – Deakin noted,

> ... competence in overcoming real barriers to communications on the shop floor requires the participant to demonstrate quite different language skills (words and facility), communication strategies (negotiating skills, problem solving, thinking skills), cooperative behaviour (assertiveness, confidence, consideration), common sense, insight (awareness of cultural differences) and familiarity with acceptable workplace practice (Deakin, 1992: 3).

Other myths included the notion of utilising written and oral testing to measure competence and that passive classroom learning, based on reading and writing, trains people to behave differently on the shop floor. Deakin also noted the misconception that 'lack of, or minimal, reading and writing skills will necessarily prevent already very competent workers from demonstrating on-the-job competence' (BLIT, 1994: 26). In a study of migrant workers in an era of award restructuring Hill (1990) quoted one migrant worker,

> We have done the work well for 27 years. I understand how to work the machine. I have improved the performance of the machine and I have trained other workers. I am always told that I am a good leading hand. Now they say you need to read and write and pass tests to do the same job I have been doing. That's not fair. The way they give tests, how can anyone pass them? (Hill, 1990: 75).

Deakin (1992) recommended an integrated approach to training that was 'intended to be a living model of continuous improvement within each plant' (p.8). As a result of discussions with various enterprises, and the presentation of this discussion paper, it was finally agreed by the industry, and by the WELL Program, that some of the WELL funds for the development of resource materials would be spent on an action research project to develop and implement a range of the elective units of the VIC in six different companies as exemplars of this proposed 'integrated model' of training.

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The results were to be written as case studies and an evaluation of the model's effectiveness completed. It was up to the staff of NALLCU to approach each company independently to gain permission to undertake a project within its precincts. While there was general support for such a project, it was not so easy to gain the commitment from companies. In some cases the negotiations took so long that the projects were severely hampered in the given time. However, four projects were successfully completed:

- Foundry Elective at Holden's Engine Company (HEC)
- Warehousing Elective at Ford National Parts Distribution Centre (NPDC)
- The first part of an integrated program (knowledge and elective units) for the VIC at Nissan National Parts Distribution Centre (NPDC)
- Level 2 modules of the VIC for the Press Shop at Toyota Altona (BLIT, 1994: 55).

Two other projects were not fully implemented during the project. One at Mitsubishi did not proceed beyond negotiations and when program materials were trialed in the following year they were only available to those with literacy or language problems, not a mixed ability grouping. The other at Mercedes-Benz only proceeded as far as the development of materials, which were not trialed. Thus, although the case studies were written for these two projects, they contributed little to the development of the 'integrated model'.

The aim of the project was to demonstrate that all employees, irrespective of educational background, language and literacy skills, could participate in training within mixed ability and multi-ethnic groups and that their learning needs could be met within this context. In order to achieve this goal the learning program would be 'holistic, relevant and dynamic' and based on the specific workplace context. Teachers were placed in the environment of a particular plant to develop a program in collaboration and consultation with all the stakeholders: managers, supervisors, leading hands, technical staff, shop floor workers and union representatives. The purpose was to provide

> ... a means of involving all the stakeholders in the process of determining what could or should be learnt, how and why. It was also to provide them with the experience and strategies for continuously improving the learning program beyond the immediate project. Last, but not least, it would position learning *about* the workplace *in* the workplace, as part of a working- learning culture (Deakin in BLIT, 1994: 27) (emphasis in the original).

It assisted teachers to develop an overview of the workplace, including organisational features, work practices, its culture and communication networks, and to be responsive to changes in that environment. It also

> ... help(ed) connect together critical knowledge and resources which (were) often fragmented and dispersed throughout the workplace ... (and) ... foster(ed) an understanding that real learning (Neville, 1994) involve(d) new insights, and changing ones mindset (Senge, 1990) (Deakin in BLIT, 1994: 28).

This was consistent with Freire's (1971) concept of 'problem-posing' education that countered the notion of training as a process of transferring information into 'empty vessels'. It moved away from the idea of curriculum as fixed and standardised, placing the responsibility for keeping the program relevant and dynamic on all the stakeholders, and introduced the notion of 'continuous improvement', common to all workplaces, into the development of training programs. Thus participants, or any of the other stakeholders, immediately incorporated changes that occurred in the workplace into the program by bringing them to the attention of teachers. This active involvement in the content of the learning program was seen as part of the process of developing a learning culture within the workplace. It ensured that the knowledge of the participants was valued and that the learning extended beyond the classroom. Implicit in the model (see Figure 2) was recognition of the potential and strengths of employees, building on cultural diversity and language skills, and focusing on the effective communicative, organisational and thinking skills that underpin strategic competence. By couching the program in the language and context of the workplace, utilising its people, networks and resources as integral components of the program and forming mixed ability, multi-ethnic learning groups that reflected the workplace, it was expected that the best opportunity would be provided for all, including those with lower literacy and language skills, to participate successfully in the training program. Importantly, assessment processes also involved stakeholders from the workplace in both design and implementation. Assessments were relevant, practical and contextualised and were not based on literacy and language skills. This systems approach to program development, as illustrated in Figure 2, demonstrates how the generic curriculum of the VIC was contextualised to the specific workplace by integrating an educational framework with the life of the plant.

Figure 2   Integrated Model in the Context of Accredited Training

Educational Framework

Concepts, Values, Strategies
evolved from
Educational Praxis & Critical Linguistics

Holistic Perspective
of
Learners and Learning in the Work Context

Values	Strategies
People Involvement	- developing Collaborative Inclusive Curriculum
Equity in Participation	- participating in Mixed Ability, Multi Ethnic & Designated Learning Groups
Learning Culture	- facilitating Collaborative Enquiry & Experiential Learning
Technical & Functional Elements of Work	- respecting & integrating Work Knowledge, Skill & Function
Existing Strengths & Potential	- developing Strategic Competence
Conceptual Thinking	- developing Reflective, Systemic, Analytical & Creative Thinking
Linguistic & Cultural Diversity	- using Workplace Language & Critical Linguistics
Holistic Competence	- using Holistic Assessment

R. DEAKIN

Curriculum Framework of VIC

Industry Competencies & Standards

Generic Knowledge	Generic Skills
Electives	Core	Streams

Enterprised Based, Stream Specific VIC

Elements of Organisation

* Customer Requirements
* Planning and Scheduling
* Organisation of
  - Material/Inventory
  - Labour Resources
  - Plant and Equipment
* Workplace Technology
* Production Process/Procedures
* Work Practices/Policy
* Workplace Environment & OH&S
* Workplace Communications
* Relationships, Responsibilities, Authority
* Learning/Training, Career Options
* Quality Control and Quality Assessment
* Continuous Improvement, R&D

Competencies to Include

Industry Specific Competencies
Key Competencies
Enterprise Specific Competencies

Stages of Production

An Overview of
Holistic & Sequential
Stages in
Plant Specific
Productive Activity

Implementation Model

Integration of
Essential Content,
Resources,
Learning Experiences
& Assessment
in a Dynamic Learning Model

Source: BLIT, 1994: 29

The educational framework was based on recognisable good practice within teaching circles and did not represent any radical departure from teaching methods that teachers had applied in their school, TAFE or adult education classrooms for years. In particular it incorporated a view of critical literacy in line with Lankshear (1994) who noted that 'being critical implies knowing the object of criticism very closely and accurately; knowing it "through and through" by means of careful analysis' (p.4). He quoted a definition of critical literacy by Ivor Shor that encapsulated the view of educational practice espoused by the integrated model of training,

> ... analytic habits of thinking, reading, writing, speaking, or discussing which go beneath surface impressions, traditional myths, mere opinions, and routine clichés; understanding the social contexts and consequences of any subject matter; discovering the deep meaning of any event, text, technique, process, object, statement, image, or situation; applying that meaning in your own context (Shor, cited in Lankshear, 1994: 4).

Outcomes of the Project

The implementation of the integrated model has been fully documented, and in particular the case studies provided every detail of the research, collaborative processes, curriculum, program implementation, assessment, results and program evaluation for each of the six projects that constituted the action research project (BLIT, 1994: 65-274). This section will provide only an overview and synthesis with some highlights and vignettes to illustrate the educational practice that emerged.

(i) Program Development and Implementation

Teachers in each project immersed themselves in the culture of the workplace, researching the processes, work practices, language and communication patterns, and meeting all the people – managers, supervisors/group leaders, leading hands/team leaders, technical and specialist staff, engineers, office staff, shop floor workers and union representatives. They asked all the 'what?' 'why?' and 'what if?' questions they could think of and thus developed an overview and schematic of the workplace, including sources of raw materials and customers of the final products. They collected work process sheets, documents, defective parts and information. As one production manager commented when asked at interview about this collaborative process,

> Oh, yes, that side of it is going along excellently ... I think they've really got down to the grassroots level and actually got a lot of information from the actual people who are doing the job, but have supported that process by going

and getting the relevant documents, any information they need from engineers, technical people, staff people. They've combined the both (BLIT, 1994: 270)

The senior shop steward in the same plant also commented at interview,

> We never had anything like this kind of thing in the past. This is the first time where actually the union or the people on the shop floor had some input into their teacher or their trainer. ... if we have input rather than somebody who doesn't know what's involved on the shop floor, the people will get a lot more out of it (BLIT, 1994: 270).

And one of the shop floor workers, from another company, who later participated in the program at his plant commented on the teachers and their approach,

> Its been funny because they've been learning as well as we have. (They have learned a lot) by listening to us (employees). They've taken knowledge off us and taken it back and put it in the course (BLIT, 1994: 128).

This sense of learning from one another was also noted by one of the teachers who commented that '... there was a sense of us learning in parallel ways with the students' (p.128). In some plants managers were initially of the opinion that they would supply all the curriculum details. As one warehouse manager noted,

> ... when we started, initially, I thought I could flood (Ann) with all the things I wanted, but very very quickly I found it wasn't so. I realised very very quickly that what you (NALLCU) really wanted to do was ... based on the framework of the VIC ... to develop what we (as management) wanted *but also* what the employee wanted. I was very happy about the way that was put together (BLIT, 1994: 228).

In crafting the learning program from all the information, materials and samples they had collected, teachers had to be mindful of the learning outcomes as prescribed by the VIC. This, however, was seen as a secondary process to be carried out once the real curriculum had been gleaned from the workplace. A matrix was constructed in each case to indicate the way in which each learning outcome was addressed (see Figure 3 on the next page). In the example given, Units 1 – 9 were the construction of the teachers to cover the modules listed, such as 'basic terms', 'types and use of tools' and 'safety'. These units traced the processes as they occur logically in the plant. The key feature of this matrix, as with other examples in other workplaces, was that each area of competence was revisited many times, thus allowing participants time to develop this skill and knowledge and to continuously build on previous understandings.

Figure 3   HEC Foundry Elective: Training Matrix

VIC Foundry Elective	Unit 1 Overview of Foundry	Unit 2 Intro to Metallurgy	Unit 3 Pattern Making	Unit 4 Core Making	Unit 5 Mould Making	Unit 6 Melt	Unit 7 Fettling Salvage/ Quality Assurance	Unit 8 Continuous Improvement	Unit 9 Presentation Assessment
E3.1 Terminology and Processes (16 Hours)									
i Basic Terms	✔	✔	✔	✔	✔	✔	✔		*
ii Steps & Process of Production Grey/ Nodular Iron	✔	✔	✔	✔	✔	✔	✔	✔	*
iii Types use Tools			✔	✔	✔	✔	✔		
E3.2 Safety (6 Hours)									
i Types of Equipment			✔	✔	✔	✔	✔		
ii Purpose & Application			✔	✔	✔	✔	✔	✔	*
iii Safety Procedures			✔	✔	✔	✔	✔		
E3.3 Furnaces (8 Hours)									
i Types of Furnaces						✔			*
ii Operation of Furnaces		✔				✔		✔	*
E3.4 Moulds & Cores (8 Hours)									
i Parts of Mould			✔	✔	✔	✔			*
ii Types of Purpose Cores			✔	✔	✔	✔			*
iii Process of Producing Moulds			✔	✔	✔		✔	✔	*
iv Process of Producing Cores			✔	✔			✔	✔	*
E3.5 Mould Tooling and Pairing (8 Hours)									
i Grating & Feeding Systems of Mould			✔		✔	✔	✔	✔	*
ii Method & Safe Procedure Pouring Mould		✔			✔	✔			*
E3.6 Fettling (6 Hours)									
i Purpose Fettling							✔	✔	*
ii Techniques & Tools							✔		*
E3.7 Casting Quality & Inspection (8 Hours)									
i Causes of variations in Castings		✔	✔	✔	✔	✔	✔	✔	*
ii Process of Monitoring & Rectifying Problems	✔	✔	✔	✔	✔	✔	✔	✔	*
iv Inspection of Casting for Defects		✔	✔	✔	✔	✔	✔	✔	*

* In Individual Cases

Source: BLIT, 1994: 82

Key competencies were integrated throughout and the development of specific literacies, language and numeracy were targeted. In every unit practical activities preceded theory, so that participants had the knowledge of each term through touch, sight, vocabulary, understanding of processes from practice. An example of one such unit (Mould Making) is given on the next page (Table 2). In this particular plant there was a very high proportion of NESB participants. Class notes were provided to participants with vital words missing and a column for notes in first languages and diagrams. Classroom discussion, with time for peer tutoring in first languages, provided the missing words, which were then entered in the notes by participants. The whiteboard filled with words and meanings, sometimes in several languages. This process reinforced the learning at all stages and created opportunities for increasing the depth and breadth of knowledge and for transformative learning experiences.

This outline of Unit 5 was given as an example of the complexity of the curriculum, its language and technical details, and the teaching strategies that were employed. In particular it outlined the ways in which key competencies and literacy, language and numeracy skills were integrated throughout the program.

As can be seen from this example, the collaborative process of researching the workplace was extended to include consultations regarding other aspects of the program. These included negotiating real work projects, participants visiting all areas of the workplace and having the work processes explained by leading hands, supervisors and technical staff and bringing people into the classroom as guest speakers and asking them to field questions from participants. The collaborative process of developing and implementing assessment strategies was also important. It was significant that a total of 78 employees participated in the pilot programs in this project, however 309 people were acknowledged as having contributed to the curriculum development process. These included the participants, 80 other shop floor employees, 96 supervisors, technical staff and managers and 55 other personnel (BLIT, 1994: 281).

Table 2: Mould Making

Outcomes:

* an understanding of the raw materials, sand recycling process, procedures and equipment used in making moulds
* an understanding of quality standards variation in mould sand, process and the consequences

Content:

* sand recycling system, quality standards, tolerance of variations & consequences for mould quality, carrying out selected tests
* scheduling & process of making moulds: monitoring process, measuring variation, identifying consequences & adjusting process
* inspecting finished moulds, gating system, assembling manifold cores, filters etc. in moulds
* inspecting castings for mould defects, cf scrap report
* safety requirements (materials handling, production process)
* making & pouring a mould
* waste elimination/continuous improvement/future technology/work change

Practical Activities:

* Sand Laboratory: compactability test for recycled sand
* Mould Line, Plant 14: demonstration with supervisor - core setting, mould inspection etc.
* Metallurgist: interview & test demonstration sand recycle system
* RMIT: making & pouring (aluminium) a mould with core, practicum at RMIT

Integration of Key Competencies

* working in small/large groups, communicating ideas, experiences
* researching information, analysing, classifying, organising data (schedules, process intent sheets, cope & drag machine, core setter)
* using mathematics/scientific concepts (pressure, ratio, tolerances, gauge reading, charts for compactability)
* identifying variables, problem solving (casting defects), key issues for improving sand systems

Literacy, English Language & Numeracy Skill Development

* acquiring language concepts (sand durocarb, bentonite carbon, composition green sand, mould making, sand recycling, compactability, active clay, schedules, mould characteristics, defects)
* reading (schedules, pattern identification, notes, scrap report, process intent sheets, charts for cope/drag, core setter, compactability)
* writing (notes of interview with supervisor & metallurgist, class notes)
* mathematical concepts (pressure, ratio, tolerances, gauge reading)

Source: BLIT, 1994: 87

Assessment was an integral part of the learning process, based on the context of the workplace and performance rather than literacy-based. It included both classroom activities such as constructing flow charts, models, charts and tables, practical problem solving and defect analysis, interpreting workplace documents and practical exercises in statistical process control such as drawing graphs and making sense of numerical information by utilising tables and charts. Workplace projects required research and analytic skills. Group work included problem solving, meetings and

developing leadership skills. It also served to develop communication skills, cultural awareness and strategic competence. Formal and informal classroom presentations were a regular feature of programs. Final projects were always presented to management with investigative reports (both written and oral) and recommendations for workplace change.

> The standards achieved by program participants were very high, often going well beyond the basic requirements of the VIC... the presentations to management ensured that suggestions were given due consideration and often adopted into the workplace ... Presentations also played a part in promoting the skills, attributes and positive attitudes of employees, often resulting in a change in management attitude towards shop floor employees and their potential in the workplace (Deakin in BLIT, 1994: 307).

One plant manager commented on how much the participants had said they had learned. He was impressed with their efforts 'Their dedication and what they've put into their projects has been very impressive' (BLIT, 1994: 122). A teacher, in conversation, expressed this process as 'teaching to showcase the skills and abilities of our students'.

(ii) Developing a Learning Environment

An important part of developing a learning culture was the feeling of ownership of the program generated in the participants and other stakeholders. As one union official expressed it,

> ... its an important part of the process because it gives those people out on the shop floor the ownership basically ... Instead of management bringing something down and saying this is what your training is, the people on the shop floor are actually involved in developing it. They're all experts out there on the shop floor and you just tap into that expertise (BLIT, 1994: 282).

Managers and supervisors also felt the benefits of being involved,

> ... we've had the opportunity to be involved in the process. I mean having quite a lot of input in the detail. ... It's something that we've always wanted, to be able to have people trained in the expertise of warehousing (BLIT, 1994: 158).

The utilisation of key personnel in the workplace as mentors to assist employees with their project work and answer questions helped to provide a supportive environment for the learners. It also started the long process of change, one that some supervisors found a little disconcerting. The superintendent of one plant, in answer to a question

regarding the role of supervisors in relation to assisting learning in the workplace, noted,

> They're with it, but they're reluctant because what we are sort of saying to the supervisors i... – let the guys make the decision – and the supervisor sort of looks at you and says, but he won't get it right – (and you need to say) – so what? He needs to learn. So there's a bit of a culture change ... the supervisors again, are a little frightened. Luckily at the moment we have some new supervisors, they're coping with it a lot better, ... some of the older one's are finding it more difficult (BLIT, 1994: 126).

The effect on employees was often dramatic. Growth in understanding of their world at work, and the importance of their role within that context helped to build personal esteem and self-confidence. They learnt to ask questions and became actively involved in learning at work. One of the NESB employees in a warehouse demonstrated how change was starting to have an impact on her work life on the shop floor. The training gave her confidence, despite her still-developing English language skills. She declared,

> Its helped me a lot because before I never. Just I work. I never ask anything about anything. But now I know the systems and everything ... now I move around everywhere. F zone, E zone, ... Now I *want* to know everything. You know I went and asked *why* they put the parts like this, why that. You know. Before I never. Always I keep my mouth shut. ... Before I really shy to go and talk to the depot man and the general foreman. Now I got a bit confident and talk to them. Find out my problems and solve them (BLIT, 1994: 160).

Supporting the continuation of this learning on the job after the completion of the project was the main problem identified by some managers. They did not want to lose the momentum gained from the training and as one manager commented,

> ... we've got all these guys that we've lit this fire under, right? And the fire's going like crazy. What am I going to do with them? Where will I put them? So that we don't destroy them or get them browned off and we lose them. The worst thing we can do with something like this is to light the fire and then let it go out (BLIT, 1994: 129).

In a research project conducted two years later (Sefton, Waterhouse & Cooney, 1995) the opportunity arose to re-visit two of these sites and interview some of the same people with the object of discovering if a learning environment had flourished in the interim. In both cases evidence suggested that learning environments did exist. In one enterprise this was necessary to accommodate massive expected changes to the technology of the plant. One interviewee noted that the VIC had given him the

confidence to apply for promotion within the plant and that he was being sent to Spain, and later to the USA, to inspect the new technology being introduced in the next year. As a (new) leading hand there were opportunities opening up for him that were unheard of for shop floor workers in previous years. In the other company, structures and processes had been established to nurture the continuation of a learning environment and to open up communication channels that allowed for innovation and experimentation.

This research on workplaces as learning environments and the effect of learning on workplace change provided some interesting findings including the importance of on-the-job learning, particularly those related to job rotation and opportunities to become involved in new ventures, 'try-outs' for new products, cross company teams for special purposes, or promotion. Those companies that were genuine in their efforts to provide supportive learning environments, and relevant structures, reaped enormous benefits from the results of both informal learning and formal training.

Post-NALLCU (1995 - 1999)

The last year of NALLCU saw vastly reduced government funding for the project. Coordinators were generally employed by companies, and by the union, to continue their work. The core staff of NALLCU became the teachers who had worked on the integrated training project, and their work at enterprise level concentrated on developing and implementing integrated training programs. Some of this work was a continuation of work that had been started in the BLIT project, however a growing number of other companies began to seek assistance with implementing the VIC. Eventually, with on-going funding unlikely to materialise, and the Industry Training Board nervous about the provision of training under its banner, the group of teachers formed a private company to continue its work. This was achieved with the expressed support of the Board, the companies and the AMWU (Vehicle Division), thus allowing the industry to maintain access to the accumulated skills of the group.

While the private training company provided the opportunity for the group of ten staff to work together, it did so in a commercial environment that was highly competitive. Thus some of the valuable developmental practices, such as monthly full-day inservice days and extensive program development time within companies, had to be

foreshortened. Nevertheless, time was made available for essential developmental work. The remainder of this chapter examines some of the educational issues, dilemmas and developments that arose and were resolved in this period.

As work moved into smaller companies that had not implemented any training to date, the issue of on-the-job training and development for the skills component of the VIC had to be addressed. In particular, the on and off-job components needed to be integrated. In order to address this issue two members of staff completed a TAFE Workplace Assessors training course at the National Centre for Competency Based Training, so that they could offer training for the rest of the staff on workplace assessment. The problem that arose was that the course only taught them to assess given competencies fairly. It did not problematise the notion of skills and it did not deal with the identification of skills. To repeat this training for all staff was considered a waste of time. The solution that was reached was to enlist the cooperation of one company, involve officials from the central union, find a willing shop floor worker and spend a day at the company as a group to investigate the skills he was demonstrating in his job. The following notes, written by the researcher from notes taken at the time, identified the findings and the concerns:

> We watched the worker perform his tasks. He took a solid steel bar that had been heated in a furnace, and had a flat already formed on one end, and stamped a hole through the flattened end. We observed the worker, individually making notes of everything we could think of in relation to his job. We then went to a room where we discussed and analysed what we thought he was doing, including where we thought the key competencies fitted into his work. We filled the whiteboard with what we thought was an exhaustive list. Then we invited the worker to join us and fill in the gaps. We found out about all the different jobs for different car companies that went through this work station, the different diameters of the steel and how the press has to be set up for each new task, the measurements that had to be taken; we found out about the planning, organising, job rotation, paperwork, contingency management, hand-eye coordination required to do the job right the first time, counting, etc, Then we discussed with the union the pragmatics and issues surrounding job value and monetary reward and how the way skills are represented can advantage or disadvantage individual workers. We discussed whether it was better to represent all the complexity of the skills involved in the task, thus possibly making it more difficult for workers to attain competency, or to give a more simplified version that might under-value the actual skill required by the worker. And we discussed the role of assessment in this context (Sefton, 1996: 4).

It was clear that only the tip of the skills iceberg (Field, 1990) had been identified through observation of this employee's work. The notion of critical analysis (Lankshear, 1994: 4) was only possible with the insightful contribution of the worker himself to the process of skills analysis.

As a result of this day it was decided that the best people to analyse the skills required to undertake given tasks in particular workplaces were those people doing the jobs. It was anticipated that similar jobs in different contexts would require different skills, and that some people undertaking the same tasks would have different levels of competency, and different skills, to others doing the same task within the same workplace. This had been confirmed by research conducted by Darrah (1992, 1994, 1997) who found that workers with quite different skills could complete the same set of tasks competently. His work and that by Jackson (1994), Stevenson (1994) and Gowan (1993) questioned conventional understandings of skills and argued that the workplace plays a fundamental role in creating and defining skills.

> ... the concept of skill requirements results in a discourse about work that replaces actual workers with typical ones. This simultaneously exaggerates our certainty about assumed skill deficiencies and their consequences while conceptualising the challenge to educators as difficult but at least unambiguous and manageable (Darrah, 1994: 67).

It was apparent that the skills would need to be negotiated and agreed in each new context. They were contextual, contingent on a range of factors, political and value-laden (Jackson, 1994; Stevenson, 1994; Billett, 1993, 1994). As one teacher, in a detailed description of a project in an enterprise, noted

> The industry standards weight skills, prioritise processes and profile elements using some generic dip stick based on the way things usually happen in industry. But nowhere ever seems to be usual (Virgona, 1996: 25).

The politics of work-skill values made all aspects of skill identification and assessment processes an integral part of the industrial agreements. Enterprise bargaining processes meant that these were negotiated at each enterprise individually. Thus, in all training projects conducted by the organisation, the skills listings, assessment processes and review procedures at each enterprise would need to be negotiated individually by the industrial parties and agreed. However, in general terms it was agreed that jobs should be analysed in terms of levels of competence that

reflected the depth of skills of the workers - able to do the job under supervision, able to do the job independently, able to manage contingencies and able to train others in the job.

An Assessor training program was required that would start by analysing and documenting the jobs and skills of the particular workplace with a group of workers who knew the areas of work intimately. The mechanics of assessment was a secondary rather than primary consideration. Such a course was designed and accredited as a private course for the company. But the state training system would not accredit the course in its integrated format, insisting on a more traditional modular approach in the formal documentation and the separation of levels into separate courses. The course had been designed to meet the requirements of smaller companies that had not developed their training plan or conducted any form of skills assessment. It started with the advanced specialist units of analysing the skills and designing the assessment system and then proceeded to train people to assess within this system. Despite the official documentation, subsequent implementation of the course provided flexible, holistic and comprehensive programs that were contextualised to each individual enterprise and based on industrially agreed criteria.

This approach acknowledged the need for skill development and knowledge acquisition to be aligned to the needs of particular enterprises, as an integral part of developing a workplace learning culture and in response to technological change. It was based on a view of skills that was being advanced in the literature at the time of the need for 'embedded technical knowledge' (Billett, 1993, 1994; Garvin, 1994; Sweet 1993), a broad technical training that is embedded in the technologies, work and production organisations of the enterprise, rather than task-specific learning that focused only on functional aspects of particular jobs. This involved learning from experience and learning by doing, moving from the practical to the theoretical. Solving problems and learning from mentors in the workplace were seen as important aspects of highly skilled work performance,

> Operating knowledge can be arrayed in a hierarchy, moving from limited
> understanding and the ability to make few distinctions to more complete
> understanding in which all contingencies are anticipated and controlled. In this
> context, experimentation and problem solving foster learning by pushing

organizations up the hierarchy, from lower to higher stages of knowledge (Garvin, 1994: 23).

As a result of their study into processes of skill formation in British firms, Campbell and Warner hypothesised that there was a need for

> ... hybrid (or mixed) skills where workers and managers will have less specialised training and broader ranges of taught capabilities to cope with the evolving technological challenges (Campbell & Warner, 1992: 40).

Clegg (1990: 215), in his study of organisations, found a common thread of 'a process of enhanced and concentrated skill formation creating a new type of worker' who is 'more tightly coupled into an overall structure of managerial control'.

The fragmentation of skills into narrow tasks mitigates against an holistic approach to workplace learning (Gribble, 1990; Brown, 1991; Scott, 1991; Gee, 1992; Kofman & Senge, 1993; Field, 1990), particularly learning that results in changes in behaviour in the workplace. The group's experience with industry and a research study, mentioned earlier, conducted for the ANTA Research Advisory Council (Sefton, Waterhouse & Cooney, 1995) supported these views, stressing the need for a multi-faceted approach to developing a learning culture in organisations.

The 'Tickcart' Project – Authenticity, Teamwork & Collective Competence
In designing a VIC program for Tickford Vehicle Engineering, the two project officers researched the product development process undertaken by the company when modifications, enhancements and special models were designed for Ford cars. They found a complex process of product concept, design, trial and production, each of which was undertaken by a Product Development Team. In order to develop an authentic training program for shop floor workers that would make this process explicit, a simulation exercise was proposed.

> The client group for training was therefore the shop floor employees but we designed a program that would involve the whole company – designers, engineers, quality people, finance people – in an effort to build bridges and unite the sub-groups. The nub of the program was the simulation of the company's design and development process applied to building billy carts. ('Tickcart') teams duplicated the roles and functions of each of the players in the product development teams. They would develop and test a prototype then build another two duplicates. For us, the trainers, the program design involved tracing the processes, defining the players, developing job descriptions,

following the paper-trail and making it transparent to the (Tickcart) teams. The trainees grouped themselves into four teams. Each member had a different role. Corresponding people from actual project teams worked with the (Tickcart) teams helping them to understand their work. Each team was given a budget of $60 per cart. A group of school children became the customers. An alliance was built with a local school who assisted us with market surveys to determine some of the specifications. Later the children tested the prototypes and finally joined in the carnival day. The finished products were donated to charity (Virgona, Waterhouse & Sefton, 1998: 5).

The key feature of this program that set it apart from other integrated and contextualised programs conducted by the training provider was its team-based structure and assessment. Teams had to work cooperatively and creatively to achieve their goals, including meeting budgetary and time constraints. They were given access to specialist expertise within the company and they had to demonstrate competence in strategically utilising that expertise to supplement the collective skills of their team. It was clear that skills were not evenly dispersed, however teams became adept at accessing the special talents of some individuals, both from within and outside their team, to compensate for the gaps and weaknesses in the skills of others.

This team-based approach was close to the reality of the way work was achieved in the workplace and matched Gee's (1997) notion of a 'community of practice', which located knowledge and work practices within the company culture, rather than the individual.

> Tacit, extensive, distributed, dispersed knowledge, dynamically developed in a coordinated network of people, tools and technologies serving multiple, integrated and overlapping functions – that is what I mean by a community of practice ... people are bonded to each other only secondarily through their primary cognitive and affective allegiances to the practice ... When the practice changes the teams change. The community of practice is like an organism that is not identified by its ever growing and dying cells (team members), but by its trajectory through space and time of its efforts and endeavours – its ever changing and improving practice (Gee, 1997: 79).

An integral part of the culture at Tickford was its identity and connections with the motor racing world, including the sponsorship of the 'Tickford 500' race for touring cars. Therefore it was no surprise when the managing director suggested that an element of competition be added to the Tickcart Project. One team, achieving the highest aggregate points across a range of negotiated criteria, would be the winner. Part of the assessment would be the testing of carts for handling and speed by the

Tickford test driver, professional racing driver John Bowe, at the Calder
Thunderdome race track. In the words of the managing director,

> They've got the intellectual exercise of actually designing it, they've got the
> inquisitive exercise of going to talk to people to find out just what the market
> needs. They've got the risk involved in, goodness we're not actually going to
> meet this date, we've got to work overtime and destroy some of our plans in
> order to meet our promise. They've got the challenge of being in a race,
> because you know there's going to be a winner. And that's what happens in
> the real world. So all these things are coming together (Virgona, Sefton,
> Waterhouse & Marshall, 1998: 87-88).

The notion of competition introduced here was intended to mirror the type of
competition that existed between car companies, rather than introducing a narrow
concept of inter-team competition that existed inside some companies to promote
higher productivity.

The authenticity of the program was also confirmed by a senior designer from the
Ford Motor Company, brought in on 'Judgement Day' to assess the design of the
Tickcarts, who stated,

> ... we go through the same process of development as these people do here
> with these billy carts. We go out, we look at the demographics and the people
> we are trying to sell our cars to, we research, we actually go into the cost,
> weight and feasibility issues. We also go out and market research our products
> (p. 70).

Legitimacy for the program came from the support given by the managing director,
and the seriousness with which his senior staff applied themselves to their roles of
explanation, practical support for teams and skill sharing. The managing director
demonstrated his understanding of the value of the program in changing the
workplace culture when he described the results in these terms,

> There are interpersonal relationships now developing between the guys on the
> shop and the guys in the office ... It's relationships, which are developing
> across the factory without the rigours of normal factory disciplines and the
> normal factory reporting lines. It's something that is spreading quite normally
> and that's great to see (p. 87).

He saw a future when supervision was a thing of the past and people worked in self-
directed, cross company teams. He wanted the training to stretch employees so that he
could utilise their skills creatively within the company's 'community of practice'.

Emergent Design

A notable feature of this program, as with other programs, was its changing nature. It evolved gradually, was honed in practice and, although the outcomes were similar, the program was not conducted exactly the same way twice. In all three groups undertook the program and each time the program improved. This came about through teachers learning from their errors in judgement, as a result of suggestions from participants, feedback on design from charities who accepted the donated carts, and suggestions from management. Thus the second group had to include adjustable seating and a brake. The third group, being a much smaller group, was given a totally different task. They were asked to design a vehicle, consisting of a prime mover and a carriage somewhat like a recreational train, able to carry about six children. The 'T-Machine' was designed to lend to schools and charities for fund-raising activities and for open days at the company.

> The team was set a target and was offered limited guidance on how to achieve the end product. They were required to work together to decide on a pathway and to use the resources of the company to assist in problem solving (Virgona, 1999: 10).

Like the other groups that had developed the Tickcarts, they were taken through the basic stages of a company product development team and their processes were expected to mirror those of such a team. The budget for this project was a little over $10,000, outside the time of senior staff in the company. As a measure for creating and maintaining team energy, direction and commitment, the managing director offered encouragement and recognition to the team and conveyed trust that the team could overcome any obstacles and achieve the outcomes on time. Because the vehicle was to be used by the company as a marketing tool, it needed to symbolise the values and identity of the company.

> This level of significance is very daunting for the training group. The investment of time and energy of the management group further endorses the level of recognition. (The managing director) is seeking to achieve a sense of excellence from his employees. He is striving to challenge and stretch his people. Such values are constructed within the discourse and demonstrated in the workplace practices as part of the work-cultural development process (Virgona, 1999: 15).

In this case it is the managing director who is stretching the program far beyond the bounds of the teachers' creativity. The size and importance of the project appeared to

overwhelm the participants who were 'somewhat unhinged by the open-endedness of the project' (p.15) and who demonstrated some resistance to his idea of them carrying the project through to completion, which lay outside their training program. They did agree, however, to come up with a plan on how the project would be completed, including any assistance they might need if they decided to complete it themselves. As the managing director said,

> They've got to determine how they want to go forward.... The next step is for them to have a plan. I don't think it really matters (what they decide)... It is their plan that really matters (Virgona, 1999: 14-15)

The boundaries of the training were flexible enough to merge with company directions and priorities. The program design was outcomes oriented, so that the content could vary while the outcomes remained the same. Thus, as new opportunities arose the program could adapt to make full use of these new learning options. Importantly, while the details could not be anticipated in advance,

> ... such learning could be predicted or presumed, even if not in detail. The emergent design was not shapeless or empty, it was crafted with intent and an understanding of the range of possibilities and likely outcomes. However, it was also crafted with a light touch, with sensitivity to the possibilities, and a creativity to respond to them and develop them to their fullest potential of learning (Virgona, Sefton, Waterhouse & Marshall, 1998: 108).

Unintended Outcomes

Just before 'Race Day' for the second group of trainees the managing director, proud of 'his' training, wrote a national media statement and released it through the Ford press network. A newspaper in Queensland ran the item, resulting in a call to the company by workers at a remote aboriginal community who wanted 'some patterns for a billy-cart' for a community activity. The managing director said 'I think I can do better than that'. He called for volunteers from the shop floor and eventually 11 volunteers travelled to Queensland by minibus with all the equipment and materials they might need, and worked with over 400 aboriginal school children building and racing billy-carts. They were away for 12 days and claimed it as a wonderful learning experience (Virgona, Sefton, Waterhouse & Marshall, 1998: 95-103). Working with this community has become an annual event for employees from this company and the general manager declared that he would continue to send them as long as the community wanted them. The community activities have demonstrated to him that his employees can work in a team, in unforeseen circumstances and without supervision.

From his perspective the investment in training, both formal and informal, has paid off in productivity, morale of the workforce and their commitment to the company. It has also indicated the potential of employees and their ability to adapt to a new environment.

Conclusion

As result of these deliberations, research and reflection, the educational practice of the group gradually evolved and began to extend the boundaries. More use was made of existing structures within workplaces to provide learning opportunities, more support was given to people as they worked to apply their learning in context, critical incidents were used more effectively, and unintended outcomes of training were exploited. It became obvious that enterprises with managers who had a commitment to training and the development of a learning culture were able to extend the learning opportunities beyond the scope of anything that teachers could envisage.

Whilst the Tickcart example represented one of the most positive workplace learning environments, it was mirrored to a large extent in a number of other enterprises. However, some were not so positive. There were examples of managers who would not listen to their employees' suggestions, who saw no value in their efforts to improve the workplace, who refused to implement any changes initiated from the shop floor and who consistently denied any value in workplace learning. As might be expected, these managers found that the workplace received little or no benefit from the training of their shop floor operators. Fortunately these companies were in the minority. They did exist, however, and teachers were discouraged by their inability to make their training effective in these workplaces, despite the holistic, integrated and contextualised program they designed. These experiences show how the training is contingent; necessary but not sufficient in itself to facilitate change.

At the time of writing new training packages were being introduced within the national training system. These appeared to have the potential to complement the educational practice that had become the *modus operandi* of the organisation. But it was early days and not many training packages had been produced. There was some concern that the performance-based nature of the assessment could lead to an assumption by some people that all training could be completed on the job, while

people were working. This would allow little time for reflection and conceptualisation. It was realised that, if this approach is adopted, the implementation of training packages could become problematic. However, the positive response from industry for the training that has been described in this chapter suggested that training packages would not pose a problem to this training provider.

This chapter has been restricted to a description, within an historical and theoretical context, of a particular form of educational practice of teachers. It has not investigated what effects this practice, in a workplace context, has had on the work of teachers. This aspect will be explored in the next chapter.

CHAPTER FIVE
Teachers' Work

> ... my most memorable and powerful episodes of professional practice were those where my work was enriched and invigorated by the 'things that mattered' to me. At its best my work involved a kind of personal-professional synergy, each domain feeding the other. Conversely when my work did not enable me to deal effectively with what I considered to be the 'things that mattered' my professional practice was unsatisfying, frustrating, lacking energy and dynamism. I'm talking about a kind of synchronicity or correspondence between core values and professional practice (Waterhouse, 1999a: 10).

Introduction

While this study is primarily on project management and organisi ional development, the management and administrative structures, processes and procedures that were adopted were designed to support the work of the teachers in workplaces, and, in turn, the learners. Thus they grew from the bottom up, or in the thinking of the organisation, from the top down, where the students were at the top of a reversed pyramidal structure. Thus the previous chapter examined the development of the training model and educational practice that formed the *modus operandi* of the organisation. This chapter examines the way this form of educational practice affected the day-to-day work of teachers and the next chapter will examine the organisation that evolved to support and facilitate this work.

A growing body of research has focused on the perceived deskilling and deprofessionalisation of teachers (eg. Braverman, 1975; Apple, 1985b; Hoyle, 1995; Brown et al, 1996; Ozga, 1995, 1996; Lawn, 1996, Spaull, 1997), both within school and TAFE education. At a curriculum level within TAFE the development of competency based training led to a plethora of centrally developed standardised modular learning materials, often based on a self-paced learning model that effectively de-skilled teachers who became mere deliverers of pre-packaged curriculum. The previous chapter looked at the more holistic and demanding approach that was adopted in this study, one that required the up-skilling rather than down-skilling of teachers and utilised and challenged all their professional skills. This chapter will examine how this educational practice affected teachers' day-to-day work.

At an industrial level, the effects of restructuring and the modern labour process on educational practice has created a number of concerns amongst teachers (Spaull, 1997). Even in the state schooling system significantly higher work loads have intensified teachers' work, testing regimes imposed from above have undermined their professional judgement, teacher surveillance and review systems have intimidated and disempowered them, and government campaigns to undermine their union have weakened their collective power to respond (AEU, Victorian Branch pp 1-2, cited in Spaull, 1997: 290). In TAFE the same processes have occurred, exacerbated by the systematic destruction of employment conditions such as permanency and wage levels, with sessional and short-term contracts becoming the normal mode of employment. Industry experience, always considered important in TAFE, has become the primary consideration and short-term 'trainer training' has largely replaced teacher education programs (see Seddon 1997a: 240).

This aspect of teachers' work is touched on briefly within this chapter and in more detail in the next. Suffice it to say at this point that most of the teachers in the organisation came from a strong union base and were dismayed to find that the Victorian Branch of the Australian Education Union (AEU), which quite rightly opposed the privatisation of the public sector, would not cover them while they worked within a private training organisation. They were forced into another, less militant union and their experience and membership was lost to the union which saw itself as representing only the public sector. Many of the teachers deserted the public sector for the very reasons the AEU articulated, and their educational practice and the way it was organised provided an alternative that was not part of the AEU platform. For some, leaving the public sector was a question of no longer being able to operate effectively from within. As one teacher, who left a permanent position within the teaching service, explained in a general staff discussion, 'I have found it really important to work in an environment where my politics and my ethics are not in conflict with my practice'.

Seddon (1997a) described what some administrators called the 'dinosaurs' in TAFE, the teachers who cling to their educational practices and principles and do not want to change, and the 'cowboys' who have dived into the new training agenda with much

enthusiasm and little thought. As she surmised, there may be a middle road whereby thoughtful educational practice can inform a new training agenda.

While the work of other teachers within the NALLCU project was also different to work that was being conducted by their peers in other organisations, this chapter is primarily concerned with teachers' work within the paradigm of the integrated and contextualised training model described in the last chapter.

Background and Contextual Issues Facing Teachers

When the NALLCU project officers undertaking the action research project first entered the workplace, they found themselves at the centre of a whole range of pressures, expectations and existing training-related activities. Although they believed that the integrated approach would be effective, a belief based on previous teaching experience, the industry had yet to be convinced. Training that had been conducted over many years within enterprises was quite different. It was with some reluctance that mere ESL and literacy teachers were allowed into workplaces to attempt such an experiment in the 'mainstream' of industry training.

> Mainstreaming the issues of English language, literacy and numeracy by perceiving them as integral to the training context was an innovative approach that denied most existing practice. It also placed the projects in the midst of a political and industrial context which required different skills of project officers from those commonly thought to be needed by literacy and language teachers (BLIT, 1994: 276).

In order to conceptualise the task that confronted them, their role within the broader context was discussed at length within NALLCU. Figure 4 (see next page) summarised the results of these discussions and analysis. As can be seen from this diagram, the integrated training model was perceived as being located in the middle of a whole range of competing activities within workplaces. Teachers working within this context needed to understand these agendas. They needed excellent negotiating skills and political nous to operate effectively and achieve the task they had been set. In addition they needed to understand the nature of the collaborative process of curriculum development they were expected to undertake. Figure 5 (see next page), in an initially more crude form (Sefton, 1993: 46), described this process as project officers came to understand it, including the on-going nature of the process.

Figure 4: Integrated Training and the Workplace Reform Agenda
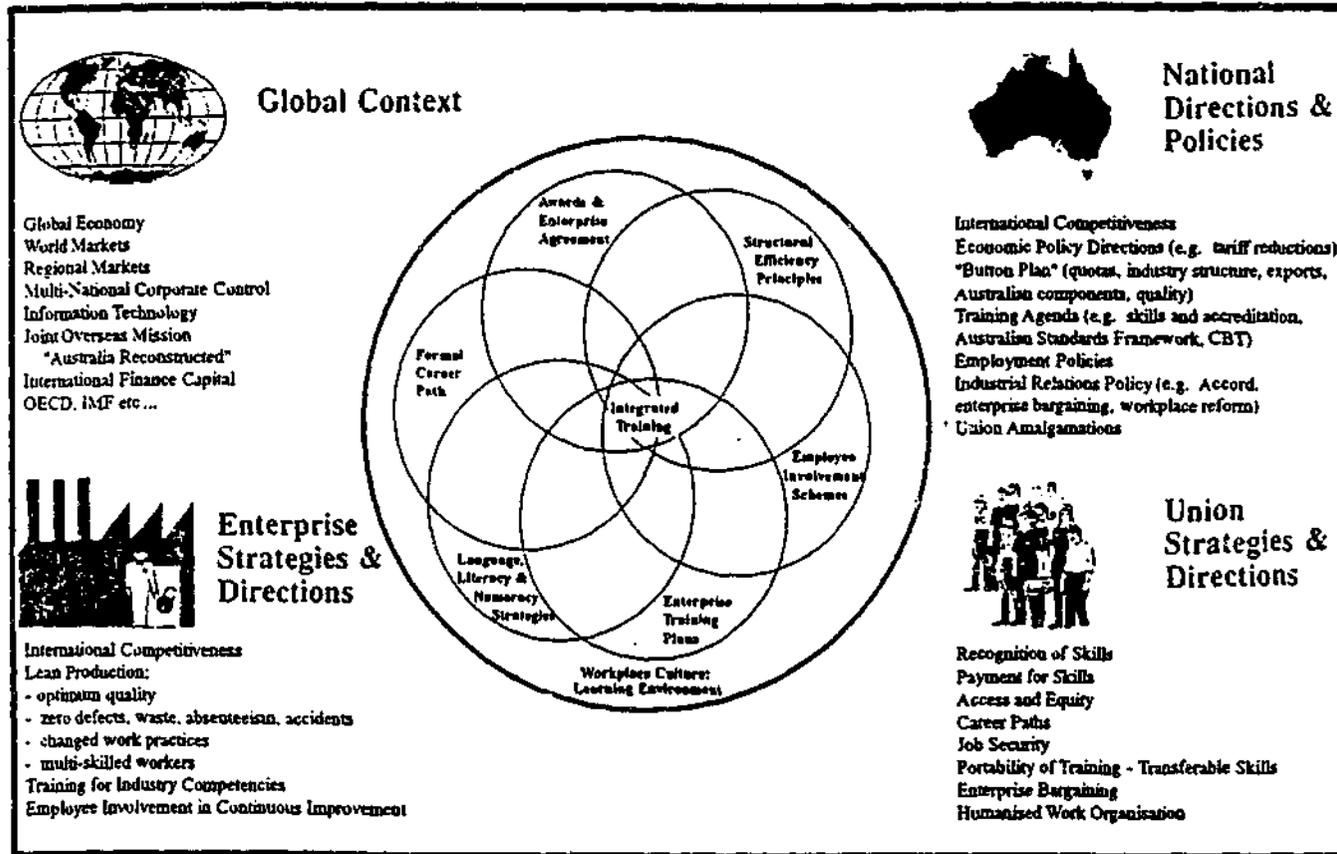
(Source: Sefton, 1993: 50, reprinted in BLIT, 1994: 16)

Figure 5: A Collaborative Process of Continuous Improvement in Training
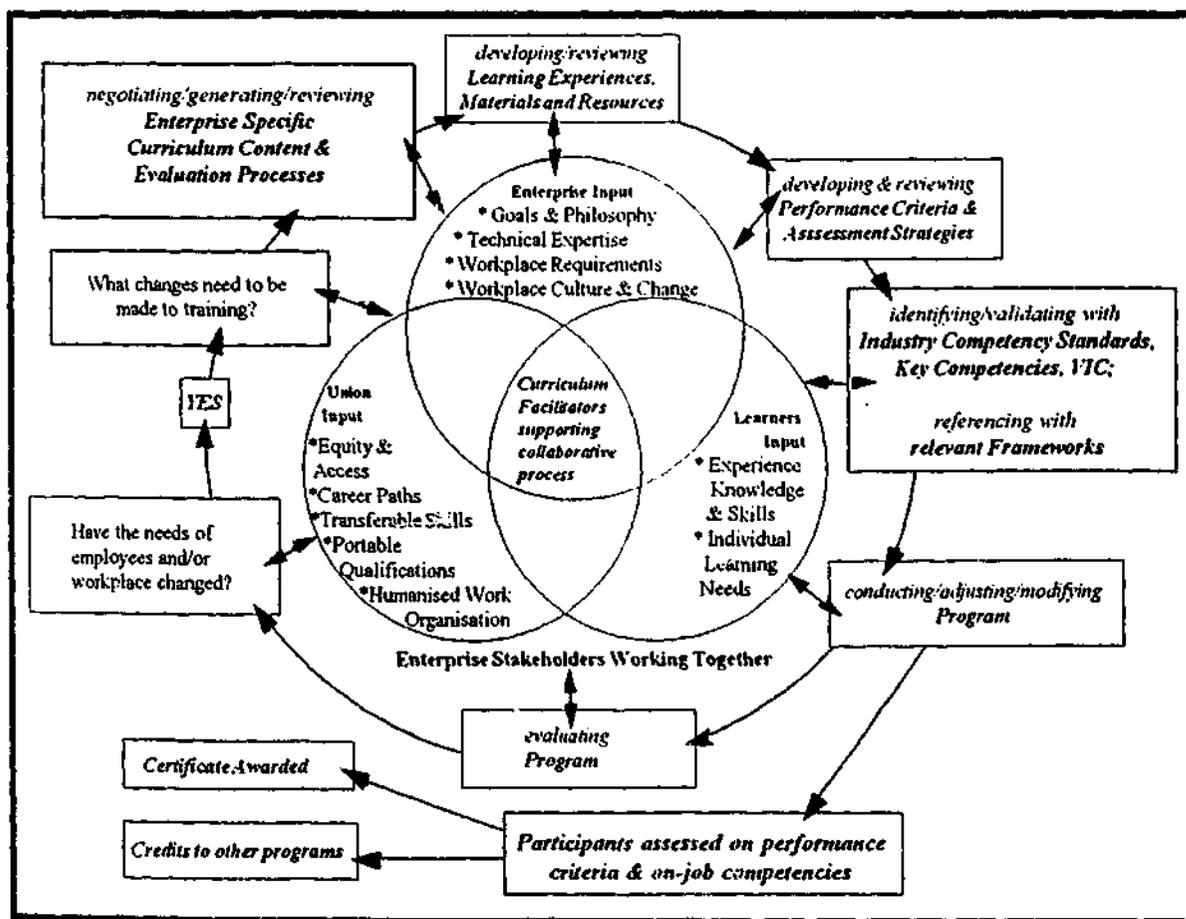
(Source BLIT, 1994: 27)

Project officers were expected to work with the stakeholders to develop and implement a training program that met the, sometimes contradictory, requirements of all these groups and individuals. It was clearly understood, however, that their prime consideration and orientation was always to be that of their students, the shop floor workers. In the chaos that sometimes reigned during workplace reform, they were expected to find ways of meeting the full range of expectations of stakeholders in ways that provided 'win-win' scenarios where everyone benefited. Most particularly they should not contribute to work intensification and increased exploitation of employees. An holistic approach was required that would help shop floor operators to view their role within a broader context.

At the same time it was understood by these teachers that most of the rhetoric expressed in the workplace reform context would not flow through to real workplaces. The space for them to operate came from the rhetoric surrounding 'learning organisations' and the workplace reform agenda, and the nominal support within some enterprises for these concepts. Teachers recognised that, while some managers might use the rhetoric, most enterprise personnel concerned at the coal-face would probably have little understanding of what this meant in practice. The reality of managers and supervisors was likely to be embedded in the taylorist processes that were still used in the workplace, and the systems, procedures and supervisory methods that had served them well in the past.

To exacerbate the situation, particularly in the pilot programs of the action research project, these teachers were viewed as literacy and language teachers, not technical experts, by both workplace personnel as well as by TAFE and other industry trainers. In some cases there was an insistence by the enterprise that they work jointly with TAFE technical teachers to ensure that they got the technical information 'correct'. Unfortunately the notion of the integrated model was foreign to these technical trainers, for most of whom a modular approach was both acceptable and preferable. Not only did the NALLCU project officers have the burden of the government agenda, that training could make Australia more internationally competitive, the enterprise agenda, that training would affect the bottom line of their business, and the union agenda that all their members would have equal access to training. They were also expected to meet the NALLCU agenda - that they would come up with a model

of training that had the potential to change the way training was delivered in workplaces.

As a prerequisite, teachers needed to view shop floor operators as skilled and competent workers whose cultural diversity represented a strength, not a deficit, and they needed to enter the workplace with a humble approach, knowing they had much to learn. Thus, they entered the workplace as both educators and as learners. As educators they were determined to bring their knowledge of how people learn to bear on workplace education. They believed that the dichotomy that had developed between education and training was false. In the words of Seddon (1994)

> What is at stake in the current education debate is not, therefore, the question of education *versus* training. The divide between educators and trainers is a consequence of an unrealistic and anachronistic hang-over from liberal meritocracy which only obscures how much they have in common. The issue is rather as Hodkinson (1991) argues, the question of progressivism *versus* conservatism on the terrain of vocationalism (Seddon, 1994:79) (emphasis in original).

Thus, as educators, these teachers believed that they had something to offer to industry training that they perceived was missing from the traditional competency based approach at the time. On the other hand they entered these workplaces as learners. The content they needed to incorporate into their training was embedded in the workplace (Billett, 1993, 1994; Garvin, 1994; Sweet,1993) and they needed to coax the curriculum from the context, the technology, the work practices and the people. They needed access to the paperwork, the stories, trends, systems, technology, logistics, language and terminology. Most importantly they needed to approach the workplace with the eye of an outsider and ask all of the 'How?', 'Why?' and 'What if...?' questions they could think of, in order to develop an overview and an accurate knowledge of the processes and procedures.

In order to undertake this work, NALLCU sought teachers who could demonstrate a number of criteria,

> These included their tolerance of ambiguity, uncertainty and change, their capacity for risk taking and for innovation, ability to teach across many technical areas, their political savvy and awareness of many cultures (Gee 1990), both organisational and social, operating in the workplace.

Each teacher had to contextualise an accredited curriculum, taking into account the specific workplace culture, in order to understand and draw upon the life and language of the plant. They had to assume multiple roles: that of teachers, researchers, curriculum writers, consultants, facilitators and brokers, as well as being learners in this process. The task was to assist the various stakeholders to work together to design a learning program which reflected the realities of the workplace and acknowledged stakeholder needs without being limited by contextual functionalism (Deakin, 1996: 9-10).

This vas no small task and this chapter explores the way teachers performed their work in this context.

Getting Started – Developing Relationships

The theory was one thing, but the reality for teachers was often different. For instance, in one workplace the first meeting of the Project Steering Committee had set the scene for the two project officers to begin their work. The members of the committee left and the two project officers were about to start work when they were called into the senior plant manager's office. They were then subjected to a two-hour tirade of what he expected to get from the training, how it would all happen, and how he expected them to operate. While they were still listening to him the senior shop steward in the plant rang NALLCU and told the manager that 'those girls are spending too much time with the manager'. It turned out that the office staff, who could hear every word the manager uttered, expected the project officers to walk out and never return. In this plant, the project officers had to split their (half-hour) lunch break in the canteen so that they spent exactly half with the staff and managers and the other half with the shop floor operators, thus giving all parties equal access. It was indicative of their skills that near the end of their time in this workplace both this senior manager and the senior shop steward, in the context of a steering committee meeting, commented on how pleased they were that their (separate) agenda(s) had been met. However, at the time, it was two shaken teachers who proceeded to the shop floor to begin their work.

The initial learning curve for all teachers entering a new workplace was very steep. There was first the question of protocol – who to talk to and whose permission to get to do so. An understanding of the workplace hierarchy was essential. Attention had to be paid to dress regulations – in some cases steel cap boots were mandatory, safety glasses and ear plugs nearly always so. Then there were the channels of

communication, both formal and informal. The key people were often not the same people as the 'important' people, but teachers had to be careful that they did not put anyone off-side. Relationships had to be built, 'blockers' to training won over or by-passed, training 'champions' identified and used effectively to help overcome the effects of the 'blockers'. In other words, project officers had to immerse themselves into the workplace culture. In the context of the 'Tickcart Project' Virgona coined the term 'enterprise thinking' to describe this process. As she explained,

> Enterprise thinking does not mean management thinking; it involves thinking that is conversant with all the stakeholders. Nor does it mean industry thinking because the company may not be representative of the industry. But it does mean becoming sufficiently fluent with the language and culture of industry, the discourses and the *lingua franca* of the workplace. For educationalists it means hearing where the drive for change is coming from in a specific company ...

> (It) is about riding the currents of the company and turning them into educational opportunities. It is about using workplace processes as the vehicle for educational aspirations and it is about being conscious of the cultural traditions that have shaped the observer's thinking and blinded him/her to the things that matter to workers, unionists and industrialists (Virgona, Sefton, Waterhouse & Marshall, 1998: 110-111).

Teachers needed to achieve this type of thinking if they were to be able to work effectively. And this took time. In the words of one project officer,

> You can't take short cuts in your relationships with people – and the other stuff doesn't flow unless you build your relationships with people. That's my feeling about it ... if you want to work in with the people in the workplace, because you have to remember this (program) is an infinitesimally small part of their lives, you have to build the relationships, and you can't take short cuts.. (BLIT, 1994: 236).

Some project officers poured some of their reflections, frustrations, bright ideas and breakthroughs into their 'red books'. A recent example of one such entry is included in Appendix 5. This vignette was shared with other staff, who identified closely with the experience described, and who all agreed that it does not get any easier as time goes by - every new workplace provides the same challenges. The only advantage after working in many such workplaces is that they have some experience of coming out the other side. In this case Ray has been asked to conduct Frontline Management Training for group leaders. The curriculum has been designed, classes planned and schedules organised, but people were not notified through the nominated channels. So

they were not turning up to class at the appointed times, either because they did not know or because other work had taken precedence. Ray has taken to the shop floor again in an effort to gain some commitment to the program from prospective participants. He already has a relationship with most of the people, but as yet many have not committed themselves to the training. This entry is quoted in full in Appendix 5, reproduced exactly as written, in a poetic form, because it gives a vivid picture of the realities of the workplace and of the teacher's work in this context.

As an experienced campaigner, Ray demonstrated his understanding of the workplace realities of a group of middle managers who were rushing to get their work completed, and who had no time to stand back and reflect on what they were doing in order to find better ways of operating. He knew from his experience that the 'breakthrough' would come when, and if, they 'push(ed) through perceived time constraints to create space and time'. Fortunately Ray also worked at another workplace where this had already happened and the results were exciting. He knew that this was largely the result of the commitment of senior management to the program and the follow-through into work practices, a pre-condition not evident in the workplace he described here. However, things have been known to change, so he cheerfully kept on trying in the hope that this would happen here as well.

Ray knew the need to build respect and trust, so he did not push unwanted into break times or earnest work-related discussions. He was used to finding the space he used for office space taken for other more important business – space was at a premium in this workplace, and in most others. His experience, empathy with these busy people, and his understanding of workplace realities and the difficulties of establishing a learning environment stood him in good stead.

At the start of the NALLCU action research project, project officers did not have this experience to draw on so they had to survive on the hope that it would work out in the long run. They needed their one-day a month with their peers to sustain that hope. That their perseverance and enthusiasm was appreciated was evident. One plant superintendent, commenting on the teachers' commitment to the program, cited this as a key factor in the success of the project,

... it's the ladies enthusiasm that's pushed past all the supervisors. If you had someone who wasn't as committed, and again, I can't stress this enough, as committed as these two ladies, it wouldn't have got off the ground. Cos they come in, they're bubbly, they know what they want. They're quite prepared. They know when we're busy and they step back. They'll say 'Look I'll come back' or 'I'll go and do it for you' or something. They *never ever* say, 'Oh here it is, it's your ball, take it'. Not once have they ever done that. And I reckon at times they must have got terribly frustrated...

... I know how hard it is to track me down, ... I'm permanently on the move. I rarely get a chance to sit in this office and I've turned around and there they've been, and I've never sort of said no to them because I know how busy their day is and I know the hours they've put in (emphasis in original) (BLIT, 1994: 127).

On the shop floor it was necessary to overcome suspicion, satisfy curiosity and build credibility amongst the workers. Another Red Book entry illustrated this process,

I was in R/T Zone desk and talking to Dennis. Bill was standing there. He asked who I was and what I was doing there. I told him about NALLCU and the VIC elective and what it means. Bill listened and then said, 'Yes, but what are you doing *here*?' I explained again, only to get the same response. 'But what are you doing here, *in the warehouse*?' I explained why we were actually on the shop floor to write the curriculum ... After some time he seemed to believe and accept what I was saying. He became excited at the prospect of participating in the pilot program. He needed to get six credits (to complete his VIC) (emphasis in original) (BLIT, 1994: 158).

This sort of positive response to project officers was not uncommon. However in some places both the union and company personnel expected that very few would want to participate in the training. This was based on previous experience of attempting to establish training, and the fact that the monetary return for some longer-term workers would be minimal. One manager spoke of his fears that the training would not occur because of lack of interest,

I was getting terrified before it started, because I thought they might turn on the whole thing and say 'I don't want to do it'. Or after one class they would decide not to do it (BLIT, 1994: 240).

The senior shop steward in one plant explained the importance of this initial work in gaining the trust and commitment of the shop floor workers,

... in the older way of teaching, where 'This is the way we do it, and this is how we have to do it' ... a top-down system you don't see nothing, you don't even see change in people. I think actually you see the reverse, you see the adverse reaction in people, you know, 'Here we go again' (BLIT, 1994: 157).

Project officers knew that the interest they generated amongst prospective participants in these early stages would pay dividends in the longer term by helping to fill their classes. However, these processes take time and although the NALLCU project budget allowed for teachers to take a certain amount of time, there never seemed to be enough. Sometimes this related to delays in getting started due to production pressures, industrial problems or extended negotiations with enterprises. In later projects as much time as possible was always negotiated but once companies were expected to pay for this time, this was sometimes restricted because of budgetary constraints. Government funding did not allow for any curriculum development, as generic modules had already been developed, utilising Government funds, for use in all companies. In most companies, however, there was a strong desire to ensure that curriculum matched the real work processes. One TAFE Foundry teacher from RMIT, who was working as part of a project team, had started to write the Foundry Elective from his textbooks when the project began. He agreed to join the NALLCU team to design a program that was much closer to the reality of the workplace. His general and technical knowledge of foundries was extensive but he found that the realities were quite different,

> I think it's such a large complex process, you know. The management people there have been working in that area for years and years ... and its taken them that long to get to know the whole thing fairly intimately – and that's what we had to do in a short space of time. ... There's a heck of a lot of people there and a heck of a lot of things going on. And we weren't allowed to get any of it wrong. So you know ... you certainly need more time than what was given (BLIT, 1994: 126).

So concerned was the manager of the Foundry that the information in the training program was 'correct' that he raised the issue of extending the timeline at a Project Steering Committee meeting.

> (He) indicated that perhaps the complexity of the process, ie. putting all four areas of the foundry together and linking it with the continuous improvement theme, had been underestimated, turning out to be more work than anticipated.

> He confirmed HEC's concern that the curriculum accurately reflect the foundry procedures and be useful for both the short and the long term.

> He also indicated his hope that the union would support focusing on getting the material right rather than focusing on a certain date. It was agreed that the timeline be extended (Extract from Minutes, 25 May 1993).

While the project brief in each case guaranteed project officers would have unlimited access to enterprise staff and information, pressures of production, important plant visitors, International Standards Organisation (ISO) assessments, and other events took precedence in the real life of the workplace. As two project officers in one plant expressed it,

> While these events distracted and held up (our) work... they were important experiences in the life of the plant and gave (us) valuable insight into the pressures which operate in a multi-national enterprise... During the preparation for ISO assessment (we) found that Foundry documentation was being updated and refined (continuously improved) faster than (we) could keep up (BLIT, 1994: 79).

Other difficulties arose at the start, when project officers did not know the right questions to ask to obtain the information they needed. For instance,

> ... some weeks passed before (we) discovered that each production line had a detailed (and documented) management flow chart indicating key documents, and quality control points and tests (BLIT, 1994: 79).

Another teacher commented that she and her partner had discovered that certain terms were used for different purposes in different parts of the warehouse and the same job was defined differently by different people, depending on their relationship to that job.

> During our investigations of the warehouse we sometimes felt like detectives without a crime. We found that it was essential to ask a range of people about each function of the warehouse (BLIT, 1994: 135).

In order to obtain an all-round perspective, they needed to listen to everyone and take all opinions into account. Sometimes this required bringing the people with different views together to iron out the differences and come to a consensus. It was also necessary to keep the details of what they were told within an overall view of the workplace,

> When we talked to people about their jobs we had to keep reiterating; 'We're looking at this whole section, not just your individual job'. We've tried to maintain a holistic perspective all the way through – whereas the original blueprint from management and the syllabus was all about bits (BLIT, 1994: 136-137).

These initial information-gathering and relationship building activities generated mountains of paper-work, information and understandings. The next phase was to

reduce this to a systemic view of the workplace, design a learning program and devise a set of experiential learning strategies that were grounded in the specific workplace but also met the criteria for the VIC. This occurred in many different ways. Some teachers drew flow charts of processes, others drew up management charts, some collected stories from the workplace and developed a thematic approach. In some workplaces, where it suited the culture of the company and accepted ways of working, across-company groups were formed to discuss the sort of practical projects shop floor workers could undertake as part of their training and real problems they could solve. In others these suggestions came from all stakeholders and were collated and sifted by project officers for possible inclusion. Thus the programs started to take shape, people were contributing and the resultant curriculum was owned jointly by the stakeholders in the training. Teachers were sometimes overwhelmed with the scope and quantity of information they were given so generously. As one project officer commented at a project steering committee meeting,

> The (company) trainers, and everyone, they've been fantastic, they really have. People keep coming back to us with more information for the curriculum (BLIT, 1994: 283).

The Co-Production of Knowledge

This process of producing knowledge for the curriculum intensified once classes began. Participants, accustomed by this time to providing information for their own training, continued to take an active role in revising and extending their programs by bringing information on changed processes, examples of faulty parts, and results of their work-based practical projects to the classroom. They took pride in showing their classmates where they worked, what they did, and how their area worked. In one workplace it was not unusual for a forklift to appear at the door of the classroom with a stack of faulty parts – 'I thought you might be interested in these'. Classrooms started to bulge with parts, equipment and containers of various chemicals, powders, and other substances. Using these aides teachers could enlist the senses of sight and touch to extend vocabulary and English language skills as well as utilising them for practical experiential learning. Classes tended to be active, noisy and engaging affairs with participants talking in many languages, explaining ideas to their fellow countrymen and women, sometimes contradicting speakers and their teachers and asking questions, running off to the plant to produce a part that had been wrongly described and undertaking group activities. Guest speakers from the workplace

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(managers, supervisors, office and technical staff, engineers and union officials) prepared carefully for their part in the training activities and often found that they were challenged, and surprised, by the questions from the floor. Learning was a joint business and teachers learnt alongside the other stakeholders in the training. Results of participants' research and problem solving were presented to management in oral presentations and often led to learning and change in the workplace. One plant manager confessed,

> ... some of the questions that the guys have been asking; (a) when they've been doing their weekly work with the classes; and (b) in trying to put their projects together; its quite frankly made us re-think and re-evaluate why we do things ... I think its been a very testing time for some of our supervisors as well. In that it's made them think about the reasons for them doing things the way they do (BLIT, 1994: 124).

Thinking about the work processes, and beginning to question and articulate these thoughts, indicated the start of a conscious development of a learning environment within the workplace. A warehouse manager highlighted the way that the curriculum development process had stimulated his own thinking about the warehouse operations,

> ... the strange thing that I found about this is, that I had to start thinking about what we did, to be able to tell Phillipa and Toni, and I sat down ... and I thought; 'What am I going to tell these people?' You know? 'What *does* happen in Binning?' And I really had to start thinking about what we wanted them to come up with. So it's a bit of a challenge (BLIT, 1994:158).

Because teachers wanted to ensure that their trainees would find support for their learning from supervisors and managers, they engaged these people in the learning processes. A by-product of this involvement, which was intentional, was the wider development of a positive learning environment. Facilitating this form of 'co-production of knowledge' (Anderson et al, 1997) provided many challenges for teachers and represented work that differed widely from the delivery of pre-packaged modules common to CBT. They found that tapping into the enormous educational potential of workplaces provided endless learning experiences, both for the participants and for themselves, and some surprises,

> Who would have thought competition and risk could be so educationally useful, or that quality research could be transferred so literally to the Tickcart Project, or that the technical drawing office could be full of good teachers or that the Company could offer so many ways to recognise training achievement? (Virgona, Sefton, Waterhouse & Marshall, 1998: 111).

Waterhouse (1996) found that asking his trainees to trace the life of one small component part from the source of raw materials, through all the processes within the factory to instalment on an engine in another company, and beyond, produced 'endless tales', too many to be told.

> There are so many stories to explore we do not have time for them all; stories in occupational health and safety, stories in work organisation and job design, tales of environmental management and waste minimisation. As we explore these stories we are learning together and we are uncovering the curriculum which is embedded in the workplace (Waterhouse, 1996: 8).

In one company, management meetings identified a number of problems and handed them on to the VIC group for solution – 'see what they can do with these'. In another, the plant manager asked to come to class when projects were discussed. 'I would like to be able to implement all their suggestions' he said 'But I can only authorise works up to $10,000'. His visit to class would ensure that projects were real, valued by the workplace and that their suggestions would be seriously considered. He also guaranteed that, if modifications or extensions to their ideas were required, that they would be part of those discussions. Thus, the co-production of knowledge produced real outcomes for workplaces, for workers and also for teachers. In terms of their work, it provided teachers with new challenges, new experiences and a great deal of new learning. While it was not easy work, it was exhilarating and rewarding when it all came together. When it did not come together – that was the down side.

The Down Side

By way of contrast, in some companies there was little cooperation from the management for training – it was part of the EBA (enterprise bargaining agreement) so it would be tolerated, but there was no support for learners and no value placed on worker in-put to workplace change. In the worst of these environments work was organised strictly on a time-and-motion basis and supervisors' attitudes were clearly expressed by one supervisor who said 'You just jam a stop watch up their arse which chases them all day!' The poor morale, constant stress, absenteeism and work injuries amongst workers made these depressing and difficult places in which to work. Teachers discovered that little could be achieved in these environments. An example of this type of negative environment was described by one teacher as follows:

In training meetings, which I attended, management consistently expressed attitudes which disregarded the skill of the workers and on many occasions reiterated that anyone walking in off the street could do their work. As a result, they reduced the training from a 200 hour program to an 80 hour program, explaining that knowledge about the company processes, the products and the customers was irrelevant to their needs. They regarded the work as procedural requiring no decision-making. When seeking reasons as to why workers resisted certain jobs, management would not consider any explanation other than workers were basically lazy and their work attitudes were exclusively financially driven (Virgona, 1999:6).

In the same workplace, following the presentation of final projects to management, one worker exerted his new-found confidence to talk about the communication gap in the company and pleaded with management to recognise the skills of the workers,

> The alternative he proffers is his idealised notion of a 'team'. His notion holds meaning in relation to cooperation, mutuality and belonging, shared skills and respect for workplace skills... While the team he speaks of is loose, he refers to key values of respect and shared commitment to task... His last sentence is perhaps the most telling: 'The reason I started and I think everybody else was to get a certificate... a certificate to say, well you are competent in what you are doing' (Virgona, 1999: 5).

As Virgona points out, this worker is both damning the company management for their attitude to workers and promoting the rhetoric of the new workplace culture. His attitude towards his work demonstrated what other companies conducted training programs to achieve. Yet this company was not prepared to tap into this pool of skills and knowledge. And it was not alone. In another company the presentation of projects to management demonstrated thoughtful and helpful suggestions that would not only save the company money, but also make the workplace a safer and more congenial environment. They were ignored and management insisted that the company had received no benefits from the training that had been conducted. In this company, two women, whose job it was to water-test certain component parts, were expected to utilise a baby's bath for the purpose. As their workbench was at some distance from the nearest tap and drain, they constantly had to carry water, in the bath, across a busy walkway and forklift right-of-way. This was hard on their backs and the danger of spillage was high, creating a hazard for both themselves and others. Their research of the workplace revealed that the necessary plumbing passed directly below their work-station and they recommended that it be tapped into. Although this was a relatively

simple and inexpensive procedure that would save accidents and time, this suggestion was ignored.

Teachers were discouraged by these reactions in the workplace. Nevertheless they could, at worst, sequester themselves in the classroom with their students, concentrate on developing a good relationship with their learners, learn together and do the best they could to break down the barriers in the workplace.

> However, the 'weight of indifference' was sometimes difficult and at times impossible to move. We found that useful ideas, even when thoughtfully developed and carefully presented were not always taken up by decision makers with the authority to implement them (Waterhouse, 1999b: 276).

Another 'down side' for teachers in the early stages, before the BLIT report was published in 1994, was the disapproval of some of their peers. Some of those in the TAFE 'mainstream' (trade and technical teachers) with whom they came into contact, wanted to keep language and literacy teachers away from their domain, and particularly did not want them to interfere in the traditional CBT in the modular format with which they were familiar and comfortable. Those on the other side – a number of traditional language and literacy teachers - wanted to keep away from CBT, which they opposed as being minimalist, segmented and Taylorist (eg. Gribble, 1990; Brown, 1991; Jackson, 1993). A more holistic approach to the question of competencies was being advocated in some quarters (eg. Ford, 1990; Field, 1990; Gee, 1992; Sharratt and Field, 1993) and it was this approach that was attempted within the NALLCU project. Some literacy and language teachers wanted to ignore the technical side of training and, more particularly, did not like the notion of working with mixed ability groupings. To combine ESL and literacy students was a large step for some, but to enter the 'dirty' world of real training, wherein they might lose their ability to insist on general curriculum, negotiated only with their students, and classes conducted all in work time, was to 'sell out' to the enemy. Teachers found themselves under attack at conferences and elsewhere. Companies attacked them as being too academic for the workplace because they promoted good educational practice as necessary for effective industry training. Unions questioned the efficacy of workplace specific curriculum in terms of a recognised credential, and needed reassurance that moving away from standardised curriculum would allow the development of transferable skills. Even within NALLCU doubts were expressed and

misunderstandings occurred between some enterprise-based coordinators and project officers working in the action research project, as was evidenced by one coordinator saying 'But we will still need language classes, won't we?' Learning materials developed to support workers in normal VIC classes differed widely from learning resources developed by the project officers. Some teachers were distressed by these developments and felt hurt and besieged by the negativity. Others pushed ahead with almost missionary zeal and dedication. It was a difficult time and one in which most teachers readily identifed with Schön's (1987) 'life in the swamp'.

Teachers who had previously hidden behind the closed doors of their classroom, conducting training using educational methods they knew and trusted, found that coming out into the open and placing these methods under the microscope for others to view was a challenge. They had been used to working with 'smoke and mirrors' and to be expected to state up-front what they intended to do, and how, was to strip them of their disguise and expose them to public scrutiny. Some found it difficult to articulate what they were doing as each instance was a case of emergent design. For some this was a time of insecurity. The publishing of BLIT helped to resolve these issues for teachers. For some the judgement of the Tickcart Project as 'best practice' in educational effectiveness vindicated the stance they had adopted. Others, accustomed by then to defending their stance, began to wonder where they had gone wrong that they were accepted by the mainstream.

An Ethical Stance

Maintaining an even-handed and ethical stance amidst this turmoil was a difficult task for teachers. It was necessary for them to balance the demands and needs of all stakeholders and produce a program that reflected this balance, and to do this within what they considered an ethical framework. They found themselves in the role of work change agents within enterprises, and as a union-based work change adviser explained,

> Work change ... starts right at the bottom. Unless you can get the people from the shop floor involved – where the people say 'Well now I know what happens before it gets to me, after it gets to me – I can actually recognise a fault. I can go and rectify it.' Or whatever, to me that's really the beginnings of work change, the real guts of work change... (BLIT, 1994: 283)

The authenticity and integrity with which teachers approached their task was reflected in comments such as one made by one senior shop steward at a project steering committee meeting,

> ... you talk the language of the people. It's true, you do. They feel it's honest, they feel that it's going to be theirs. Before, when anybody tried to teach them something they feel there's another agenda there. They think there's another line there. But with you they feel it's theirs. They really believe that. That's the feedback I'm getting (BLIT, 1994: 283).

While this feedback was flattering to the teachers concerned, they were also aware that the company had agendas too, one's they expected to be met, such as higher productivity, less waste, higher quality and continuous improvement. The process of educating workers for the workplace is about their enculturation to fit the company mould. This created an ethical bind for teachers who believed that education should be emancipatory and empowering. However a good case can be argued that all education is about values,

> ... let us not be naive. Foucault and more recently Fairclough (1989) have laid bare the processes by which education functions as a most effective moral, social and political enculturator. Participation, let alone success within the education system demands submission to its values (Virgona, Waterhouse & Sefton, 1998: 8).

Bowles and Gintis (1976) related this process of enculturation to the social relations of capitalist production whereby employers establish social relationships and organisational forms to channel the personal and social needs of workers into the production and expropriation of surplus value. Education, they say,

> ... plays a dual role in the social process whereby surplus value, i.e. profit, is created and expropriated. On the one hand, by imparting technical and social skills and appropriate motivations, education increases the productive capacity of workers. On the other hand, education helps defuse and depoliticize the potentially explosive class relations of the productive process, and this serves to perpetuate the social, political, and economic conditions through which a portion of the product of labour is expropriated in the form of profits (Bowles & Gintis, 1976: 11).

They admitted that this was a fairly simplistic view of what was as complex and contradictory a process as the system that it reflected and to which education neither added to nor subtracted from the overall degree of inequality or repressive personal development. They suggested that education was best thought of as an institution that served to perpetuate the social relationships of economic life. However, they warned

that attempts to reform the education system have often floundered because of a refusal to question the basic power relations in economic life. To be blind to the role of the institution of education under capitalism was to help to perpetuate that system. They advocated educational strategies that would lead to an environment in which young people

> ... can develop the capacity and commitment collectively to control their lives and regulate their social interactions with a sense of equality, reciprocity, and communality. Not that such an environment will *of itself* alter the quality of social life. Rather it will nurture a new generation of workers ...(who are) ... unwilling to submit to the fragmented relationships of dominance and subordinacy prevailing in economic life (emphasis added) (Bowles & Ginits, 1976:14).

The alignment of business with school education became even more pronounced in recent times (see for instance Gee, 1994), creating ethical dilemmas for school teachers. However, in workplace education, being situated closer to the expropriation of surplus value than the school, the enculturation process, and its purpose, was much clearer. It was as well that teachers were aware of the contradictions that existed within the role they were expected to play so that they could consciously develop strategies that could help to mitigate the worst of its effects. At the same time, it was also as well that they understood that the sort of changes that would make for a more democratic and participatory control of the production process also required social ownership of that process. And this was not something they could create in their classrooms. The best they could do was to work the contradictions that existed within the dominant discourse of the 'new work order' (Gee et al, 1996) to the benefit of workers, in the hope that a glimpse may be seen of a better future and a more congenial way of working.

Teachers within the paradigm discussed in this and the previous chapter worked within workplaces and therefore felt the discomfort of these contradictions at close hand. They needed to know, and accept, that these questions existed for all educators.

> Pretending objectivity leaves teachers and students vulnerable to exploitation through self deception. Therefore, 'objectivity' is not the problem but 'whose subjectivity?' is! (Virgona, Waterhouse & Sefton, 1998: 9).

They were aware that, even in the best of the workplaces, most employers and senior managers did not want to equate wages with skill acquisition and utilisation. The

union agenda of metering out workplace change and continuous improvement for higher wages provided a constant source of struggle between the industrial parties. The union saw most of the discourse of the 'new work order' as a way of intensifying work for higher profits, and with some justification. On the other hand, teachers knew that workers were not passive recipients, acquiescing to the norms and authority relations of the workplace, but active participants in these struggles. Regardless of what happened in their classroom, workers figured out for themselves what they would and would not apply, how far they could go in challenging authority, and what suggestions they would and would not make for improvements. Therefore, no matter what the latest management vagary, be it Quality of Work Life (QWL) or Total Quality Management (TQM), they were well equipped to deal with it. What they did require was recognition of their skills, access to the dominant discourse and a fair and balanced education program that gave them opportunities to have some say in how their work was organised and the chance to survive in the given environment.

Teachers responded to these contradictory requirements by firstly celebrating, promoting and officially recognising the existing skills of workers. By adopting a holistic view of the workplace they were able to allow workers access to knowledge outside their own area, including physical access in some cases, and even outside their workplace. This gave them the product knowledge that the fragmenting of craft jobs under Taylorism (Taylor, 1911) had taken from them. By inviting managers, supervisors, technical staff and engineers to be guest speakers in class they exposed workers to the dominant discourse of the workplace in a non-threatening environment. Through discussions and coaching before such visits they promoted their learners' participation in this discourse. And by encouraging work-based projects that provided strategies of working smarter rather than harder, they developed 'win-win' scenarios that benefited the workers as well as management. It is with a few examples of some such 'win-win' scenarios that this chapter will conclude.

Working Smarter Rather Than Harder
A growing file of copies of worker/learner projects, kept within the provider organisation for audit purposes, provided a rich source of data of the thoughtful, useful and potentially productive work that was presented to management as part of their training and assessment. The presence of the researcher at a number of these

presentations provided further insights into the careful research and preparation of suggestions that resulted in workplace change in the instances quoted below.

One of the work-based projects with the most far-reaching results came from the national parts distribution centre of a Japanese company. A small group of warehouse operators were unhappy that the boxes of parts entering the warehouse from Japan were all of the same size, but were not labelled with either the contents or the weight. They were working in a restricted space and had to therefore lift the boxes manually. Until they actually tried to lift them they had no idea how heavy they were, thus back injuries were occurring. In class they discussed this problem. At the suggestion of their teacher, they decided to couch their problem in the language of the managers, so that it would more likely be heard and heeded. They also decided to look at longer term as well as short-term strategies to resolve their problem. In a formal presentation to management of the warehouse, they pointed out the occupational health and safety issues arising from the problem, including the high probability of injuries, resulting in claims for workers compensation and lost time. They requested the purchase of suitable lifting equipment and suggested that the warehouse be reorganised so that the equipment could be utilised. They also suggested that, in the longer term, the packaging should be changed in Japan. As a result of their work, the design engineer in the warehouse worked with them for several days to examine and discuss the problem. Together they decided how to reorganise the warehouse, which was then completed, and the lifting equipment purchased. However, the real success came with the visit of a senior manager from Japan, who was brought down to the warehouse to examine the problem and talk to the workers. As a result of these discussions, he went back to Japan and changed the packaging. Thus the workers achieved both their short and long term goals.

On another site, workers examined the problem they were having in changing dies in an aluminium die-casting operation. It appeared that there was a design fault in the machine and some molten aluminium was leaking through under the die and then solidifying and sealing the die in place. Changing dies was a difficult, dangerous and time-consuming exercise, taking up to 40 minutes to complete and requiring the use of a crow bar that could damage the die. Any slippage could also cause serious accidents to occur. They researched possible solutions and found a manufacturer that

made ceramic washers that fitted the machine exactly. By placing a one-dollar ceramic washer under the die during each die-change they found that the die no longer stuck in place and that it could be changed safely in 10 minutes or less. The only cost to the company was a new washer for each change. For that they saved 30 minutes and achieved higher productivity and the workers were happy that the job was easier and safer.

Waterhouse and Miller (1996) reported on one project conducted by a shop floor operator who suspected that the chemicals he was using at work were having an effect on his health. He found that the chemical was being used at twice the recommended strength in one operation and in the other operation it was five times stronger than recommended. Furthermore, the supplier told him that it was not designed for this type of work and that another, less dangerous chemical would be more suitable. In his project this worker recommended trying the alternative product. He also designed a Standard Operating Procedure to ensure that the correct concentrations of chemicals were used. The savings to the company were substantial and the negative effects on workers' health were minimised.

Other stories abounded as each workplace produced similar projects from all the worker-learners. These examples were selected to demonstrate the type of 'win-win' results that could be achieved by workers when companies were prepared to listen to the voices of their workers and to value their suggestions. In these companies, productivity did increase, but not at the cost of work intensification.

Conclusion
This description of teachers' work in workplaces belies the notion that their work was being deprofessionalised or deskilled. It was very exacting work that required judgement, political understandings and excellent teaching skills. It also required a supportive administrative and management structure that valued both the teachers' work and the outcomes for the learners. The next chapter will examine the effects on teachers and the organisation of the outside institutional agenda of the Quality/Best Practice discourse and chapter seven explores issues surrounding project management and power/knowledge relationships.

CHAPTER SIX
Quality, Best Practice & Benchmarking

> The current use of quality is an attempt to show it as an irresistible formula for success from which there are no losers. Quality has become shrouded in the spurious neutrality which once accompanied Taylorism (Fitzgerald, Rainnie & Stirling, 1996: 103).

Introduction

The use of the term 'quality' has come to mean very different things to different people. In a manufacturing context it referred to the quality of the manufactured product, and to the standardised processes by which the same (high) quality was reached in every instance. To the educational practitioners who were the subject of this dissertation the term referred to the quality of their educational practice. However, the way in which the term was used by Fitzgerald et al (1996) in the quotation cited above was of 'quality' as a dominant discourse (Gee, 1990). In order to differentiate between the two uses of the term, in this chapter 'Quality' will be used to refer to the use of the term as a dominant discourse and 'quality' to the more conventional use of the term.

'Quality' in VET

As the concepts inherent in the engineering manufacturing model of Quality processes became embedded in the national training system during the 1990s, 'best practice' and 'benchmarking' as a way of 'continuously improving' the VET system became the new dominant discourse. These concepts permeated the management systems required of each Registered Training Provider (RTO) in Victoria, including TAFE institutes and private providers of VET programs. Tenders for government funds included demands for documentation of the Quality systems that were in place within the provider. These were expected to monitor student progress, maintain records, collect statistics, produce certification in the required format, keep financial records, demonstrate that every trainee received the same training and assessment (i.e. 'consistency' or 'conforming product') and to ensure that the required 'standards' were met in every case. Audits of these requirements took place on an annual basis and all of these records had to be provided and accounted for on demand. The

'Quality certification' of an RTO (ie. ISO 9000 or similar) assisted this process and gave more credibility to the organisation in the eyes of the state training authority.

In 1997 a new 'Quality Management Framework', wl.'ch linked to the Australian Quality Awards, was developed by the Office of Trair ing and Further Education (OTFE) in Victoria. Based on the Australian Business Excellence Framework it provided 'measurable outcomes' across seven domains: Leadership; Strategy & Planning; Information & Analysis; People; Customer Focus; Processes, Products & Services; and Organisational Performance. The 'measurable outcomes' included such measures as '85% of staff and/or other appropriate stakeholders agree that...' or '... demonstrate a 5% improvement in outcomes which benefit stakeholders', all of which were open to interpretation and manipulation, and even in a positivist paradigm represented a travesty of scientific principles. When RTOs were asked to trial this system in 1998, there were many complaints about these measures which eventually had to go. As an incentive, it was promised that those RTOs that could demonstrate adherence with this 'Framework', and that were regarded as meeting the criteria for 'excellence' were to be classified as QETOs (Quality Endorsed Training Organisations). QETOs would be responsible for managing the accreditation of their own courses and the increase of their own scope of registration. An added incentive was the promise of receiving priority for government funding, and possible eligibility for longer term funding. To achieve this status RTOs were to demonstrate adherence to the framework and undertake a range of regular internal auditing processes. Those RTOs which had already started down the track of obtaining Quality certification through a recognised Quality assurance body could use this as proof of their Quality standards for OTFE, providing the collection of relevant information was part of this process.

Promises of QETO status, however, were withdrawn in late 1998 on the appointment of a new general manager to OTFE who wanted a different approach. This new approach, also based on the Australian Business Excellence Framework, used on-line technology (Self-Assessment Manual – 'SAM ONLINE') and a manual, OTFE (1999). Although the quantifiable measures were omitted, this framework required information, and evidence to support it, of every facet of an organisation, from strategic planning processes to attitudes and behaviour of management,

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> The fundamental and pervasive importance of establishing a leadership system cannot be overstated.... and the importance of everyone working together to achieve common goals... to promote change and continuous improvement (OTFE, 1999: 74).

Meanwhile pressures for quality certification were starting to emerge from companies, whose own quality assurance processes demanded that all their providers of services have recognised quality systems in place. The large car companies, many of which had adopted a quality system, insisted that their component manufacturers also comply. Some component manufacturers that made parts for many different manufacturers, both in Australia and overseas, had to comply with a number of different quality requirements, and a succession of quality audits. As part of this process they, in turn, simply passed these requirements on to their service providers.

A whole international industry had sprung up around this concept of 'Quality', mainly targeted to the globalised manufacturing industry, which required standardised high quality component parts no matter where they were manufactured in the world. A new market for Quality assurance was created by appealing to, and demanding this Quality assurance from, the growing service sector. Initially the manufacturing paradigm was transferred directly to this application of the standards.

Thus the 'Quality agenda' developed its own momentum, with built-in mechanisms for its own survival. These included up-dating/revising or completely changing the standards every few years. Also new standards being introduced for different purposes, so an organisation could be expected to attain more than one type of quality certification (eg EMS 14000 (environmental management); QS 9000 (automotive specific); HACCP 9000 (Food Safety); SafetyMAP (Occupational Health & Safety)). The extent of this institution is demonstrated by the Foreword to the new (draft) requirements for ISO 9001 to be introduced in the year 2000 to be entitled 'Quality Management Systems',

> The International Organization for Standardization (ISO) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental,

in liaison with ISO, also take part in the work (ISO, 1999, *ISO 9001:2000, Quality Management Systems - Requirements* (Draft document): 4).

Quality Assurance companies sprang up everywhere employing armies of auditors to ensure compliance to these international standards. Consultants, sensing a new market, materialised to spread the word. Organisations found it necessary to employ Quality Managers and to train members of their staff in the conduct of quality audits.

Apart from the administrative requirements and costs of implementing these processes, there were other negative aspects to this discourse. The major feature underlying the rhetoric was the control mechanism, designed to provide a 'standardised' and regulated system within a 'competitive', 'open market' situation that purported to provide a 'level playing field' for all players. Foucault's 'disciplinary power' (Foucault, 1976b: 104) aptly describes the Quality Management Framework devised by OTFE, as it was designed to minimise the need for external control mechanisms by coercing the development of 'voluntary' internal procedures and processes in compliance with its requirements. Foucault's concept also describes the entire Quality agenda.

Marginson (1997) linked the recent emphasis on Quality in education within Australia with moves by the New Right and governments after the early-1970s 'to break the political momentum for improved resourcing, and create conditions for a reduction in unit resources' (p.125). In order to achieve this goal, perceived connections by the general public between government spending and improved educational results needed to be discredited. 'Outcomes' replaced 'in-puts', both in terms of institutional notions of educational practice and of resource allocation, allowing policy makers to develop a new theme of Quality in education,

> Quality (excellence) was defined as separate from and superior to quantity (resources). Policies supporting better educational quality were sharply distinguished from and superior to policies involving more resources, excluding any interaction between quality and resources (Marginson, 1997: 126).

This agenda of 'doing more with less', whilst achieving new heights in 'excellence' within the VET system, was evident in a state system that considered a measure of the Quality of its educational provision the quantity of training hours they could

'purchase' for a given price on the 'open training market' under 'compulsory competitive tendering' processes. The higher the number of hours purchased within limited funds the higher the Quality. The degree of 'excellence' of the actual programs was measured by way of the 'Quality Management Framework', and demonstrated through a series of 'best practice' and 'benchmarking' projects. Interestingly, when some OTFE personnel were questioned at a briefing session about the internal quality system employed by OTFE, they had to admit that they had only 'looked at it' and were neither ISO certified nor even adhering to the Quality Management Framework they were specifying for their providers.

Even in a manufacturing environment, Total Quality Management (TQM) systems have come under increasing criticism (eg. Wilkinson & Wilmot, 1995; Jones, 1997). Many researchers have criticised TQM as representing 'Tayloristic management techniques' (eg. Boje & Winsor, 1993; Conti & Warner, 1993; Levidow, 1990; Parker & Slaughter, 1988a, 1988b; Wood, 1989) that led, not only to intensified work, but also to reductions in the size of the workforce. As Fitzgerald at al (1996) concluded,

> Quality is a loaded word. It implies values and standards. It is something we
> all want although we may have markedly different perceptions of what it is.
> Current management strategies are designed to replace these potentially
> conflicting values and standards with the market-based assertion of quality as
> 'fitness for purpose'. In doing so, they seek to apply 'quality' to processes as
> well as outcomes. In essence, quality is being used alongside the language of
> the marketplace and the cult of the customer to commodify personal
> relationships and depoliticise industrial relations (p. 103).

The negative connotations of the term 'quality assurance' probably explains the gradual movement away from its use, from Quality Assurance Systems (QAS) towards Quality Management Systems (QMS) and, more recently, simply Management Systems (MS) with the term 'quality' missing altogether.

Bowing to Pressure

As a result of these external pressures on, and expectations of, a small VET provider, management finally judged that it was necessary to comply by seeking some form of quality certification for the company. Thus in 1997 the first steps were taken to apply for AS/ANZ ISO 9001 (Australian/New Zealand Standard Quality Systems: Model for Quality assurance in design development, production, installation and servicing) for small business, in what was to be a costly and time consuming exercise. The

resonance with a manufacturing model was apparent in the name. The design feature was chosen so that the organisation could claim the curriculum design feature of its enterprise. It was hoped that by establishing its own system the company could meet the new OTFE guidelines, however they might change over time, as well as the requirements of the automotive manufacturing industry with which they worked, in a system recognisable to that industry. It was hoped that the organisation and its members could maintain some control over the quality system that was adopted.

In an educational organisation that was functioning well with established procedures and processes, a reputation for high quality programs and a group of excellent, motivated and enthusiastic staff, who were also nearly all shareholders in the company, the predominant danger from the Quality agenda was perceived by management to be one of alienation. Everyone acknowledged the need for the current systems and wanted to be associated with a well-managed organisation with a good reputation for high quality training programs and services. But they doubted that ISO certification would actually improve the quality of their educational practice and believed that the additional requirements of the formal Quality system were likely to be only burdensome. They resented the implications of the need to impose outside standards on processes, procedures and practices that they saw as already meeting the criteria for the production of quality educational programs and services. They were also aware of the work of people like Jackson (1995) who used an example from the area of health to illustrate the danger that changes in the name of 'quality' may actually compromise or damage the quality of services being provided. As a result of this study she concluded that,

> ... the concepts of 'quality' can't be taken at face value, even though it looks like an honest, trustworthy and common sense word. Upon closer examination, neither TQM nor ISO turns out to be precisely about achieving high quality results. Instead they are concerned with instituting various kinds of documentary control systems that let agencies outside of the workplace ... decide whether a given supplier or provider of a service is a reliable place to do business (Jackson, 1995: 5).

This was confirmed by the first words of the external auditor that visited the company when he said 'We represent your potential customers. They want to know if you are a reputable firm to do business with' (QAS Auditor, first visit, June, 1998).

Having decided to proceed it was decided by management to employ a consultant to write the Quality Manual. The selected consultant was known to management and experienced in designing Quality systems for educational organisations. He was able to produce the first draft of the manual with minimal input. It was believed that it would be possible to then concentrate on the sections of the manual that related to teaching, curriculum design, and procedures that would affect the practice of teachers, carefully vetting them for compatibility with the established directions, practices, procedures and understandings. Similarly, the procedures that affected the work of office staff were vetted to ensure that they accurately reflected existing practice, rather than inflicting new requirements. This was found to be just the beginning.

In some cases the consultant was able to point out a simpler, less onerous way of maintaining some required records that improved previous practice. In others, such as those procedures requiring close surveillance of staff, which were considered too managerialist, the whole procedure was discarded, or changed to something entirely different. Nevertheless a whole raft of new proformas that standardised records had to be designed and imposed on staff. It was not that most of those records were unavailable under the previous system, rather it was now mandatory that they were kept in the consistent manner prescribed so that quality audits could be conducted.

Learner Enhancement as the 'Product' of the Company

The Administration Manager took on the additional role of Quality Manager and a Quality Management Review Committee (QMRC) was established as required for ISO certification. After discussions between the consultant and members of this committee, it was finally agreed that the business was primarily about learner enhancement. This appeared to be reasonable. However, the committee's understanding of the process they were about to become involved in was sketchy at best, and the ramifications of this decision did not become apparent for some time. It was not until the date had been set for the external audit, and the 'preliminary visit' had been held, that it was fully realised that this definition of the company's 'product' was totally untenable. The auditor's preliminary visit precipitated the decision to change the designation of the company's 'product'.

The most significant problem with 'learner enhancement' as a 'product' was inherent in the process of quality certification, the whole of which was founded on standardisation of the 'product' so that a customer could be certain that it would be of the same uniformly 'high standard' in every case. This led inexorably to notions of standardised curriculum, banks of authorised assessment items, and processes for dealing with recalcitrant students. As has been discussed in detail in previous chapters, each of these were an anathema to teachers in the company and represented a direction totally contrary to their commitment to contextualised curriculum (Sefton et al, 1994), fifth generation assessment (Caulley, 1993: 124-133) and the development of strategic and collective competence within companies (see Virgona, Waterhouse & Sefton, 1998).

Members of the QMRC struggled with attempting to define these standardised processes in ways that were representative of the actual practice of the company. They finally had to concede that the contradictions were insurmountable. It was a question of values, and in the final instance the company's quality system needed to reflect the values it considered important across the political, economic, organisational, professional, community and cultural domains (Townsend, 1997). There was no way to pursue a pragmatic approach that provided sufficient documentation for quality accreditation without ownership of the inherent value system. The question was what 'product' would be tenable without compromising values? The problem was that the whole of the Quality manual was written around 'learner enhancement' as the 'product'.

A partial answer to the question was proposed by the external auditor who suggested that the QMRC might consider naming the service that was provided by the company as its 'product'. He further suggested the 'cloning of teachers' as part of the process of providing a standardised high quality service to clients in industry and other organisations. The notion of 'clones', in terms of sameness in the espoused values and approaches adopted by staff, was useful but a set of teachers who were 'clones', who could be substituted for one another, was not considered desirable. The preferred model was rather that of a dynamic team of people, with *different* skills and abilities, who could share experiences, learn from and support one another. Nevertheless, a different approach became visible. The auditor further suggested that the company's

'Quality statement' should be placed on display for the perusal of visiting clients. This meant that whatever was decided would be on display for all to see and therefore needed to be a statement everyone in the company could both live with and own. In making this move it was realised that the values held dear by members of the company would became merged to a large extent into the 'Quality system', and the idea of keeping them separate so as not to contaminate the purist ideals of staff would be lost. It would not be possible to isolate the system from the organisation. The alternative was worse, so it became necessary to ensure that the values and ideals did not become submerged into the system, but that they dominated it instead. If the Quality system was to be an expression of values, then those values would need to reflect the organisation as it was. There was no question about the fact that the company had a distinctive style of operation and there were expectations that staff would work in certain ways (see chapters four and five). Every effort was made to select staff who shared the world-view espoused by the company and a process of induction was designed to complete the enculturation. It was a question, then, of embodying this into the quality system.

The problem was finally resolved by redefining the 'product' within the Quality Manual (WLI Quality Management System, Volume 1 (1998)),

> The Quality System is based on the understanding that the company's **product** is the service provided to the client through undertaking an educational or training program, and can be described as the development of a learning culture in the client organisation (QMWLI*Intro/2* 11/11/98*Page 2 of 4) (emphasis in original).

The quality philosophy, embedded in the mandatory 'Quality Statement', and incorporated into the Quality Manual, was re-defined in the following terms:

> The quality of the Company's programs and services derives from its people: the partnerships they establish with learners and clients to develop innovative, relevant and educationally sound learning opportunities; and their commitment to education as a process of social change (QMWLI*S1/3*16/11/98*Page 1 of 4).

This statement reflected the values of the organisation at least, and could be placed on display with a degree of equanimity.

A comprehensive revision of the manual and all associated general and teaching procedures was undertaken, a problematic process as every change created new anomalies, particularly in areas such as staff appraisals, which were universally rejected by both staff and managers of the company as inappropriate, unnecessary and counterproductive. The key to staff performance, it was believed, lay in the development of a shared way of knowing, in working together to find solutions to problems, in understanding individual differences and styles and matching these with the idiosyncrasies of various workplaces. The key lay in taking account of preferences, strengths, weaknesses and stress levels, and in the establishment of a trusting environment so that staff felt free to bring their problems and issues to the attention of management for assistance and understanding. This was consistent with Lonsdale's (1998) 'fourth generation' of staff appraisal (see discussion in chapter three).

The problem remained, however, of how principles such as these could be incorporated into the framework of a Quality system that appeared to be based on a different set of criteria. The question of staff appraisal, therefore, was turned on its head. Staff would be asked to appraise the performance of the management and administration in providing the sort of support they required in order to do their work effectively. Only new staff would have some form of appraisal after six months in the company. This would take the form of a discussion between the staff member and a member of senior management, with each party appraising the performance of the other. The aim was to ensure that the staff member had been fully inducted into the company, had received all the support they needed and felt comfortable with the work, and also that they fitted with the style of work that had become the trademark of the company. The opportunity was made available for either party to break the contract by mutual agreement. That power relations would still be embedded in this practice was evident, but this point was left unresolved at the time. Changes could be made later, if anyone could envisage a better process. Meanwhile, this approach was apparently acceptable as it was not challenged by the external auditor.

The Audits

Under the small business option for quality systems implementation, external audits were kept to a minimum However, internal audits, conducted by suitably trained

individuals from within the organisation, had to be conducted and the results provided to the external auditing body. These results needed to be accurate, and recorded, as they were subject to random checking during the external audit process. Reports had to be written in carefully chosen language so as not to create confusion (or attract the attention of external auditors) and forms completed for all cases of non-compliance to procedures. Minutes of QMRC Meetings recorded each measure of corrective action taken as well as any changes to the Manual, procedures and the relevant proformas. Mountains of paperwork accumulated, in the interests of Quality, few of which affected the actual quality of the educational practice of the teachers. As the day for auditing approached, a notice to staff highlighted the burdensome nature of the system. Numerous proformas with official titles and numbers were requested from staff, all to be completed with the relevant information. QMRC meetings to monitor and review processes seemed endless.

The external auditor claimed that the system 'should serve the interests of the company', but the question remained, could that really be? The system was aimed at imposing uniformity and conformity. Could one small company twist this rigid system to its own requirements and directions, or would the company be swallowed by the Quality discourse? These contradictions added to those already inherent in the nature of the work being undertaken and remained largely unresolved.

Best Practice & Benchmarking

The discourse surrounding the Quality agenda included terms such as 'best practice' and 'benchmarking', all part of the 'outcomes orientation' that separated the in-puts (resources) from the results of educational processes (Marginson, 1997: 125). As discussed earlier, this discourse was viewed with a healthy scepticism by staff along with the whole Quality agenda. However, there was also an understanding of the point raised by Jackson (1995) that educators should take control of the agenda and develop 'quality frameworks' that consolidated and extended the values they deemed to be important about their work, rather than those of economic fundamentalists. An example of how this might proceed was provided by the Council of Adult Education in Victoria (Kiraly & Siat (eds), 1997) in an ANTA *Best Practice for Educational Effectiveness Project* (BEEP) that they conducted in 1996. They used the opportunity provided by this project to align adult learning principles with 'best practice' in VET.

As part of this project teachers identified five key 'benchmarks' for Quality provision of VET:

- Using strategies to interest and motivate learners;
- Adapting the program to suit the learners' purpose and context;
- Planning of course content and sequence to achieve outcomes;
- Establishing respect and rapport with and between learners; and
- Maintaining current knowledge in the field.

These 'benchmarks' had been published, endorsed, disseminated and accepted within the system. Thus, when tenders were called for an ANTA 'Demonstration of Best Practice in VET Project 1997', a window of opportunity opened. By building on these 'benchmarks' and exploiting the advertised criteria of 'educational effectiveness' it was believed that a viable bid could be crafted, particularly when it was clear that the criteria and 'performance indicators' could be identified by the tenderer. This allowed for the introduction of a set of values and practices that were compatible with those of the organisation. However, the wording of the tender document presupposed alliance to a certain discourse, which was constricting and normative. For instance, the aims of the project were to,

- Identify high performance levels in the development and delivery of VET and the 'best practice' which produces them; and
- Demonstrate (provide evidence of) and widely disseminate those practices, with a view to supporting other organisations to achieve 'best practice'

And the objectives for individual projects were stated as being to,

- Identify 'best practice' against a range of categories and indicators;
- Demonstrate (provide evidence of) and document 'best practice'; and
- Provide opportunities to develop identified 'best practice' further in the particular categories of focus (cited in Virgona, Sefton, Waterhouse & Marshall, 1998:1).

The 'category of focus' in this instance was deemed to be one of 'educational effectiveness' and the 'expected outcomes' from individual projects was that they would form the basis of 'continuous improvement' of the VET system. The tenderer was expected to provide evidence of 'best practice' in their work in general, and to indicate how this 'best practice' was to be demonstrated in the particular project that was put forward for funding. Although this was seen as a window of opportunity, the darker side was the need to 'box' an innovative program within an undesirable discourse. This was another aspect of the contradictions that faced educators in

workplace training. On the one hand there was a desire by teachers to be accepted by their peers as 'mainstream players', with relevant practices and educational programs. On the other hand there was a desire to remain aloof from the negative aspects of the Quality discourse, including 'bench-marking' and 'best practice', and thus to remain outside the current system - Foucault's 'normative' processes exactly (Foucault, 1979b).

Background to the Project

Victoria was one of the Australian states that had readily embraced the drive towards a competitive, privatised training market (Anderson, 1994, 1996). In 1997 there were more than 700 Registered Training Organisations (RTO) registered with the Office of Training & Further Education (OTFE). As OTFE was handling the tenders for Victoria for the national project, and they were proud of their privatised system, it appeared likely that at least one of the 'Best Practice' projects would go to a private provider in Victoria. Knowing that the Company had a sound reputation in the system, this looked like an opportunity to acquire funding to document one of the more innovative programs that was about to start at the time. The unusual and innovative nature of the program, based on a long simulation activity, provided an attractive basis for video representation. In its favour also was the changing nature of the national training system towards the introduction of training packages, which indicated the possibility of a move away from standardised, modular curricula towards a more enterprise-specific adaptation of national competency standards with only assessment standards mandatory. It appeared that the new system would allow for a more flexible approach to designing training for companies, in that it could more readily incorporate difference than the previous system with its accredited courses and structured modules. It was in the interests of the organisation to ensure that as much flexibility as possible was built into the new system and this project was seen as one way to affect that process.

Furthermore, from a point of view of survival of the organisation, it was considered necessary to find ways to promote it as being one that was capable of creating the 'benchmarks' that constituted 'best practice' in training. This could assist in gaining recognition within the wider system, securing future funding and attempting to affect, in some small way, the directions of the system. In line with the policy of the

organisation to document its work, it provided an opportunity to obtain some funds to document an innovative program and produce some publications and a videorecording. These could be used for professional development activities both internally and as part of the external activities of the organisation. Politically and strategically it was seen as a useful means of legitimising approaches to training that had formerly been marginalised within the system. It would also provide publicity and publications to promote the company and its training practices.

More importantly it was seen as an opportunity to enter, and interrupt, the dominant discourse by re-defining 'best practice' in VET to include options that teaching staff considered important. As discussed in chapter four, these options included: developing inclusive, integrated, context-based and holistic curriculum; acknowledging that learning programs needed to be developed from scratch in each new environment; treating the acquisition of 'competence' as a developmental process; negotiating assessment strategies that were based on group achievements rather than on individual competencies, especially literacy and language competence; involving managers, engineering and technical staff in the training and assessment processes; and taking account of the requirements of all stakeholders in the training, not just the company management, but also the potential trainees and the union.

The 'Tickcart' program that was promoted for this purpose promised to be both visually exciting and practical; thus the production of a video was planned into the exercise to complement a full case study. The 'market' for these materials was seen by the organisation to be VET practitioners who wanted a critical, analytical and fully descriptive case study, similar to previous publications (eg. Sefton et al, 1994, 1995) that provided a grounded educational theoretical perspective. It was assumed that this would also prove useful to VET teacher educators and a wide range of people involved in the professional development of VET teachers and trainers. A short video was seen as enhancing the usefulness of the case study by bringing it to life with real people in a particular context. The dissemination strategies were seen to be the delivery of papers at seminars, workshops and conferences, and through journal articles and short items for various publications.

The Program

The program selected for this purpose was conducted at Tickford Vehicle
Engineering, a company involved in the design and development of high performance
cars for the Ford Motor Company. The first integrated unit of the Vehicle Industry
Certificate training, encompassing a number of accredited modules such as
Communications, Working in Groups, Manufacturing Processes and the Vehicle
Industry, consisted of designing and building billy carts ('Tickcarts'). This was
targeted to shop floor operators developing an understanding of the design and
development stages of the company's work as part of the whole work process. The
program was also designed to create lines of communication between the people on
the shop floor and the people in the office (engineers, office staff, managers), a
perceived need in the company, and to provide workers with experience of working in
teams. The experiential learning strategies were expected to enhance their oral and
written communication, English language and 'learning-to-learn' skills.

> We wanted the training to engage the participants by challenging their skills
> and capitalising on their interests. We needed to shake off any association with
> school, since many potential participants had declared themselves to be
> refugees from traditional education systems. This suggested the conscious
> adoption of adult learning principles by providing opportunities for input
> during the planning stages, autonomy and self-direction during the learning
> stages and a negotiated role for participants in devising the assessment
> processes (Virgona, Sefton, Waterhouse & Marshall, 1998: 43).

Company processes of design and development, including the paperwork and budget
processes, were adhered to, and company personnel were involved in all aspects of the
training and assessment of the Tickcarts.

Practical assessment of the Tickcarts occurred on two main days: 'Judgement Day'
when the experts from Tickford and Ford assessed the carts on a range of negotiated
criteria; and 'Race Day' when the performance and handling of the carts were
assessed by John Bowe, a professional touring car racing driver, at the Calder
Thunderdome race-track. Further assessment was provided by a group of school
children who acted as 'customers' by completing surveys and testing the prototype
Tickcarts. Assessment of the development of key competencies was a more formative
procedure carried out by teachers, incorporated into a program evaluation session and

ratified by both participants and management. All assessments were based on group performance. This provided an opportunity to challenge traditional individual performance-based assessment and introduce concepts of strategic and collective competence (Virgona, Waterhouse & Sefton, 1998).

The Process

The first problem that arose was that of putting together a concept proposal as an expression of interest, in order to advance to the short-list of projects to be considered for funding. This stage of the procedure, and that of selecting a small number of projects to put forward for consideration by ANTA, was conducted in Victoria by OTFE. It was a question of taking a creative and different program and fitting it into a discursive 'straight-jacket' without losing its integrity or individual nature. At the same time it was necessary to capture the imagination of the selection panel as well as demonstrate that the organisation not only understood, and subscribed to, notions of 'best practice', but could also articulate how this program fitted the description. This was achieved by firstly taking the given 'educational effectiveness criteria', with minor adjustments, and providing a list of 'critical success factors' specific to enterprise-based training which matched the company's practices and policies (see first two columns in Appendix 4a). For submission purposes a third column (not shown in Appendix 4a) was added to provide evidence of how the organisation conformed to these criteria in its normal educational practice. A second table (Appendix 4a) provided the same first two columns with the third providing a list of 'indicators of success at Tickford Vehicle Engineering'.

Despite the initial dismay of the two project officers working on this project, they admitted that on closer examination of the table this apparently rigid framework was sufficiently flexible to accommodate their program, and that in fact they met all the criteria and had achieved all the 'success indicators'. Thus, the program was suitably 'boxed' for presentation to OTFE and ANTA.

The expression of interest proved successful and the project was short-listed. OTFE then called all short-listed applicants together for a briefing on the preparation of a full submission. Attendance at this meeting was instructive. Approximately 30 projects were represented, from which five or six were to be selected for consideration

and funding by ANTA. It appeared that many of the TAFE Institutes were represented and not a great number of private providers. This was estimated as improving the chances of selection in the final round as it seemed likely that the discourse of 'free market' liberalism would prevail to ensure that at least one private provider project would be highlighted.

The full submission required detailed documentation, including evidence that the organisation, and the particular program, was 'best practice'. Letters of support were obtained from university researchers, who had conducted research utilising the organisation's programs and work-sites, from other companies with which work had been done using this approach to enterprise training, from the AMWU (Vehicle Division), which wanted relevant and accessible training for their members, and the Managing Director of Tickford, who supported the project whole-heartedly. Previous publications by staff were cited, as was proven experience in the provision of professional development for VET practitioners. Use was made of the fact that the training provider had a quality system in place. It was expected, however, that the most telling advantage would be the holistic model of enterprise-based training that was espoused, which appeared to more nearly represent the new directions of the system than most other practice in VET at this time. This despite the fact that the system still officially called for modular-based learning.

Meanwhile, the program had commenced and was progressing quickly. A management decision had to be made regarding the video, or the program would be finished with no film captured. It was decided to commence filming in the hope of obtaining funds. When it was announced that the submission might be nominated to ANTA for funding, a few changes were requested. It appeared that attempts at making a video in similar previous projects had been less than successful and evaluators of those projects had recommended that no further videos be funded. Thus it was suggested that the making of the video be abandoned in favour of simply conducting a number of 'how to' workshops which incorporated industry visits. It was decided to struggle to retain the video and a second submission was prepared to this end. By agreeing to provide six workshops and produce a video that would replace an industry visit (because such visits were not viable in a small workplace and the program would be finished anyway) the OTFE personnel finally agreed to support the proposal to the

selection panel and to suggest to ANTA that this project, including the video, be funded. In order to facilitate this process it was necessary to agree to a number of checks and balances being built into the project management, particularly in relation to the production of the video. The conduct of six workshops across three states required the provision of a professional development kit to be handed out to participants with a copy of the video. It was finally settled that the 'project products' would be: a short video to replace an industry visit, with the purpose of providing an idea of the enjoyment and enthusiasm generated by the program as well as some key educational principles; a professional development kit containing a workshop manual, a set of 'presenter's notes' and a set of workshop resources; and a full case study as a separate publication.

It was also a requirement that a brochure would be prepared explaining the project and its products and placed on the Internet at the OTFE web site. The funding was increased to include the conduct of the workshops, but the development of the workshop manual and notes for presenters were to be incorporated into the prior costings for the project. Thus the money for developing a full case study (the 'why' of the project) was basically usurped by the professional development kit (the 'how to') aspect which was seen by OTFE as the priority. Although this did not meet the goals of the training provider, it was decided to go ahead on that basis and worry later about the recovery of additional costs. There was an awareness that OTFE personnel had a differing view of what constituted a case study, but this was also left in abeyance at the time.

At this stage OTFE timelines were running behind schedule. According to the original advertised timelines, the project would have been due to start shortly after the proposed training program commenced. However, there were also delays in the final selection process within the ANTA bureaucracy. Thus, the timeline for funding, which was always going to be problematic even if all had gone to plan, was stretched even further. Meanwhile the program, in response to industry requirements, was well under way. As mentioned earlier, it had been necessary to start filming even before notification was received that the project was short-listed. The program was being implemented in a relatively small company and only two groups would be required to enable the whole of the workforce to complete the program. The second run of the

program followed directly on from the first and word of the ANTA funding did not come through until a few days before 'Judgement Day', close to the conclusion of training, for the second group undertaking the program. In fact, the funds did not materialise until after all the filming was completed, edited and the video finalised. Timelines remained strict in one sense, however, as the end date for the project remained fixed to the *original* timeline set by ANTA. Thus the project was shortened by almost six months. However, it was with some difficulty that as little as one month's extension was obtained.

Making the video

Initial hiring of two people to take video footage had provided some useful background material but the hiring of a professional production company could not occur until funding was secure. Normal practice was that a script be written before filming commenced. However, once the production company was hired 'Judgement Day' was already looming. Funds allowed for only two days filming by the professional crew ('Judgement Day' and 'Race Day') and interview questions and schedules were required for the first of these days. In order to obtain the maximum benefit from the first day's filming the day was organised to accommodate the requirements of the film crew. Thus, at least the outline of a script was necessary before filming began and it was agreed that the final script would be ready before Race Day.

It was necessary to involve a team of staff from the company to assist the Production Manager with writing the script in order to meet the tight timelines. The process started with a detailed analysis of the purpose of the video, the main points that were to be made and what film and interview segments were to be included. This was a useful exercise in focusing the activity and cutting back unnecessary comments and footage. It was agreed that the full length of the video would be about 10-12 minutes, and all points would be made in that time. The purpose of the video was to replace an industry visit, which was considered inappropriate because of the small size of the company and the fact that the program would be finished before any such visits could occur. The video, therefore, needed to give viewers an idea of the people, the energy, the enthusiasm and the fun that was generated in the program, as well as showing that participants understood the serious side of the training.

The Project Manager from OTFE required that each aspect of 'best practice' as shown in Appendix 4a should be covered in the video but it was decided that this would not occur in a way that dominated the story. It was assumed that the main points could be drawn out in the subsequent workshop activities and in the case study. It needed to reflect the reality that real learning often comes from the mistakes that were made, rather than from a perfectly planned and executed program. Therefore there should be no attempt made to cover up the 'warts', but rather they should be highlighted as part of the learning experience. The dialogue from the various players would tell the story, rather than an instructional video being produced on 'how to' implement a 'best practice' training program. It was also decided that the views of the industrial stakeholders would be presented to indicate the wider application of the principles but that the full story of the involvement of the school children could not be incorporated in such a short video, as it was a story in itself.

At the completion of 'Judgement Day' the Production Company supplied a transcript and copies of all the taped material so that a final script could be written, including voice-overs, to tie the story together. The gaps were identified and interview questions were prepared for the second and last day of filming on 'Race Day'. The final stages included editing and viewing alternative materials before the video was brought up to broadcast quality.

To complicate the issue, the project requirements included a Reference Group to monitor and guide the project and a Focus Group of sample end-users of the products of the project to have in-put to the content and script of the video. Each of these groups had to be satisfied with the final product, as did the project manager at OTFE who had the final say (or right of veto). Careful negotiations on membership of these two groups ensured that, on the whole, comments were useful and readily incorporated, such as the suggestion that footage behind the interviews should show the participants in their workplace undertaking normal work interspersed with footage of them in their training program, to show the interconnections and perspective. However, the Project Manager at OTFE (who admitted, 'I am an engineer, not an educator') expected that the video would be more traditional, giving explicit instructions on each principle of best practice and how it was demonstrated in the

program. Fortunately this notion was rejected by both the Reference Group and by the Focus Group, who saw such explicit instruction as part of the activity that a workshop would cover. A compromise was reached which saw an introduction and final section that put the video in perspective with the national project and stated the 'best practice' principles, but left the main part of the video intact as a narrative (see Appendix 4b for the final transcript of the video).

The Case Study

The notion of the case study appeared to be viewed with some suspicion at OTFE, especially when the first draft outline of the contents was forwarded with a progress report. Apparently OTFE personnel did not understand who the target audience would be. To a largely administrative, rather than educational, bureaucracy, all reference to educational theory appeared to be viewed with suspicion. At a meeting one such OTFE manager stated the opinion that the target audience of VET teachers and trainers would not be able to understand a theoretical perspective, only a practical 'how to' approach. From the 'best practice' experts another agenda appeared to be present: What did educational theory have to do with 'best practice'? In one communication an OTFE staff member (supposedly the state expert on 'best practice') admitted asking everyone in her office what some of the theoretical terms, such as 'grounded theory' and 'praxis', meant and no-one had ever heard of them - 'I even asked one industry trainer of many years experience and she had never heard of them either'. The fact that such terms, where used, were explained and illustrated in the case study was ignored. There seemed to be a feeling of outrage that anyone should dare to challenge the 'superior' knowledge of the experts on what constituted 'best practice' by introducing such terms.

Maintaining the case study as part of the suite of materials to emerge from the project was paramount to the provider, however. The production of a rich, ethnographic style case study (eg. Caulley, 1994) was felt to be the key to longer-term influence on the VET system and the opportunity to place on record a number of theoretical pedagogical concepts, grounded in practice, which could help to swing the training agenda back to a more educational stance. In particular, the case study was seen as a way in which the positivist view of 'best practice' could be challenged by introducing the 'messiness of the swamp' (Schön, 1987) and the understanding of the

developmental nature of both the programs and the understandings of those programs within workplaces (eg. Virgona, 1996; Waterhouse, 1996; Sefton et al, 1994. 1995). It allowed the introduction of discussion of the concept of 'best practice' as being value-ridden, subject to context, essentially retrospective in nature ('if it works it's good') and, importantly, that perfect plans executed exactly as planned do not necessarily constitute the criteria for good practice, let alone 'best practice'. It gave the opportunity to argue that mistakes are useful for learning, and that program improvements and changes can and should happen as and when required.

Following written guarantees that the language of the case study would be accessible to all interested parties, further discussion with OTFE personnel confirmed that preparation of the case study would proceed as planned. However, certain conditions were placed on the publication. It could not go to print until vetted by OTFE 'best practice' experts for simple language and content, which was not to be too theoretical. Every page had to have the official 'best practice' footer and border and the description of the training (variously referred to as 'integrated', 'context-based', 'enterprise based', etc. in the draft document) was to be named 'best practice' in the area of 'educational effectiveness' and related to the 'critical success factors' (see Appendix 4a) throughout. Initial reactions from the OTFE 'experts' to the final draft document were negative. They decided that they only wanted a 20 page executive summary document, a position entirely inconsistent with the commitment to a 'thick description' in the ethnographic tradition. A struggle ensued leading to an stalemate that was finally resolved by a much more senior manager at OTFE who, after reading the draft, agreed that it should be published, but that only the executive summary should be placed on the OTFE web-site, instead of the whole document as previously planned. Nevertheless, the detailed Case Study was finally accepted as part of the official suite of 'products' emanating from the 'best practice' project.

Outcomes of the project

From the system's perspective, the main outcome of the project appeared to be the dissemination of 'best practice' principles throughout the VET system. Thus, the emphasis was on the 'how-to' aspect, which included the Professional Development Kit and the workshops. The system's perceived need to improve the practice of VET teachers was driving the project. However, there were a number of assumptions

embedded in this approach, including that dissemination and replication represented the best way of achieving this end, rather than other change processes. This attitude took no account of the literature on learning organisations, for instance where Muller and Watts (1993) refer to 'the world of learning adapting and surviving and gradual improvement' (p. 362). One factor that emerged strongly from the project was the way in which learning grew out of opportunities that arose along the way, critical incidents that occurred and mistakes that were made. These were made explicit within this project to highlight the learning that arose from them and to challenge some of the inherent assumptions of the discourse of 'best practice', that there is in existence

> ... some form of positive guidelines that apply under all conditions and in all contexts. The experience documented here would indicate that these 'best practice' principles are much more temporal, contingent and contextual (Virgona, Sefton, Waterhouse & Marshall, 1998: 112).

The careful documentation of additional costs incurred by the enterprise in undertaking this project also was a notable outcome. These included the time commitments of senior personnel across the company, as well as the paid time of participants, and a cash commitment by Tickford to pay for the materials for the Tickcarts and for the extra time required by teachers to coordinate and conduct a program such as this. Without these additional resources this 'best practice' program would not have been possible. It could be concluded that the quantity of resources used in this program *was* of direct relevance to the quality of the program. However, the resources provided by the government constituted only a minor contribution towards the conduct of the program and arguably little to the quality of that program.

OTFE notions of 'best practice' in processes were rigidly maintained through centralised graphic design for publications, with no creativity allowed for individual projects. Pages on the Internet were also pre-designed and had to conform in every way to the template provided. This aspect was very poorly coordinated and, at joint meetings of the six Victorian projects, it was apparent that other projects also had problems meeting the requirements. Reporting requirements were exacting and specific, while final deadlines were sacrosanct despite systemic delays.

After the prolonged struggle with OTFE to maintain the integrity of the video and the case study it was ironical that the project was nominated by OTFE to ANTA for a

national 'best practice for educational effectiveness in VET' training award which it duly won.

Conclusions

Despite any benefits that might have accrued through obtaining the Quality certification, there is no doubt that this activity was costly, time-consuming, inhibiting, oppressive and wasteful of resources and energy. Staff and management found the extra work a burden for little added benefit. It appeared to have little positive effect on the actual quality of the teaching programs, or on the management of the organisation. The few procedures that were streamlined could have been adjusted without this activity. The funds could have been more effectively expended on professional development activities that would have been more likely to have a real effect on the quality of the educational programs. However, certification was considered necessary, and it achieved the desired results. The reputation of the company made it easier to work with government institutions, such as OTFE, and with private enterprises.

The most significant negative aspect of the process was the feeling of cooption that accompanied it, the feeling of being drawn into a rigid framework that could destroy the sense of exploration, discovery and innovation. Shades of Foucault indeed – 'Prisons resemble factories, schools, barracks, hospitals, which all resemble prisons' (Foucault, 1979a: 83) and reminiscent of his description of the power of 'normalising' techniques (Foucault, 1979a).

The proposed new 'Quality Management Systems' of the ISO 9001 for the years from 2000 onwards, mentioned earlier, with the emphasis on Quality *management* rather than Quality *assurance,* is based on an even more rigid system that will (attempt to) intervene even more strategically with the internal management processes,

> This International Standard applies to the activities of organizations
> from the identification of customer requirements, through all quality
> management system processes, to the achievement of customer satisfaction
> (ISO/CD2 9001:2000: p. 9).

The effect of this new standard will be to require the re-writing of the Quality Manual over a specified period of time to ensure conformance, thus ensuring an on-going commitment to the whole Quality agenda. As Burrell (1988) concluded,

> The real point is ... that, as individuals, we are incarcerated within an organizational world. Thus, whilst we may not live in total institutions, the institutional organization of our lives is total (p. 232).

However, on the other hand, the 'best practice' project indicated that it is possible to some extent to swim against the current and find opportunities in the inconsistencies and gaps in the rhetoric.

Although the use of the term 'best practice' in 'educational effectiveness' to describe the training seemed to be both presumptuous and bombastic, a compromise on this aspect allowed the remainder of the professional development kit to retain its integrity. From a systems perspective, it also had some advantages. Many VET teachers and trainers were being sent into companies to provide training using pre-packaged generic curriculum, and were given no time to contextualise these materials to the specific workplace. If programs like the Tickcart Program were to be labelled by the system as 'best practice', those teachers and trainers would be able to mount a case within their own institutions to be given time to devise enterprise based programs that were more relevant and 'educationally effective'.

From an internal perspective, teachers found that their previous existence on the fringes of VET was finally at an end as their educational practice was suddenly 'best practice' and forming the 'benchmark' for other VET providers. This had both positive and negative aspects as staff wished for acceptance from their peers but did not want to be aligned with a system they associated with neo-liberalism. A certain discomfort arose from the recognition of the power of normalisation on both individuals and organisations. However, the 'products' of the project were both useful and 'marketable' and were used widely in presentations, seminars, professional development exercises and promotional activities.

This chapter has indicated the political nature of the Quality discourse under neo-liberalism with its associated discourses of economic rationality and managerialism. It provided an illustration of the way in which the political discourses of management

theory and institutionalism affect the everyday life of people and the shape and character of their organisations. The next chapter turns to the exploration of project management and the search for alternative ways of operating and managing within this dominant discourse.

CHAPTER SEVEN
Power/Knowledge and Project Management

> The role for theory today seems to me to be just this: not to formulate the global systematic theory which holds everything in place, but to analyse the specificity of mechanisms of power, to locate the connections and extensions, to build little by little a strategic knowledge (*savoir*). ...

> The notion of theory as a tool kit means: (i) The theory to be constructed is not a system but an instrument, a *logic* of the specificity of power relations and the struggles around them; (ii) That this investigation can only be carried out step by step on the basis of reflection (which will necessarily be historical in some of its aspects) on given situations (Foucault, 1977a: 145).

Introduction

The previous three chapters have described in some detail the educational practice that became the *modus operandi* of the organisation, the effect this had on teachers work and one instance of the intrusion of outside influences, in the form of the Quality/best practice discourse, on both the organisation and its members. This chapter turns to the issue of project management.

Chapter two, which described the methodology of this study, explained that the role of the researcher was not that of an impartial bystander, but rather that of a participant observer with a political agenda that was targeted to creating change. In her role of project manager of both the Work Placed Education Project and NALLCU, as well as the managing director of the private company that formed in 1995, she was well placed to exercise some influence in this regard, within the external constraints imposed by the environment, the industry and its people. Other constraints resulted from the reflexive process of organisational development undertaken collectively with her colleagues. The approach she adopted and the style and practice of project and organisational management that evolved during the eight-year period of this study had its roots in her previous managerial experience within the TAFE system. This chapter starts by describing this experience and its legacy for later project management.

The remainder of the chapter, which is part descriptive and part reflective, attempts to encapsulate the strategies, tactics, motivations, organisational dynamics and development, and the politics and power struggles that underpinned the project management function of the researcher, and later of the management team.

Necessarily multi-layered and complex, the description is interspersed with relationships, understandings and analyses that resulted from discussions with professional colleagues and union comrades and the collective reflection on practice that continued throughout the study. This chapter also looks at the development of a management team and the ways in which a resistance of managerialist models and modes was attempted.

Managing in TAFE

The researcher's first involvement in TAFE occurred in the mid 1970s when TAFE programs were largely an adjunct of the secondary technical system and classified as 'middle level' or 'trade' courses. Inspired by the Kangan Report (Australian Committee on Technical and Further Education, 1974) that advocated the establishment of adult 'Access' programs in TAFE, and motivated politically through her commitment to a Marxist analysis of education under capitalism (see for instance Bowles & Gintis, 1976), the researcher became involved in the establishment of an Access Unit at the local college. Her role at the time was that of Community Education Officer, based at the Regional Directorate of Education on secondment from the college. She worked voluntarily in the evenings as a teacher in the fledgling Access Unit and as a member of the initiating committee to establish paid and permanent teaching positions within the Unit. When she returned to the college it was to work full time as a teacher in the Access Unit, teaching in areas of adult numeracy and women's access programs. When she later assumed the role of head of department she knew the difficulties of trying to operate effectively as a teacher under a conservative regime and she wished to try a more innovative and expansionary approach to meet the community needs for access programs.

As head of department she established a system whereby the policy directions and the philosophy of the department were identified through group discussion and agreement, the result of a conscious and critical process of reflection on current practice and discussion of creative ideas for future activities. This exercise was undertaken thoroughly once a year and up-dated as necessary on a regular basis. The focus of the activity was on the needs of the learners, potential learners and the community. She perceived that her role was to organise the department so that teachers would be able to implement programs that met the criteria they had

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established in the agreed policy directions. While it was impossible to conduct a full democratic vote on every issue, important decisions were made within policy guidelines. Various individuals assumed an *educational* leadership role when their interest and expertise made them the relevant person to do so. However, she saw *political* leadership as part of her role as head of department. Her politics constantly challenged staff and there is no doubt they also influenced the outcomes. As one reminisced recently,

> I remember that period in Access as an exciting and challenging time. We argued long and hard about all manner of things, particularly pedagogical and political issues. I recall long talks, in the office, after work, at the pub, in the car -- about ideas, philosophy and values. We were pushed and challenged by your political views. Looking back now I can see some people must have felt a bit threatened but for me it was inspiring and empowering to have a Head of Department who was passionate about education as a social and political process (Waterhouse, 16 November 1999, in conversation with the researcher).

The innovative approach adopted as policy by the department, combined with the relatively abundant government funds for access programs at the time, resulted in programs and student numbers growing dramatically. Additional teachers were brought in and the department grew quickly with the support of one 'champion' within senior management. Close liaison with community networks, and work in neighbourhood houses, raised the awareness of teachers to the needs of the community and uncovered multitudinous demands for access programs. Successful submissions for available money brought special programs for unemployed youth, people with disabilities and women into the college. At this time the researcher also started to develop wider networks both within the college, as branch president of the teachers' union and chair of their education committee, and statewide by becoming a member of the Social and Community Services (SACS) Advisory Committee of the then TAFE Board.

However, once the Access 'champion' in senior management left the college there was consistent pressure from management to 'consolidate' the operation rather than seek new funds for expansion to meet genuine community needs. Lack of power to appoint their own new members of staff eventually undermined the consensus operation that had developed in the department. Some new members of staff were not committed to the same political and philosophical agenda and this eventually split the

department into two camps. Recognising that the consensus model would never work under these conditions, the researcher took an opportunity that arose to move to another department. The new head of department, from the opposing camp, adopted a managerial stance, which included staff appraisal systems and terminating the contracts of some staff who disagreed with her. She effectively destroyed the consensus and reduced the department from an innovative leader in its field to a minor, reactive player with teachers who lacked motivation and lost direction. This had a disastrous effect on staff, providing evidence of a teacher becoming an 'administraitor' (Waterhouse, 1999) and of management acting as the 'enemy' (Newman, 1994).

A brief occupation of the role of head of Off Campus Studies allowed the researcher to develop a new statewide network across all TAFE colleges and to pursue her interests in providing access and community programs in another form. This was followed by a year in the Regional TAFE Board as research officer and then as manager, extending her statewide networks at a different level as a member of the TAFE Board staff. The role also incorporated work in the 'further education' field, including the disbursement of government funds for access and community programs. At this time the national training reform agenda had been introduced with the emphasis on making the system more responsive to industry needs. In Victoria regional TAFE boards were to be discarded as a source of planning advice to the central TAFE Board. A new State Training Board (STB) was established with planning advice being sought from a network of industry training boards. In 1987-1988, when the researcher was in the regional TAFE board, 'training' was in the process of being split organisationally from the 'further education' function, and regional TAFE boards were being transformed into regional further education boards to give advice to a central Adult, Community and Further Education Board (ACFEB) that was also being established.

On returning to the college in 1988, the researcher became its planning officer but retained membership of the regional further education board and later became a member of the advisory committee to ACFEB for a three-year term, a role that overlapped the start of the Work Placed Education Project.

As Planning Officer the researcher was involved in activities such as the development of strategic plans, evaluation projects, research and the development of new program areas (eg aboriginal education). She also became a member of the senior management team of the college with responsibility for aboriginal education and equal opportunity, areas that were, like other access programs, seen to be marginal to the traditional engineering 'mainstream' programs of the college. Her last role at the college was as manager of industry programs and consultancy services, the 'fee-for-service' area of the college, an area that was resented by others in senior management because they felt that it cut across their 'patch' by seeking staff from their areas for work they believed they should control.

In an institution with historical roots in an engineering tradition and a strong 'masculine' culture to match (see Marshall & Mitchell, 1989; Connell, 1987; also Gramsci (1971) on hegemony of the dominant group & Gee (1990) on dominant discourses) the senior management 'team' was more like a football team than one the researcher had expected to find leading a TAFE college. The majority of members had played 'Australian Rules' football and it was apparent, and stated openly by some, that those who had not had this experience also lacked leadership potential. The discourse was dominated by football terminology with sexist, and at times racist, innuendo common. It was the perception of the researcher at the time that team loyalty was considered more important than matters of educational leadership, community and industry needs or strategic directions. As the economic rationalist policies of the system led to reductions in college budgets, internal decisions were made on budget reductions on the basis of cutting back contracts and then making uniform cuts across all departments regardless of other relevant factors such as growth in employment in some areas and reduction in others, community or industry needs. Hardest hit were those departments (such as Access) with casual and contract staff whose contracts became expendable. Impossible targets for revenue raising through fee-for-service activities were imposed on teaching departments. Teachers who had previously worked hard were told they would need to work harder and for longer hours. Their response was often one of passive resistance; some worked to rule (ie. less than before), morale dropped and some people resigned while others decided to 'see out (their) time (to retirement)' by keeping their heads down and doing what they needed to do to survive. Some tried to meet the new expectations and suffered health

problems. Only some prospered in the new environment – the 'cowboys' (Seddon, 1997a). The negativity amongst the majority of staff persisted however, as was evident from countless comments and reports from college staff, both teaching and support staff, over the intervening years such as, 'I got out – best thing I ever did.' 'I'm just serving out my time.' 'I made it to retirement!' 'Don't come back – you'd hate it.' 'It's gone from bad to worse.' From one retired trade teacher: 'We used to have a terrific college. We all worked together... In the end I was glad to get out.' And from one member of administrative staff: 'I used to enjoy going to work. I felt as if I was part of an important process of educating students. Now I just go to work.'

It was her lack of commitment to the directions taken by the management team, the constant conflict with her ethics and politics, and differences with the director that drove the researcher to seek employment outside the college and led to her taking up the projects described in this study. But it was not before the director had decided to demote her from his management team for failing to give him blind and absolute loyalty or to follow the required line with staff. One of his criticisms of her management style was her tendency to 'get too close to staff and allow them to see (her) weaknesses'. As Blackmore (1993) concluded,

> Leadership, as a masculine activity, as I have argued, has been traditionally associated in liberal capitalist democracies with 'so-called' male traits of aggression, individualism, and competition. Any display of the 'feminine' qualities of emotionality, caring or sharing are perceived, therefore, as weaknesses in managers in a technocratic and hierarchically organized workplace (Blackmore, 1993: 42).

It should be noted, however, that the cultural, discursive and political characteristics of this style of management were not gender-specific. Whilst particularly affecting women and those of other races, they also alienated anyone in the college who stood opposed to the directions they espoused.

The Legacy

Sixteen years in this TAFE environment provided the researcher with experience in managing institutional change, and developed her skills in financial management, administrative systems, strategic planning and management. Albeit that some were of a managerial style that would need to be unlearned later, she knew what was *expected* of a manager. It also instilled in her not just resilience for what she felt was a battle

for survival but a dual feeling of exhilaration in meeting its challenges as well as depression at its reality. Her politics had led her to analyse this struggle as part of a more general phenomenon and not simply a personal battle. Thus she found a certain resonance with Foucault's concept of power/knowledge and his view that power is neither simply positive nor negative, but a reality (in Gordon (ed), 1980). Also his understanding that there is a need to approach the analysis of events by recognising a whole range of levels at which these events can produce an effect.

> The problem is at once to distinguish among events, to differentiate the networks and levels to which they belong, and to reconstitute the lines along which they are connected and engender one another. From this follows a refusal of analyses couched in terms of the symbolic field or the domain of signifying structures, and a recourse to analyses in terms of the genealogy of relations of force, strategic developments, and tactics. Here I believe one's point of reference should not be to the great model of language (*langue*) and signs, but to that of war and battle (Foucault, 1977b: 114).

The first hand experience of institutional change within the TAFE system in Victoria provided valuable insights into the processes and politics of change and the struggles, pain and disillusionment that accompanied them for many people. It alerted the researcher to the pockets of resistance, and subsequent potential for influence, that remained in existence throughout the system despite attempts to purge such pockets from the new institutions. It also helped her to identify points where pressure could be applied to create change, the weaknesses in the politics behind the changes and the windows of opportunity that were opening.

Through her work in managing industry training programs the researcher came to recognise that the skills and expertise of teachers in the access area were highly relevant to the process of industry restructuring that was occurring. At a time when this area of the college should have been growing dramatically to meet this new area of need it was still diminishing in size, function and influence and it was not evolving into new directions. She believed that the developments in industry opened up many windows of opportunity that were not being exploited by the college. As Gribble (1987), a well-known adult educator in Victoria pointed out at the time,

> There's an opportunity for TAFE to do *brilliantly*, I think - to be a brilliant asset in the education community ... But at the moment I think staff in TAFE colleges are not anywhere near where that direction is going to take. So ... the *opportunity* is wonderful but it could be really blown unless they're very

careful (Gribble quoted in Grant 1987:31 emphasis in original)

The researcher, thus, entered industry with both positive and negative experiences of management, but with the desire to find a better way of working than that occurring in her old college, and a belief that,

> ... in foreshadowing the alternatives to managerialism it is the revival of attitudes and values which need to be addressed; values which place human considerations over economic ones, values which demonstrate the interdependence of environmental and human well-being and which resist automatic acceptance of the alleged benefits of efficiency (Rees,1995: 25).

Working for the Board(s)

The projects conducted between 1991 and 1995, for the state and national automotive industry training boards, operated within a management and administrative structure established by those Boards. As project coordinator/ manager, the researcher was responsible to the executive manager of the relevant Board for the day-to-day operation of the projects and to the manufacturing sub-committees of those Boards (Victorian Manufacturing Training Council (VMTC) and Manufacturers' Advisory Group (MAG) respectively) for the outcomes of the projects.

This period was important within the context of this study, partly because many administrative systems and procedures instituted at that time survived to become part of the practice of the private company. Mainly, however, the understandings that developed in this time about the industry, its people and its way of operating, provided helpful information for future successful project management and for organisational development. While the style of management remained similar, and some of the systems remained in place, the purpose differed widely after 1995.

The Work Placed Education Project

At the start of this study the automotive manufacturing industry had adopted the rhetoric of industry restructure and this was creating a window of opportunity for change. The possibilities were endless and contradictions abounded. It was an exciting time to become involved in this industry, which had a history of being at the forefront in times of structural change in production methods. The adoption of forms of 'lean manufacturing' (Womack et al, 1991) in most companies alongside the introduction of new technology was leading to new training, new work practices and new work

organisation. Lack of literacy and language skills by workers was being blamed for low productivity and non-competitiveness of the industry. It was the opinion of enterprises that these 'enabling' skills needed to be up-graded as part of the push for international competitiveness and for the successful implementation of the VIC.

The Work Placed Education Project was initiated by the executive manager of the Board in a prior position he held at the Office of Training and Further Education (OTFE). When he obtained his new position it was on his condition that he brought the project with him to the Board. Ownership of the project by the industry members of the Board was therefore conditional and not absolute, as individual companies were prepared to seek funds to address their own needs. The project was not accepted at all by the repair, service and retail sector of the industry, where a 'literacy problem' was not seen to exist. In the manufacturing sector, with its history of migrant employment and lack of formal training, it was admitted that there was a necessity to gather information, and gain access to government funding to address problems. The successful introduction of the VIC was seen to be required to make the sort of changes required in industry if it was to increase productivity and become internationally competitive. The union saw advantages for their members in terms of recognition of existing skills and access to higher wages. From a union perspective access to training on an equitable basis was necessary and literacy and language skills were seen as a major barrier to such access. They demonstrated complete support for the project, particularly at a central level where the project coordinator had immediate access to the state secretary whenever she requested. Whether or not the results of the project would be made public remained a contested point, as did the need for this particular project as a means to achieve the ends required by the enterprises.

For most of its duration the Work Placed Education Project was a research project with only two workers employed - the coordinator and one project officer. However a number of people with particular expertise were recruited to assist with the design of the survey questionnaire. Later a team of 37 literacy and language teachers were selected and trained to conduct the fieldwork over the twelve days of the survey implementation.

The economic recession of the early 1990s had led to 'down-sizing' and a series of redundancy rounds disrupted the early stages of the project. The project management problems that arose during the early stages of the project emanated directly from the VMTC, mainly around these constant delays, and the barriers and organisational complications that were put forward in relation to conducting the survey. Some of the issues that arose between project staff and industry representatives on the VMTC became antagonistic, creating tension in the project and a sharp learning curve for project staff. These tensions also helped to draw the boundaries within which project staff had to operate.

Years of experience in adult education had indicated to the project team that people who were perceived to lack certain basic skills lacked confidence and were disempowered as a result of the dominant discourse whereby the victims were blamed for their lack of skills. The first step in changing this situation often occurred when they realised that they were not alone, that numerous others shared their 'problems' and that these problems were systemic, not the responsibility of individuals and constituted no cause for shame. It was therefore in the interests of these workers to firstly 'mainstream' the issue of literacy and language by demonstrating that it was endemic to the Taylorist system of production whereby workers were not required to be literate. Second, the report would need to be published and available, not hidden away on shelves in offices. Third, the recommendations would need to push members of the VMTC as far as it would go towards a different view of how to 'deal' with the 'problem'.

Even before conducting the survey the project team were aware of the likely results. Their experience with shop floor training combined with knowledge of the very high proportion of NESB workers and the effects of the Taylorist work organisation made the results inevitable. It was also apparent that the VIC had been designed with no thought given to these factors. Thus, with the implementation of the VIC imminent and generic learning materials already being developed by TAFE, the project team made an effort to influence this development so that the learning needs of workers were considered. They attempted to get the VMTC to consider discarding the survey in favour of using the funds to move directly to working on a 'developmental learning model' for the VIC. This created a furore amongst VMTC members who made it clear

to project staff that their role was to conduct the survey. They were not to interfere in the VIC - literacy, numeracy and English language skills were 'enabling skills' that were to be dealt with *before* workers entered VIC classes. There was to be no 'watering down' of the VIC to take account of learning needs - the VIC was 'mainstream training' and serious business. The adverse reaction to these suggestions made it evident that the survey would have to be conducted and that a lot of work would need to be undertaken to change some attitudes on the VMTC before the report was published. A positive advantage which arose from this altercation was that the barriers to the survey suddenly disappeared and dates could be set for its implementation.

It was apparent that the project team would need to find other ways of having an effect on the VIC implementation. They gave up trying to affect the VIC in the short term and concentrated on the survey. However, they did not waste opportunities that arose to talk to individual stakeholders, raising issues, discussing strategies, and developing short and long term visions and ideas. Neither did they cease investigating formal and informal lines of influence within the industry or on planning strategies for the future. But with the survey definitely proceeding, and time-lines in place, they concentrated initially on making sure that the survey gave workers the best possible chance of demonstrating their skills within the constraints of the survey methodology.

A leading academic from the field of academic research methodology was contracted to the project to assist in the research design and the statistical analysis of results in order to ensure that the methodology provided reliable and valid results and that the analysis of results was sound. The high calibre of the reference group membership, which included well-known academics, teaching practitioners and industry representatives, also lent credence to the project. The project team developed their own credibility with the industry by maintaining a high profile in workplaces, providing briefings for workers and multi-lingual information about the processes, obtaining the support of the union and its shop stewards in branches, and working long hours. That this was noticed by members of the VMTC was evident when evening phone calls to the office by senior training managers from companies to 'chat about the project', started with the comment 'I thought you might still be there...'

As expected the results produced few surprises. Despite the high number of non-English speaking migrant workers, and the availability of English classes at work in most companies, only 20 per cent had attended any form of language class at work. A further 23 percent had never attended any form of English class either before or since arrival in Australia (Sefton & O'Hara, 1992: 62). The results of the survey also indicated that approximately 16 per cent of English speaking workers had trouble with literacy tasks. When asked about their own learning needs nearly 60 per cent said that they never had to write anything at work and more than half believed that reading and writing were not important to their work. However over 70 per cent wanted to undertake the VIC. The communication channels at work were overwhelmingly perceived as being oral, with few reading the company (or union) notices. Multi-lingual communication was considered important. The union used this information to acquire money to produce multi-lingual tapes with basic information about union services. These proved very popular amongst their members with hundreds being taken away in the first day they were available and then being handed from one to another.

In terms of the longer-term strategies that were adopted by the project team, the main tactics were to continue liaising with, and lobbying, stakeholders and re-writing the report until all VMTC members claimed ownership and comments such as 'we can do something with this...' were forthcoming. The recommendations that were finally agreed left room to manoeuvre, with longer-term strategies relating to a 'developmental model' of the VIC included, and ensured access to mainstream training for all workers. By the conclusion of the project the industry had claimed ownership and the report (Sefton & O'Hara, 1992) did not sit on shelves gathering dust, but became a guide for the way in which the industry approached meeting the literacy and language needs of its employees over the next few years. It also provided the basis for the procurement of considerable government funds to address the problems that had been identified, including the establishment of NALLCU.

Managing the NALLCU Project
When NALLCU was established at the National Automotive Industry Training Board (NAITB) in 1992, the researcher was appointed as manager. Substantial funding allowed for the appointment of a number of enterprise-based coordinators and a range

of curriculum officers to undertake both resource development and to act as project officers for the action research project (BLIT, 1994). Over the three-year period in which the project operated more than 30 members of staff were employed. Management of this project was much more complex and demanding than the previous project. Figure 6 gives a diagrammatic representation of the various projects and their personnel.

It was agreed by the industry that project staff would report directly to the manager of NALLCU, to whom they were answerable for the conduct of the project on-site in enterprises. Thus, although enterprises needed to be consulted, and to agree, about both the work being conducted on their site and who would undertake that work, they did not 'own' the project staff. Any complaints or comments came back directly to the project manager. Staff did, however, feel the pressures to conform to the expectations of training managers in enterprises within which they worked, and to whom they also reported. This dual reporting requirement caused some conflict for project staff, particularly for those working as enterprise based coordinators, depending on the degree of commitment of the company in which they were working to the development of a national coordinated approach. This did not apply to the union NALLCU coordinator who enjoyed a different relationship in her role.

The manager of NALLCU had a limited say in who was appointed as enterprise-based coordinators, and some were people who had worked for years in the provision of language or literacy classes in the same environment. This meant that they were perceived as 'company' people who were acceptable to training managers and not necessarily as innovators who might disturb the status quo. The fact that they worked only part-time in their coordination role and part-time as teachers, often in the same workplace, also tended to blur the boundaries. However, if they were to succeed in their new role they would need to adopt different strategies. It was essential therefore that they keep control of their own activities. The fact that the industry had agreed that they would report primarily to the manager of NALLCU was a good start, but company personnel were inclined to make use of any resources to hand in ways that suited themselves. The requirement was therefore imposed on coordinators by the manager of NALLCU that they would develop action plans. These action plans had multiple purposes. Firstly the development of such a plan would force coordinators to

Fig. 6   NALLCU – 1992-95

Manufacturers' Advisory Group ←→ NAITB ←→ Repair, Service & Retail Advisory Group

Executive Director NAITB

Manager NALLCU

Coordinated Approach

Cooridnators (12)
Vic: 7
NSW: 1
Numeracy: 1
SA: 3

SA Project Steering Committee

SA NALLCU Coordinator (1994)

Learning Materials

Numeracy on the Line (2)

Curriculum Planning Officer

BLIT (1993) (action research)
6 sites
6 Reference C'ttees
1 Project Scribe
8 Project Officers

'Audit' LNA

'Audit'-LNA Working Group

Reference Group

LNA Guidelines/Ethics Guidelines/Self-assessment

LNA Coordinator (1994)

Workplace Communications Project (1994)
RS&R Sector
2 Project Officers
4 Projects
Across 4 states (SA, ACT, QLD & Darwin)

Training Projects (1994), 8 Project Officers

Mid 1992 to 93

1994 to 95 Mar

170

think about their role rather than have it develop in an ad hoc manner. In an internal newsletter for NALLCU staff it was pointed out,

> It doesn't matter too much which way you develop your job, as long as it is in line with overall principles. However, it is important that you know what you have done, and are doing, so that you can describe it to anyone who asks you – particularly within the companies. Have some ideas up your sleeve to talk to people about and how you would like to put these ideas into practice. We will talk about this more (NALLCU Newsletter No 1, 1992: 3).

Discussions with individuals about their particular positions were supplemented with group inservice activities that were targeted to expanding their horizons so that innovative ideas could emerge, be shared amongst the group and become incorporated into their individual action plans if appropriate. They were also encouraged to build room for flexibility into their action plans, so that new ideas and approaches could be incorporated later. Other important purposes of these plans were that coordinators would consider the strategies they intended to use and to plot a campaign to achieve their aims. Getting company personnel to sign off the action plans meant that position descriptions were verified, each coordinator had some space to operate and their roles were legitimated within the company. Most importantly, however, it was an exercise in personal development for a group of educators, who were generally used to following a given job description, to define their own role. Many found this an empowering and useful activity. Also it was easy to report on their activities as required. From a project management perspective it kept the role of defining the work of coordinators in-house and subject to guidance and leadership from the manager and the group.

On the other hand staff members who were appointed in 1993 to be project officers for the action research project were selected by an internal process, for a different purpose and to a different criteria, part of which was their ability to carve out a space for themselves. While they were also asked to complete action plans for reporting purposes, and so they were subject to the same requirements as other staff, this activity was not significant. A project brief was developed for each action research project wherein project officers' roles were more specifically and formally described and which was negotiated before a project started. The project brief contained explicit documentation of the aims, objectives, curriculum development and learning strategies, roles and responsibilities and timeframes and ensured that teachers had the

necessary freedom of movement at an enterprise level to achieve the goals that were established. The signing of the project brief by the state secretary of the union, a senior member of the enterprise management and the manager of NALLCU, gave legitimate and guaranteed space for the project officer to proceed in an agreed manner that was somewhat independent of the enterprise management. In particular it gave direct access to all personnel – shop floor workers, supervisors, managers, technical staff, union representatives and office staff such as design engineers, sales and administration – to negotiate curriculum content and learning strategies. This allowed for improved curriculum design and assisted in involving everyone in the training in order to create a supportive learning environment, in and outside of the formal training.

The establishment of an on-site, tripartite project steering committee, with both the manager of NALLCU and the project officer(s) in attendance, created a forum to deal with any problems as they arose. It also allowed the project officers to maintain a collaborative, supportive and sympathetic role within the workplace whilst any tough negotiations that were required were undertaken by the manager. This division of labour placed the manager in a support role for the people doing the important work at shop floor level. By maintaining for the on-site project officer the role of executive officer of this committee, it was possible to ensure that meetings were called, minutes written and decisions recorded. That this was a political as well as administrative task was impressed on project officers who came to realise the importance of such documentation.

The success of this approach led to a similar process being adopted by project officers within their training programs. Work-based projects were negotiated with enterprise managers in conjunction with worker-learners thus ensuring that workers received 'passports' that allow them free access to other areas of the workplace, normally closed to them. This enabled them to collect data, ask questions, and sometimes to work on new developmental projects in other areas.

While the project brief set the scene for project officers once the project was agreed, what was not so apparent was the time it took to establish the project brief in the first instance. In many cases this process took longer than the project itself, months of

negotiations not being uncommon particularly when industrial issues were also on the table. In some instances an industrial 'fence' was drawn around projects by the union so that the projects could start whilst other negotiations continued.

The initial 'marketing' of the notion of integrated training was found to be problematic. It rested on the rhetoric that was so readily utilised in the context of training and industry restructure (eg continuous improvement, waste reduction, improved quality). However, the implicit need to 'empower' workers and listen to their ideas contradicted the control mechanisms of the past that many were loath to set aside. Suggestions that 'if this is what you want, then you will need to...' made some enterprise personnel uncomfortable because they did not want to admit that any form of 'empowerment' of employees was the last thing they wanted. It was generally found to be preferable to talk directly to the plant management regarding the training they required. Gaining access to these people was not always easy, as training managers needed convincing that this was a good idea and they sometimes had a vested interest in retaining existing training regimes. They also distrusted talk of 'education' rather than 'training', complaining of 'academics' who did not understand the needs of industry. Strangely plant managers often held quite contrary views, expressed by one,

> It's learning really, instead of training. I hate the word training. Learning really as far as I am concerned, that's what it's about. You train animals I think (BLIT, 1994: 160).

In one large company the project was isolated into the warehouse where it could be trialed without necessarily affecting other areas of training. In another plant a TAFE teacher had already been engaged to write the necessary curriculum but the plant management thought that probably only one group of ten employees, at most, would be able to do the course because it was so technical. On being asked what they intended to do about the rest of the 200 or more workers in the plant – were they to be '... denied access to completion of the VIC because it was *too technical*?' these managers were shocked. They agreed to try an integrated approach. As one later remarked,

> We certainly wanted the people to learn some of the technical aspects of our manufacturing operations. But then the real concern was, were we developing something that was going well beyond the comprehension of our people? This

has been really to the credit of NALLCU and this is when I think NALLCU really stepped in (BLIT, 1994: 68).

The TAFE teacher also commented on this aspect of the curriculum development and the value of working together in a multi-disciplinary team,

> I think that was a great success. I think that was probably the best thing about it, there were people from different backgrounds coming together to develop the program, for those particular people. I thought that worked very well (BLIT, 1994: 78).

These comments, made at the conclusion of the project, belie the tense negotiations that made it possible and the difficulties that accompanied the process of working together, the compromises that were necessary, the extra time it took or the pressure that was placed on project officers. It also omits the role of the union in supporting the project by isolating it from other industrial disputes surrounding training in that company and through their on-going support on the project steering committee.

In one plant project officers were told that they would have one person assigned to them who would obtain any information they needed from the shop floor. This effectively denied the project officers direct access to the shop floor. In this case it was necessary for the manager of NALLCU to invoke the conditions in the project brief and insist on open and direct access by project officers to all personnel and an office on the shop floor so that direct contact could be encouraged. The role of the tripartite steering committee, and the support of the union, was critical in solving this problem.

While these negotiations, and sometimes confrontations, with company management were always the role of the manager of NALLCU, project officers also required assertive skills in order to create opportunities and space to operate within the enterprise. Examples of how they handled this process have been given in the previous chapter. Another hurdle experienced by some project officers was in relation to 'failure' rates. In the view of some enterprise training personnel, if you did not have some failures you did not have a high enough 'standard' of training. They wanted to see a traditional Bell Curve with some participants gaining high marks, some failing and most in the middle. In an adult education process this notion was considered disastrous. Teachers were more interested in celebrating the skills of their students,

not in failing them. The tactic used to overcome this attitude from the training department was to involve the managers and supervisors in assessing the work of participants and to ensure the union retained some control. If there were to be any failures, the managers and supervisors would have to fail them, and the union would have some say. Thus arose the notion of participants presenting their work to management, with central union personnel also invited along with other guests (eg. from NALLCU, interested academics), a process that was found to build the confidence of participants and also removed all suggestions of failures. The only failures that occurred in these programs were those who did not complete the requirements or who dropped out part way through the program. All those who completed passed.

Other incidents occurred on a daily basis, too numerous to mention. The critical point was the necessity for both project workers and managers to be flexible, assertive and focused, with long-term goals in mind and a range of tactics and strategies to reach them. In pushing the boundaries of the given operational space, most received severe rebuffs at one time or another, at which time they found themselves in a war zone. Even in times of relative peace and harmony educational programs that addressed issues of workplace change required careful, thoughtful and constant attention to potential pitfalls. They also required agreement from the union and needed to fall within the bounds of enterprise bargaining agreements. From a project management perspective the major role was to support teachers in their work, to help them avoid the worst of the pitfalls and to take on the larger and contentious issues as necessary. More importantly it was to encourage them to keep the 'big picture' in mind and to push the boundaries with creative solutions.

In the third year of NALLCU's operation the government funding was cut substantially and it was made clear by the funding body that it was unlikely to continue except on a project-by-project basis thereafter. The decision was made to encourage companies to continue the employment of coordinators by other means, and in many cases this occurred. Thus central funds were available to continue work on the integrated model of training, extending the work into other companies and completing projects started under the action research project. A project coordinator was appointed in South Australia, answerable to the local project steering committee,

to liaise with those coordinators whose employment had been taken over by local enterprises and to initiate new activities. Some WELL funds were also made available for a 'workplace communications' project in the repair, services and retail (RS&R) sector, as part of the final year of NALLCU. Although the NALLCU manager managed this project, and it was officially part of the Unit's activities, the links to NALLCU were kept rather more tenuous as this sector continued to maintain that they did not have a 'literacy problem' and did not want to be associated with the manufacturers' project. Project officers reported directly to the RS&R council of the Board.

The available funds were stretched by finding other sources (eg. national staff development funds, state program funds through joint projects with TAFE institutes) and by asking companies to help pay for the services they received. The project became in fact a provider of training rather than a research or coordination project. This function sat uncomfortably with the Board's charter, which did not include a training role. At the request of the union, whose officials wanted to maintain the training aspect of the group, and the support of some of the smaller to medium size companies, whose training managers wished to continue to access the integrated model of training, the establishment of a private training company was proposed by the Board. Thus, at the end of its third year of operation the NALLCU project was declared finished by the Board and became defunct, despite the desire by some members of MAG to find ways of keeping it going. The demise of NALLCU and the establishment of a private company was supported by the repair, services and retail sector representatives of the Board, whose attitude was 'Let the market decide'. The Board sold the furniture and equipment that had accumulated during the NALLCU project to the new company, at their book valuation, and the funds were utilised within the last stages of the project. With the encouragement of the union, and their support in finding adequate work, a new company was formed and the Board supported an application by the company for private provider status, as an industry provider with OTFE.

The notion of forming an incorporated body with a board of interested stakeholders, suggested by the chairman of the National Automotive ITB, was discarded early. The group, consisting of teachers and non-teaching administrative staff, decided that they

needed to control their own destiny. In particular, as a result of previous experience, it was considered essential to be able to establish their own philosophy and directions and to be able to make their own decisions on issues such as the employment of new staff. Thus a private company, with only those working within it able to be shareholders, was established and registered with the Australian Securities Commission.

Establishing a Private Company

The establishment of a private company required the development of a raft of administrative and financial systems and procedures to cover the areas previously part of the Board's role. It was agreed that these needed to be sufficient to proceed with the work, but not to impose a managerial burden on the people who had to do the work at the coalface. Roles and responsibilities required clarification, modes and conditions of employment and rates of pay established and company ownership secured.

As the major shareholder, and registered as the company secretary, the role of the researcher became that of managing director. At the behest of staff this role was to be a non-teaching role; rather it was to manage the company and to find work for teachers. One of the teachers finally agreed reluctantly to become the registered second director of the company, to take on an active position of director, training and development, and to share the management role with the managing director. In the initial stages of the company they formed the management team. His reluctance to assume this role was related to his view of management. As he later expressed it,

> There is some difficult unlearning for me in adopting the stance of the manager-self, it feels unsteady, unsafe. And if the manager-self is to take flight it must take further risks, it must 'let go'. Part of what it must release is a set of constructs about managers: traditional constructs laced with notions of power, control and direction; the construct of 'administraitors' (sic) is there, as is the construct of managers as 'the enemy'(Newman, 1994). Such constructs are not entirely helpful for the work I now need to do. I need to build new, more appropriate constructs of manager and management. I need to recognise and appreciate the alternatives that already exist and come to see these as effective 'management'. I must also let go of the idea that I could never be an excellent manager ... I need to let go of the idea that I'm not 'naturally good with figures' and therefore 'can't do budgets and stuff like that'. I need to unlearn the idea that there are others more suited, more gifted, more talented who can do this management work. For the manager-self to take

flight I need to release my perch on the tree of excuses. It is difficult to let go, it is tough unlearning, but it must be done (Waterhouse, 1999: 284-285).

His ambivalence towards the role of management was mirrored by some other members of staff. The notion of 'unlearning' was also posited by Goldman and Nagel (1993) who argued that managers in learning organisations needed to 'unlearn' a whole range of traditional management lore. This became even clearer in later years when, in 1999, a staff development activity uncovered the reluctance of teachers to become involved in management training in enterprises. Not because they lacked the knowledge, understandings or expertise, particularly for the form of 'management of the future' (Clegg, Barrett et al, 1996) that was required, but because they felt ambivalent about training managers at all. It was housed in the notion of management as the 'enemy'. When one member of staff, who had successfully managed a spastic centre with a large staff, personal carers, parents and volunteers to coordinate, was challenged about this attitude, he replied ' ... but I left and got out of it, didn't I?' This issue recurred at various times during the latter part of the study and will be discussed further in the next chapter.

Teachers' salaries were to continue in the custom and habit already established within NALLCU, at a support services level two on the TAFE teachers' salary scale. Annual leave of six weeks was agreed, with two of those weeks being in lieu of overtime to take account of flexible hours worked in industry. Finances did not allow for paid maternity leave, however unpaid leave would apply. It was agreed by the shareholders that the purpose of the company would be to keep its people employed rather than to make a profit, particularly in its first years of operation. Few people could afford to invest much money in shares, so the venture was severely undercapitalised and it was recognised that this would limit the scope for expansion and necessitate careful financial management.

The market niche for the company was the integrated and contextualised model of industry training it espoused. While this meant that the training was effective, for both the trainees and the enterprises concerned, it was not cost-competitive when compared with the traditional CBT training offered by TAFE institutes in the form of off-the-shelf standardised packages. The time it took to develop the curriculum in each

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company, and the need to spend time organising real work-based experiential learning on a continuing basis throughout the program, meant that it was expensive to implement. Also, targeting workplace change meant that the program needed to be constantly adjusted and could not sit on shelves in a package for group after group. Thus the training had to be marketed on the basis of quality and results and companies had to be prepared to pay for a top quality program in their workplace. Government funds subsidised the costs but were insufficient to cover even the cost of program implementation.

Other possible areas of work included professional development for TAFE teachers and industry trainers, to spread the methods of integrated training throughout the system, the development of publications for sale, for the same purpose, and educational research projects.

The company was in a position where it had to relate to government institutions, in which economic rationality and managerialism were the established discursive practices (Foucault, in Gordon (ed)1980; Gee, 1990), and an industry that was accustomed to working with traditional enterprises and influenced by the discourses of lean production and restructuring. The new training company was therefore vulnerable to these discourses and a strong organisational culture was required to counter their hegemonic effect (Gramsci, 1971). That this was difficult has been explored in the previous chapter regarding the effects of the discourses of Quality and best practice. Figure 7 illustrates the way in which the organisation was perceived from within. The dotted lines represent the relative fluidity of the structures and the acknowledgment of the possible effects of outside influences.

At the heart of the operations of the company was the teaching practice of the practitioners who conducted the main business of the company – the design, development and implementation of workplace education, and other projects, within enterprises and organisations. This practice, which has been described in detail in previous chapters, was underpinned and informed by educational research at a number of levels. Administrative systems and procedures played a subordinate role to the main area of activity and were designed to ensure that the organisation was seen (by funding bodies and enterprises) to be 'well managed' and responsive. As shown in

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Figure 7, these systems and procedures fell roughly into two types – those that directly supported the teaching and other projects (support structures/systems), and those that were only necessary to the survival of the organisation (survival strategies) such as legal, quality and funding requirements. The 'way of knowing and operating' of the company incorporated all of the above, was grounded in the historical roots of the organisation and the political and philosophical understandings of the group, and had the capacity to grow and change over time in a process of emergent design (Lincoln & Guba, 1985; Caulley,1994).

Figure 7: Operations of the Company within the Broader Environment
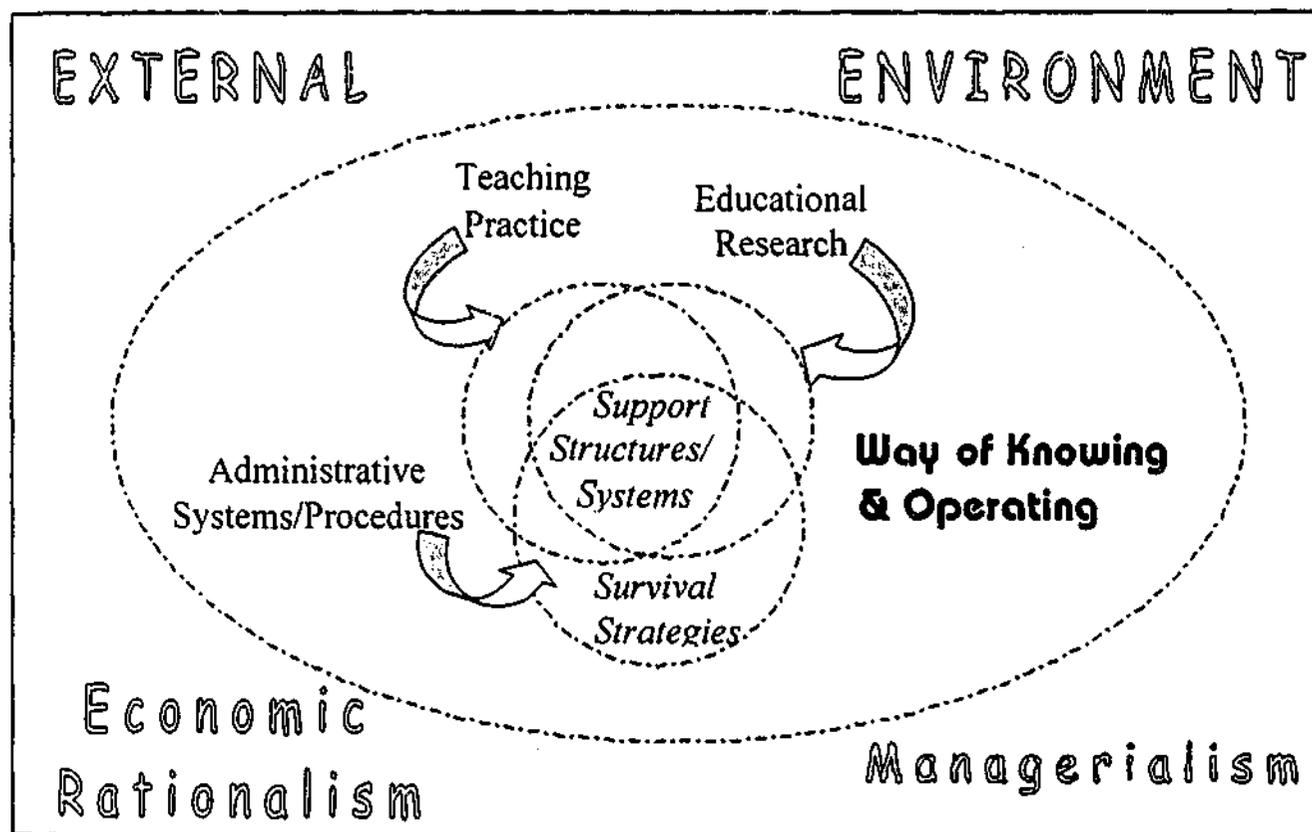
For those individuals who had been part of the organisation for many years, the process of development of a shared 'way of knowing and operating' had been a joint venture. But for those staff who joined the organisation later it was more a process of enculturation. While there was an effort made to recruit people with new ideas and expertise to promote dynamic growth, the company had built its name on some non-negotiable principles and practices. These included a commitment to its established educational practice, a world-view consistent with a view of the worker/learner as the focus of activities and a commitment to transformative learning as a means of creating social change. Thus teachers were selected for their adherence to these basic values

and beliefs in relation to their work. If their political understandings included more progressive views this was considered an advantage. The degree to which all members of staff shared, or did not share, these values and understandings represented a measure of the company's relative vulnerability to the dominant discourses in the external environment such as those of economic rationalism and managerialism, and the Quality agenda.

Research was central to the work of the organisation as a major way of changing the methods of work, the practice of teaching, and the culture and shape of the company (Sefton & Waterhouse, 1997; Falk et al, 1999). Research occurred at a range of levels within the organisation. Teachers researched the technology, language, resources, processes, procedures, work practices and communication channels within a workplace, or organisation, and the learning needs of participant/learners. Learners conducted research as they undertook their training program through practical work-based learning activities. Members of staff were encouraged to experiment with innovative ideas for training programs wherever possible. Teachers, both individually and collectively, reflected on their practice and wrote about it for conferences and journal articles (see chapter 2: 37). Individuals within the organisation who undertook academic research as part of personal study were encouraged to feed the results of their work, and their reading, into the general pool of understandings and knowledge of the group. Library resources included relevant research from the academic literature. Finally, a number of commissioned research projects were completed in areas of workplace learning and change (Sefton, Waterhouse & Cooney, 1995), effects of changes in regulations in the Food Industry (Thomas-Walsh, 1996) and a literature review on changing patterns of work and the implications for VET (Waterhouse, Ewer & Wilson, 1998). Any new tenders for funded research were targeted to areas that would assist to improve the understanding of the group of their working environment, enhance their teaching practice, or open up new areas of work for the company. Commissioned research that lay outside any of these areas, or that was in contradiction to the general direction of the company, was avoided. Research, it was argued, should build the capacity (Seddon 1998b) of the organisation to recognise windows of opportunity and respond appropriately to new challenges.

The skills required of teaching staff were considerable, as has been explored in chapter five, and the selection of staff members with these skills who would fit into the established educational and organisational culture, operate in the same way, and play an active role in the growth and development of the company, was not an easy task. Adding to the difficulty of finding such people was the economic reality of working in a highly competitive environment where the major competitors were TAFE institutes that were reducing costs by hiring sessional and contract staff for this work. Their access to recurrent funding to further subsidise their costs for industry programs exacerbated the situation. Despite every effort to remain viable while employing people on longer-term contracts, it was difficult to employ people not directly engaged on projects for a large proportion of their time. The employment of people who had their own registered consultancy business became one option and a network of such people provided a supplementary pool of expertise to complement the skills of core staff. Another option was to form a network of, and strategic alliances with, other similar small businesses and organisations for the purpose of joint ventures and mutual support, thus forming a virtual organisation that had the capacity to undertake a wide range of contracts. Many existing staff members were also completing post-graduate academic study on a part-time basis and preferred to work part-time. Thus job-sharing at all levels was common, including in management. Both directors of the company were in this situation. The employment of full-time teachers was, however, the favoured option. The advantages of permanent teaching staff in terms of organisational learning and development, continuity and stability were indispensable and far outweighed the disadvantages. They provided an asset that TAFE institutes were losing as these public training providers continued down the road of economic rationalism.

Professional development of both teaching and administrative staff was always considered vital and, although financial restraints made it difficult to manage, certain activities were undertaken. The work of the Director, Training and Development was predominantly in this area. Emphasis was placed on sharing the expertise of the group with one another and some of the most useful sessions were devoted to this activity. This was complemented by the papers written by staff for conferences and journals, many of which were written by more than one member of staff. Both the writing and the finished papers were useful for everyone. New areas of work provided new

learning and the sharing of that learning was paramount for staff development. Outside input was sought in areas such as political economy, work organisation and the introduction of new training packages. As the educational experience and understandings of the group deepen..d and become more theoretically complex, the induction (enculturation) of new staff became more important and problematic. It became increasingly clear that it was not possible to find new people who shared all the attributes required for the work. Training in curriculum writing and workplace assessor skills, provision of observation activities of existing programs and pairing of new people with more experienced members of staff for mentoring purposes was costly and time consuming. In some cases individuals did not last in the workplace, or found the work too demanding, so the benefit of the training was lost to the company. This placed a limit on the rate of growth of the organisation, as there was no intention of reducing expectations or changing the style of work.

In entering an existing organisation with its own set of ethics, practices, customs and culture many new staff members had a great deal of learning to undertake before they were really in a position to add to the expertise, knowledge and understandings of the group. Thus it was difficult for them to experience the same sort of personal growth that had occurred for the original members who were part of the developmental process. Nevertheless, new staff members were gradually and successfully added to the group.

Developing a Management Team

National strategies, with funds attached, were constantly promoted by the national training authority (ANTA) to advance managerialism in VET organisations. These included initiatives such as the META (Management Enhancement Team Approach) National Management Development Scheme, and 'best practice' awards and grants. In addition, conferences, workshops and a constant stream of written materials continued to bombard VET providers with the dominant discourse and rhetoric of managerialism. Concurrent developments within industry settings required staff to work within enterprises and organisations where similar management structures and discourses prevailed. Thus there were many outside influences, as well as direct pressure, to conform to the dominant management paradigm. More importantly, as workplace educators working mainly at a shop floor level within enterprises, members

of staff were consistently asked to train workers for the new work order (Gee et al, 1996). Hence a shared view of educational practice and a code of ethics were paramount to ensure staff did not inadvertently educate workers simply for intensified work and acceptance of managerialism in their workplaces. Working within such contradictions required a firm understanding by both practitioners and managers of educational and political principles and teaching practice. It also required management decision making that increased the capacity of the organisation, not only to survive, but also to move forward despite the relatively hostile environment.

There was a need to develop administrative and financial processes and procedures in order to operate effectively, and to meet the requirements of funding bodies. So that people were recognised as official spokespersons for the company and could therefore talk directly to enterprise personnel and government officials, titles were bestowed. A 'business manager' managed the finances, and a 'quality and administration manager' (the former administrative officer) managed the office and quality system. The 'senior management team' consisted of the two directors and the 'manager industry services', who was promoted from the teaching staff to look after the statistical returns and information technology and to play a project management and leadership role in industry projects. There was only one administrative assistant, who had control of the library, data entry for student records and who acted as receptionist. Most of the 'managers' were not steeped in old traditions of management, however some of them believed that they lacked 'management' skills and required training. In an effort to avoid traditional training a new management structure was suggested, providing a forum for decision making, reflexive processes and mutual learning and support to occur. The new structure is outlined in Figure 8.

In order to ensure continuity and a consciousness about new ways of operating that countered the predominantly managerialist discourses that surrounded the organisation, it was necessary to subject the role of the managing director to analysis and dismemberment in favour of a team approach. This task was first tackled by looking in detail at the reasons for decisions that had been made.

Figure 8: Company Structure

Management Team

Senior Management

Managing Director/ Company Secretary (P/T)	
Director Training and Development (P/T)	Quality and Administration Manager (F/T)
Manager Industry Services (F/T)	Business Manager (P/T)

Formal Relationships with other organisations (shared work/MOU)

Networks with other Providers Govt Depts Unions Organisations Consultants

| Industry Training Consultants (Teachers) | Sub-Contractors (Own Business) (Teachers) | | Teacher Seconded from TAFE |

A Multi-Dimensional Framework for Decision Making

The framework for decision making that is illustrated in Figure 9 is an attempt to categorise and explain the data collected from the many years experience of management decision-making by the researcher working in management roles within the context of VET and from the more recent experience of the senior management team. The multi-dimensional conceptualisation (Smith, 1997) utilised two dimensions: the basis for decisions or actions (pragmatic ↔ ideal); and the measures or responses (proactive ↔ reactive). Thus, the diagram offers four domains as the basis for making decisions/choices.

Figure 9: Framework for Making Choices

Proactive Measures

Preventative Systems   Educational Ideals

Pragmatic Solutions ← → **Ideal Solutions**

Survival Strategies   Educational Responses

Reactive Measures
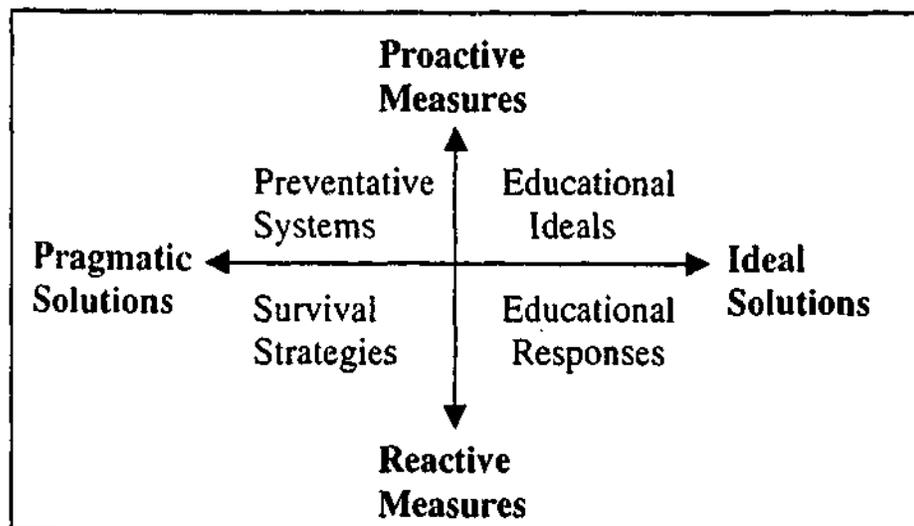
It is propounded that each of these domains has its place in the life of an organisation. Also, it is suggested that it is important to develop an understanding of the whole framework and an appreciation of the dialectical relationship of the domains to one another. Decisions that are made for a range of reasons in the other three domains can provide a sense of positive movement in the direction of the 'educational ideal' domain if the policy directions of the organisation are targeted to this outcome. Similarly, choices may be made at enterprise, project or classroom levels that promote educational ideals. This is represented diagrammatically in Figure 10. It is argued that, although the names of the domains may differ, people, and the organisations within which they work, also exist within similar constraints and imperatives. It is argued that the better the understanding of the paradigm the easier it should be to identify windows of opportunity, which may open up in other domains, that can be exploited without losing sight of ideals. Also such understanding should assist to find ways of working that will meet the external pressures whilst maintaining internal integrity and continuing to move forward in a positive direction towards the 'educational ideal'.

Figure 10: Making Choices that Promote Educational Ideals
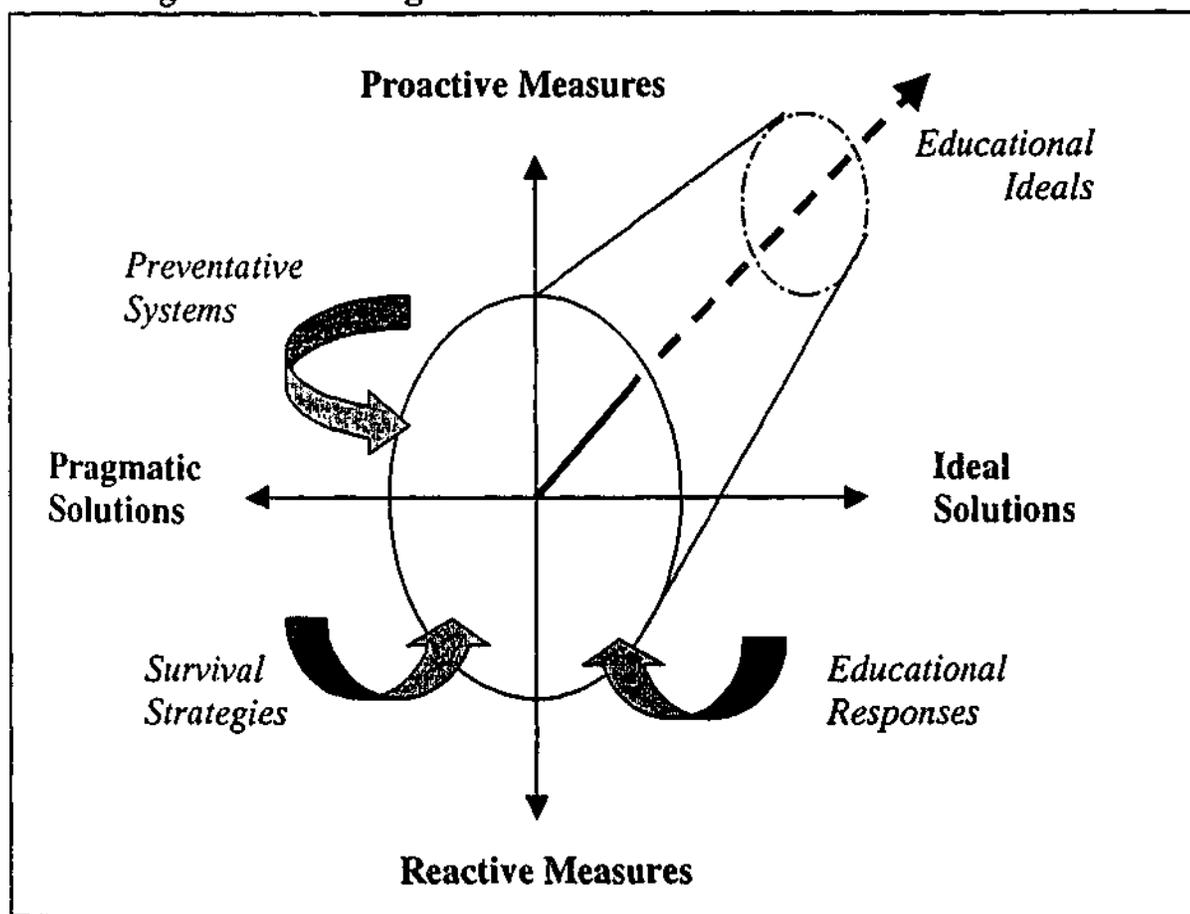
The quadrants explained

The quadrant *educational ideals* represented the ideal world of the educator. It encompassed their educational vision, values, ideal teaching practices, preferred style of working and desired goals, in the present instance in the area of workplace education. It included such goals as developing a progressive form of workplace education for workers; using training opportunities to create positive change in workplaces; encouraging innovation, experimentation and research both amongst teaching staff and amongst the worker-learners; promoting educational theories of learning in workplaces and in the associated unions; and promoting integrated, holistic and transformative learning as good practice in workplace education. It also included a commitment to environmental issues. Primarily, however, in the organisation that is the focus of this paper, it translated into a shared commitment to the worker-learner as the focus of all activities.

From a management perspective, this quadrant represented a negotiated and dynamic view of the educational ideals and values of teachers as the primary resource and guide for making management decisions. However, being part of a real world that had a different set of priorities meant that decisions could not always be made from this perspective. The need for cooperation and a high level of voluntary compliance by staff to administrative procedures, financial restrictions, and reporting systems provided a challenge for managers. Teachers in the organisation were selected for their creative flair, innovative strategies and idealism, but also for their opposition to the dominant paradigm of economic rationalism and managerialism. They therefore tended to have little, if any, sympathy for any form of bureaucracy and were skilled at resisting forms of administrative structure.

The domain of *education responses* represented the less-than-ideal situations that abounded in real life. In practice it was found that few projects fell into the ideal domain. Most were a response to expressed requests for a particular program or service. Nevertheless, experience showed that windows of opportunity did emerge within many projects that enabled the application, by skilled workplace educators, of educational ideals and values. As was described in chapter five, some projects remained far removed from the ideal, mostly where there was a lack of commitment to the training by company management and thus little or no support in the workplace

for the trainees. But even in the worst case scenarios teachers were sometimes able to find one or more training champions within the workplace who assisted to make the program meaningful. In some cases programs that started out with little support from the responsible manager in the enterprise turned around completely within a relatively short space of time (see for instance the Tickcart Project, Virgona et al, 1998).

The role of management within projects was to provide the administrative back-up, negotiate a project brief that provided the most favourable workplace environment possible within the circumstances, encourage teachers in difficult times and support their creative leaps when these occurred.

The domain of *preventative measures* represented all those administrative and financial systems and procedures that directly supported the teaching function, and the employment of staff to undertake this work, thus ensuring the on-going viability of the company. They were designed to forestall criticisms from industry, government or funding bodies, that staff lacked the necessary business sense, organisational skills or financial management abilities. These measures were particularly important for a group promoting educational ideas, values and strategies in workplaces, and therefore already considered by some to be idealists. Efficient and high-level management skills were essential in this environment. At a micro-level, however, a number of procedures and processes had a more important function. For instance, negotiated understandings were encompassed in the project brief, budgets were sealed into contractual arrangements and tripartite steering committees guided the implementation of projects as well as providing a forum for problems to be addressed. Attention to these administrative details was found to be critical to the success of training projects within these environments.

The domain of *survival strategies* represented the component of administrative systems and procedures that did not directly enhance the educational ideal. They were sometimes perceived to have a negative effect on teaching programs and other projects because they encroached on teachers' time. They included legal requirements, statistical record keeping and quality systems that imposed administrative burdens on staff, including additional paperwork, without noticeable advantage. Legal requirements could not be avoided. Similarly statistical returns were

required by funding and registration bodies as a condition of funding. The development of a Quality system, as described in the previous chapter, was a different matter. While this was regarded as a survival strategy, there were some benefits of obtaining the recognition of being a 'quality' organisation including legitimation, easier access to government funds, and recognition by enterprises. Also the best practice project proved to be a positive experience with results that fitted into the *educational ideals* domain. This project also served to demonstrate the dynamic nature of the framework, intended to enable organisational decision-making so that managers and staff did not feel that their ideals were compromised because they had to make decisions that appeared to run in a counter direction. This suggested that windows of opportunity existed to change what started as a survival strategy into a positive result.

This framework proved useful for addressing issues relating to notions of administration and management consisting of 'the enemy' or 'administraitors'. It assisted the director, training and development and the manager of industry services to 'grow' into their new roles within the organisation. A reflexive analysis of project management in specific instances was used to improve operations, administrative and financial management systems and decision making. By sharing the management of projects amongst the three senior managers, close contact was maintained with all projects and difficulties shared and analysed. Every effort was made to learn from mistakes, and to become what management literature espoused as a 'learning organisation'.

Conclusion

While it remained a constant struggle to obtain sufficient work and a number of projects were not as ideal as teachers would have liked, at the time of writing the company had been in operation for nearly five years, was still solvent and it was able to look to the future with some optimism. It had proved itself in the 'marketplace' despite its 'Rolls Royce' model of training that some enterprise personnel did not believe they could maintain. The collectivist nature of the organisation (Rothschild-Whitt, 1979), its use of research projects for capacity-building (Seddon, 1998b) and its distinctive competence in the area of integrated training and workplace change (Selznick, 1957) combined with a rejection of managerial management styles and

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structures, placed the organisation in what Clegg, Barrett et al (1996) described as a 'new' paradigm typical of the 'postmodern' organisation (see discussion in chapter three).

Those staff members who were committed to the organisation, and shareholders, continued to provide critical comment and feedback on issues they considered important, and to recognise the necessity for survival strategies. Some staff members found the necessity to conform to Quality systems as unduly restrictive and believed that the organisation was moving in the wrong direction in adopting such systems. In a few cases these individuals opted to leave the organisation rather than struggle within it. Others felt that the more formal organisational structure provided a sounder foundation for moving forward.

Members of management often found themselves walking a tightrope and balancing conflicting ideals. Mistakes and errors of judgement were made. These were carefully analysed in order to learn and move forward. The existence of a supportive, non-competitive and caring environment, rather than a competitive 'dog-eat-dog' relationship between managers, meant that all problems could be openly aired and discussed without apportioning blame. Thus the analysis of mistakes could be undertaken in a constructive way so that lessons could be learnt and everyone's practice improved. Similarly comments and complaints by staff regarding management issues were accepted in a positive sense as a helpful way of developing the organisation. An atmosphere of openness was valued and staff generally responded by not allowing problems to fester, but bringing them out into the open for discussion and resolution. However, the system was not perfect or problem free. Differences did exist and problem resolution sometimes created sharp contradictions between individuals. A few staff members, particularly those who saw themselves as outside the collective (ie. self-employed and sub-contracted), did not respond to this openness or misunderstood the nature of the organisation. This sometimes led to the loss of those staff members. Nevertheless, for the majority of staff members the system appeared to work.

The effects of external discourses, institutional practices and changing directions continued to affect the organisation. It was recognised that the continued existence of

the organisation was contingent on a number of external factors over which there was no internal control. Thus the contradictions abounded. At the time of writing it had been recognised that less reliance on government funds was necessary to the future of the organisation, both because of the restrictions imposed by funding bodies and because of the vagaries of governments and the institutions they spawned. Thus changes were required and on-going organisation development inevitable.

The next chapter will attempt to draw together all the threads that have been examined in this and the previous three chapters and analyse the whole in relation to the context, the theoretical framework and the research question.

CHAPTER EIGHT
Alternatives to Managerialism?

Introduction

This study has documented the work of one small group of teaching practitioners working within the field of workplace education in the automotive and component manufacturing industry in Victoria, Australia. It has analysed the teaching practice that evolved, the way this affected their work and the organisation they developed to support their work. It also analysed the effect of dominant discourses of outside institutions on them and their organisation.

This chapter will consolidate the study by drawing together the threads that were separated for the purpose of analysis. It will provide a brief overview of the research and the findings that have arisen from it, examining them in relation to the questions that were posed. Some tentative answers will be formulated and new questions that have been raised by the study enumerated, suggesting possible directions for future research. It will also assess the value of the theoretical framework and the methodology that were adopted for the study, analysing the aspects that were useful and those that were not. Finally the discussion will return to an abstract analysis based on the theoretical framework to draw out the broader conclusions of the research.

The Research Question(s) – Findings and Tentative Answers

In the introduction to this dissertation the research question and a number of subsidiary questions were posed. This section will take each question in turn, provide a brief overview of the findings from the study and suggest some tentative conclusions that may be drawn from these results. The main research question was **'Is there a viable and sustainable alternative to managerialism in the vocational education and training system of the 1990s in Australia?'** The subsidiary questions were:

1. What are the spaces that exist within the redesigned institution of vocational education and training in Australia that allow the development of a more progressive education for workers?

2. What role can workers' education play within the class struggle that is played out daily in workplaces? Is there an intrinsic value in education for workers, or does

the traditional 'reproductive' (Bowles & Gintis, 1976) role of education mean that it will only serve to intensify work and meet the current needs of capital for a subservient and involved workforce? Is it possible to produce a progressive model of workplace education that might point to different futures?

3. What effect has this model of workplace education had on the work of teachers? Have they been de-skilled and de-professionalised, or does the 'new' workplace require a new set of skills from teachers?

4. Will the automotive industry eventually settle from its current restructuring phase into work-intensified sweat-shops, with workers coopted into the production process body and soul? Or will the conditions be such that the struggles of the union for a more humanised workplace can become a reality?

5. Is the rise of neo-liberalism, with its concomitant economic rationality and managerialism, the inevitable result of the emergent new means of production or a reactionary movement against the dominant trend of history?

6. To what extent does an economic rationalist and managerial agenda in public institutions impinge on the operation of an 'independent' organisation? Will it be possible to remain 'independent' over the longer term, or will the organisation become 'normalised' (Foucault, 1979a) and be absorbed? Is it possible that a small organisation can in any way affect the directions of a large public institution at a time of intense change, or is the resilience of such institutions, even during a period of redesign, such that many views can be accommodated without altering its 'new' foundation?

For the purposes of presentation in this chapter, the subsidiary questions will be addressed first, followed by the main research question.

1.   Spaces & Opportunities – Working the Contradictions

The opportunities that made this study possible arose from the 'informational technology revolution' (Castells, 1996, 1997, 1998) that was occurring in the last two decades of the twentieth century. Information had become a commodity in its own right and information technology provided a new means of production. Consequently a period of immense change was taking place in society. In the automotive manufacturing industry, always sensitive to technological changes, this had created opportunities for workplace education that were unprecedented since the introduction

of universal schooling for children. Workers who had previously been expected to contribute only their labour power were being asked to think about their work. Their active involvement was sought in schemes to improve productivity by eliminating waste, reducing defects, improving quality and changing work practices. Their training for these activities became a priority.

Concomitant rhetoric of the need for 'learning organisations' (eg. Senge, 1990, Watkins & Marsick, 1992, 1993) permeated management literature. Underpinning this rhetoric was the 'empowerment' of workers through their involvement in the learning organisation. Implicit were notions of trust and valuing their input. Also that learning should take place at and by all levels of an organisation both from one another and from external organisations.

Neo-liberal open-market policies of reducing levels of tariff protection cast enterprises (and their workforces) upon the international market, causing a struggle for competitiveness in order to survive. For large multinational car companies this meant competing within their own company on a global basis for local survival. For component manufacturers it meant competing with other firms in a global market. In this environment, the involvement of workers in measures that ensured corporate survival was promoted as a way of retaining jobs.

Much of the 'new work order' discourse (Gee et al, 1996) contradicted the traditional mode of management in enterprises which was based on management by right, control and supervision. New skills were required of middle or 'frontline' managers who were expected to coach a new breed of 'empowered' workers and encourage innovation and experimentation whilst still maintaining production schedules and increasing productivity. From the perspective of workplace educators, the contradictions evident in this scenario provided multiple opportunities for the development of a meaningful form of workers' education. Paradoxically, the space for the development of the organisation that was formed by this particular group of workplace educators to exploit these opportunities, was created by the neo-liberal policy of the marketisation of TAFE (Anderson, 1994, 1996; Marginson, 1993, 1997), a policy they opposed. This contradictory situation was brought about by the introduction of economic rationalist policies and managerialism in TAFE institutions. Under such conditions it

was hardly surprising that the educational response to industry training needs was based on a paradigm of economically efficient and manageable CBT. Unfortunately, mechanistic training in generic and modular forms provided a Taylorist and rational approach at a time when this was quite inappropriate.

This study has demonstrated one way in which it was possible to utilise the spaces that were created, to grasp the opportunities that were offered and to work the contradictions that existed within workplaces and the institution of VET in Australia to create a more progressive form of education for workers.

2.   *A Progressive Model of Workplace Education?*

The 'integrated model' of workplace education that has been described here presents no new insights into the way that people learn. It was based on good educational practice as it has existed for many years in both the academic literature and in a number of adult education and school classrooms. What was new was the application of this good educational practice to a workplace setting, a context fraught with industrial and political conflict. There was clear evidence to suggest that workers wanted their workplace knowledge, or naive, 'subjugated knowledges' (Foucault, 1976b), both formally recognised and valued. It has been well documented in this study that, where this recognition occurred, the personal development of the employees was remarkable. Given a work environment in which their input was valued, and where a situation of trust existed between company management and employees, it was found that most workers were happy to both contribute to the better organisation of their work and to suggestions that could potentially improve the competitive position of their company within the marketplace. As was reported, many unsafe practices and situations were improved, conditions and work organisation that had caused frustration to workers often changed for the better. The evidence also suggested that workers involved in the type of integrated training that has been described here, experienced learning that was meaningful, transformative, personally empowering and enjoyable. Most were proud of their new certificates and pleased to accept the recognition of their managers, peers and family for the personal achievement that this represented. For many workers there were undreamed-of new opportunities for promotion and more interesting work; for workers who completed the training their pay packet increased.

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When the workplace environment was conducive to learning and managers were prepared to listen to the voice of their workers, positive outcomes were forthcoming both for the workplace and for the workers. That this created conditions for increased productivity was not in question; enterprises would not be interested in undertaking such an expensive and time-consuming exercise if they were not receiving some benefits from the outcomes. Whether or not it contributed to work intensification either directly or indirectly is the question. Anecdotal evidence would suggest not; but an argument could be mounted that such workplace education contributed to the cooption of workers to invest more of themselves, including the production knowledge that they had hitherto kept to themselves, in their work. However, work intensification is a large and complex question, dependent on a number of factors. For instance, experience in a number of companies demonstrated that, despite the hard work of central union officials to persuade workers otherwise, most workers in the automotive manufacturing environment seemed to welcome the introduction of 12-hour days and, against advice, voted for its introduction when given the opportunity. That this contributed to work intensification was not in doubt, particularly when overtime was added to the equation. Other factors such as the accelerated introduction of new technology, total quality management schemes, and increased production demands would have continued in any case.

There was some evidence to suggest that those workers who had completed their studies found ways of surviving in these environments. There was no evidence that they were worse off than before as a result of their training. It is therefore concluded that this particular model of workplace education did not, in its own right, contribute significantly to work intensification. It is argued here that this was the result of the conscious stance of the teachers in relation to work intensification, concentrating on ways to 'work smarter rather than harder' and 'win-win' scenarios, and their commitment to working within industrial agreements. In this sense this model of workplace education could be called progressive. It is suggested that without these political understandings and commitment the same educational program could become a tool of management and work intensification. This is an area that would warrant further research, contrasting and comparing different training models, and the attitudes and approaches of teachers/trainers, and their effects on the workforce.

3. Teachers at Work – De-skilled & De-professionalised?

It is suggested that the key to the success of this model of workplace education was the political stance adopted by the teachers, one that placed them clearly on the side of the workers in both the day-to-day and broader power struggles that permeated the workplaces. While teachers had to walk a fine line within workplaces and could not be seen to overtly support workers' struggles, their stance was clearly understood by the workers. This was evidenced by comments such as that by one shop steward,

> They feel it's honest, they feel that it's going to be theirs. Before, when anybody tried to teach them something, they feel there's another agenda there. They think there's another line there. But with you they feel it's theirs. They really believe that. That's the feedback I'm getting (BLIT, 1994: 283).

The record showed that not all teachers achieved the fine balance that was required. Some were perceived by management as being too close to the union, others were criticised by the union for being too close to the company. One or two were so anxious to demonstrate the undervalued knowledge and capabilities of their students that they helped them to excess with their projects, making the level of their attainment hard for them to maintain in the workplace. This type of paternalism did little for the workers in the long run despite any immediate gains. Gradually these practices were eliminated from the organisation. However, some good teachers did not last in the difficult environments. For some the contradictions were too great, the demands too difficult and the results not rewarding enough to compensate for the problems they had within some recalcitrant workplaces. In some cases the teachers were removed as a result of requests from the union, in others the enterprises complained and requested their removal.

It is argued here that the role of teachers in the workplace was to provide the best possible education for workers under circumstances over which the teachers had little or no control. It was not their role to tell workers how to conduct their struggles or to presume that they knew better than workers how this should happen. In the words of Foucault,

> The intellectual no longer has to play the role of an adviser. The project, tactics and goals to be adopted are a matter for those who do the fighting. What the intellectual can do is to provide instruments of analysis, and at present this is the historian's essential role. What's effectively needed is a

ramified, penetrative perception of the present, one that makes it possible to locate lines of weakness, strong points, positions where the instances of power have secured and implanted themselves by a system of organisations dating back over 150 years. In other words, a topological and geological survey of the battlefield – that is the intellectual's role. But as for saying, 'Here is what you must do!', certainly not (Foucault, 1975b: 62).

Thus uncovering communication channels, unravelling the knowledge stored in workplaces, facilitating the sharing with their peers of individual workers' various pieces of workplace knowledge, organising visits to other workplaces, encouraging workers to reflect on their work practices, assisting with methods of analysis and ensuring access to the dominant discourses of the workplace; these were the role of the workplace educator. Deciding how these tools were then utilised by the workers was not their role. That these tools were useful in ways not visualised by educators was seen as a positive outcome. That they helped some employees to survive in the environment in which they found themselves was also a positive outcome. Whether or not these outcomes will ever contribute to a different society is a question that only time will answer and would warrant further research.

Important to the work of teachers was the understanding that in some workplaces they were not going to achieve the ideal educational outcomes they would have liked. The political understanding of the nature of the changes that were occurring within workplaces helped them to maintain their positive outlook and faith in their teaching methods, as well as keep their ethics and educational goals intact, despite the evidence of their 'failure' in specific contexts. It also helped them to identify the type of win-win scenarios they could create that would subtly alter the power relations that affected workers in their day-to-day work life.

The workplace education that has been documented in this study placed high demands on the skills of teachers. Not only did they need all their traditional teaching and curriculum development skills, they also needed tact, assertiveness, political nous and judgement. As well they needed to be skilled at analysing the moods, nuances, currents and discourses of each workplace; to develop 'enterprise thinking' (Virgona, Sefton et al, 1998). The results of this study demonstrated that teachers could not rely on previous experience, as each workplace was different. Thus it was necessary to analyse the 'same *and* the difference' in each organisation (Burrell, 1988) and their

ability to ask the right questions was paramount, their understanding of people, power relations and industrial issues essential. Casting aside any notion of 'teacher knows best', they needed to be insatiable learners who took a delight in understanding production processes. This sense of discovery needed to infect their teaching and their students as they, together, uncovered the curriculum embedded in the workplace (Waterhouse, 1996). Designing learning activities that transformed participants required creativity, innovation and flair on the part of teachers. Involving all people in the workplace in this process required patience, persuasion and perseverance. Making them believe that the consequent training program belonged to them, was their idea and could be maintained by them, needed leadership and a willingness to relinquish ownership by the teacher.

As has been documented, this work was demanding, exacting and difficult. When the environment was conducive to learning the results were exhilarating; when the environment was not sympathetic the effect on teachers was devastating. In the latter case they required support from their peers and managers and to recognise the impossibility of achieving a successful outcome in such an environment. The lack of control in this regard was discouraging and a succession of such workplaces could be depressing. The fact that some workplaces changed, new circumstances provided opportunities or new personnel sometimes became training champions, meant that it was necessary to persevere. But this sometimes resulted in individual teachers finding themselves involved in more than one 'failure' at a time.

This study provided a distinctive vignette of teachers working in industry, adding to the scant literature in this field. It concluded that this work was both professional and skilled and suggested that the role of sensitive and progressive workplace educators could well be extended as the informational technology revolution continues into the new century.

4. *Automotive Manufacturing & the 'Learning Organisation'*
The rhetoric of the 'learning organisation' was found to be strongest in the larger companies, though the meanings associated with this rhetoric were different across companies. Toyota for instance would probably proclaim itself to be a learning organisation, based on its Toyota production process and practice of 'continuous

improvement'. However its interpretation of this was one of a controlled environment, the range of options for workers' contributions to changes in production being limited to the operations carried out by their immediate team of four people, and a highly structured process before any changes were adopted. Once adopted, any changes became part of the standard operating procedures and the process started over. Ford, on the other hand, adopted natural work groups that were sometimes as large as 25 people. These groups had the power to try changes to the production process as large as removing some processes from the moving assembly line altogether.

Experience documented in this study indicated that component manufacturers have varied considerably in their response to the new competitive environment. The workplaces described in this study ranged from a positive learning environment such as that found at Tickfords, where many gains were made as a result, to those component manufacturers who held no pretences to being a learning organisation, spurning all attempts by workers to achieve even small changes. Some of those companies in the latter category have already disappeared from the marketplace, others remained under severe threat as evidenced by their crisis management style and chaotic work organisation (see for instance the vignette in Appendix 5; Virgona,1999, 2000).

Currently the automotive manufacturing industry is still benefiting from the training agenda although many enterprises are finding the link between wages and training irksome. However there was little support from companies for the new industrial reforms being introduced by the Howard Coalition Government (see Editorial in *The Australian* 7 April 1999: 12). Its new Workplace Relations Amendment Bill, 1999, appears to push towards a more confrontational approach to industrial relations and the individualisation of both work contracts and, subsequently, training, with training being seen as a means whereby individuals could increase their own 'human capital'. So far the automotive manufacturing industry has not generally taken this line, due in part to the industrial and political strength of the union. Local agreements embedded within EBAs have protected workers from the excesses of this approach at least in the short term.

Questions were starting to be asked about the viability of 'lean manufacturing' (Unterweger, 1992) that required just-in-time production and delivery of parts. Environmental issues were arising from roads choked with delivery trucks and the work intensification was creating health problems for workers such that in Japan a word was coined for 'death from overwork'. Other approaches were starting to provide viable alternatives (Cooney, 1999), such as the use of the more humanised type of 'natural work groups' (Hampson, Smith & Ewer, 1994) introduced by Ford, as opposed to the Toyota-style competitive team structure (Parker & Slaughter, 1988a). The rapid transformation of technology .. . affecting the way work was being performed. Maintenance of machinery was often minimal as machinery based on older technology was worked around the clock to destruction and then replaced. The need for a cooperative and flexible workforce was still driving the restructuring process. Thus the concept of the 'learning organisation' still held currency. Whether or not this would continue depended as much on the rate of change brought about by the new technology as on the demands for higher productivity and quality in a competitive environment.

The judicial promotion of training by the union to obtain better wages for their members, combined with the preparedness of their officials to become involved in the details and organisation of that training, has meant that this industry has been able to institute changed work practices and new work organisation by consultation rather than decree. It would be reasonable to expect that while cooperation with the union continues to create an environment that is able to accommodate change, workplace education and the associated rewards for workers would remain on the agenda. However, experience in this industry would also indicate that if either the union or the companies see another way of achieving their objectives, training could cease to be a factor overnight. It is evident that the degree to which training meets the requirements of both the industrial parties will affect its future in the industry. Further research in this area could well focus on comparative studies across industries to ascertain the relative efficacy of various approaches to workplace education and changes in work organisation.

5. *Neo-liberalism – Inevitable Product of a new Means of Production or Reactive Anachronism?*

Neo-liberalism had its foundation in the 'think tanks' of the 1940s in the conservative reaction to Keynesian economics, the existence of a 'socialist' alternative and a perceived need to create a society based on competitive markets, with the state providing favourable conditions for this to occur. The 'New Right' that was later formed to achieve this end developed a political platform that succeeded in undermining the Keynesian economic policies across political parties.

> It imagined the world as a timeless, borderless always-ready market, in which social relations were grounded in competitive individualism. But it was more than a body of doctrines: it was a power-knowledge system, which provided a means of criticism and reconstruction, a new language for politics, a model of the preferred society, and a formula for rule (Marginson, 1997: 55-56).

It is argued here that, by the time these conservative ideas reached fruition in the late 1970s the golden days of the old style of capitalist expansion based on normal commodity markets were already in decline. A new means of production was on the rise, international finance capital was in control and countries were forced to adhere to its doctrines. While free flowing capital welcomed more open markets, the response to the crisis of over-production was not addressed by the neo-liberal agenda. What was required was a new approach to capitalist expansion based on innovation, new ideas and creative solutions, rather than policies based on more efficient exploitation and work intensification. The new informational technology required the application of thinking to the process of production, based on a cooperative workforce, while the industrial relations policies espoused by neo-liberalism promoted demolishing the power of unions, using confrontational force if necessary. Contractualism in the public sector and decision-making based on economic rationality effectively hindered the public sector from responding adequately to the demands of the new means of production. In VET the introduction of CBT and standardised training was exactly the opposite of the type of workplace education that could provide the flexibility of thinking that was required. The 'flexibility of employment' introduced in TAFE institutes created a drop in the morale of teachers and lack of interest in the new demands that were emerging. Use of technology as a means of educating people was introduced as a cost cutting exercise, rather than as a way of encouraging innovation. The type of managerial regimes that were introduced appeared to be a way for neo-

liberal leaders to buy the support of the upper middle classes by paying them unrealistically high 'salary packages' to introduce their policies. Yet management literature was suggesting that the type of management that was needed was quite different (see Table 1, p 66). The call for innovation had been taken up by the popular press with numerous articles on the need for innovation, and venture capital has become readily available for small innovative high technology companies, making them competitive with, and causing concern to larger companies.

The contradictions between what was required as a result of the new means of production and the policies that were being promoted by neo-liberal governments lead one to suggest that neo-liberalism, and the economic rationalism and managerialism it promoted, emerged as an accident of history rather than an idea that had reached its time, an anachronism from the past rather than a way into the future. As the former Prime Minister, Malcolm Fraser, argued, economic rationalism is

> ... an ancient and 'barbaric ideology that was a backward leap over more than a hundred years of struggle to humanise capitalism. The economic rationalist has this ideology and they write down all the rules and then they just apply the rules, regardless of circumstances, regardless of their impact on people' (Fraser, quoted by Dixon, *The Age*, 3 April 1993: 17).

6.   *Economic Rationality, Managerialism & the 'Independent' Organisation*

The redesign of the institution of VET in Australia, and Victoria in particular, under the neo-liberal policies of governments in the 1990s had led to the creation of a quasi marketisation of TAFE (Anderson, 1994,1996; Marginson, 1993, 1997). Based on a concept of the 'purity' of market forces, this system relied heavily on a number of assumptions about 'consumers', namely that they were motivated primarily by economic factors and basically only self-interested. In Victoria, the Kennett Coalition Government moved quickly to privatise VET using a system of contracts with all providers of services, both public and private, to focus government departments on the 'core functions of policy making, resource allocation and specification of services and standards setting, monitoring and regulation' (cited in Alford & O'Neill, 1994: 4). The Office of Training and Further Education (OTFE) in Victoria had revolutionised its mode of operation, defining its role as the 'steerer' rather than the 'rower', that is the 'purchaser' rather than the 'provider'. It also set in place processes to regulate and monitor the 'standards' and 'quality' of provision of VET programs.

It has always been true that an organisation that accepted government funds would have difficulty remaining 'independent' of rules of accountability for public funds. That this should be so was not contested. What was different under the new VET institution in Victoria in the 1990s was the degree to which the internal operations of the funded organisations were subjected to scrutiny and direction by the funding body. Not only were the needs for financial viability prescribed, but management systems that conformed to external requirements were also imposed. Extensive record keeping, statistical reporting and audit requirements meant that a certain level of bureaucracy was necessary as was a high level of informational technology for the electronic maintenance and transmission of financial and statistical records. Conforming to these requirements and standards meant that an 'independent' organisation had the administrative and management basis of their organisation largely decided for them. On the other hand, the availability of government funds also gave VET providers a degree of independence from the enterprises in which they worked, whereas a full fee-for-service operation could be more directed by the client, focusing entirely on its needs rather than those of its employees.

In addition, support for staff development from the system was often dependent on subscribing to a form of managerialism that removed all discretion from the organisation to manage their affairs in the way they wished. The Management Enhancement Team Approach (META) National Management Development Scheme was a good example of the ways in which the system promoted managerialism by providing funds to 'assist' with its implementation and mentors to ensure it was implemented. The dominant discourses promoted by the system included those of 'Quality', 'best practice' and 'benchmarking'. Chapter six of this thesis discussed the effects of this discourse on the organisation and concluded that, in the words of Burrell, 'whilst we may not live in total institutions, the institutional organization of our lives is total' (Burrell, 1988: 232). As reported in this study, it was possible to utilise the discourse of 'best practice' to some advantage and to use the opportunity to cause some discursive ferment amongst the 'cowboys' within the VET system by introducing concepts such as 'collective competence' and 'group assessment' processes. It was also possible to question the basis of 'best practice' by

demonstrating that it was value laden, 'temporal, contingent and contextual' (Virgona, Sefton et al, 1998: 112).

As Foucault (1979a) observed, normalisation is an instrument of great power capable of imposing homogeneity. The new institution of VET imposed funding conditions that tended to reduce 'independent' organisations to variations of the 'same'. The adoption by both OTFE and ANTA of the 'Tickcart' project as an exemplar of 'best practice' was indicative of the normative power of an institution. It demonstrated the resilience of an institution that could absorb innovation even though it may run counter to policy directions. What was important to the organisation in this study was not to fight against what was the 'same' as other organisations, but rather to concentrate on what needed to be different.

An Alternative to Managerialism?

This study has provided a number of insights in relation to the main research question, **'was there a viable and sustainable alternative to managerialism in the VET system of the 1990s in Australia?'** It was not suggested that one example could provide the complete answer to this question. Rather it is suggested that the struggle to find an alternative to managerialism by one group of people in a particular context has produced a way of approaching the problem that may prove to be useful in other contexts. As demonstrated earlier, the style of management adopted by the organisation that formed the basis of this study was founded on a number of important principles. First, the role of management and administrative procedures was to support the work of teachers and to promote a set of shared educational ideals. There was no suggestion that management was a separate and more important activity than teaching, rather the reverse was true. Neither was the introduction of 'generalist' managers seen as appropriate; understanding and being part of the educational agenda was essential and required an educational background of senior managers within the organisation. It also suggested that joint staff development activities should be conducted to ensure that administrative staff understood the educational issues and reasons for decisions that were made on educational grounds and that teachers understood the administrative and managerial decisions based on pragmatic and survival criteria.

Second, all forms of performance appraisal and surveillance of teachers were rejected. Trust was seen as paramount if teachers were to be able to turn to managers for support and assistance when required. An organisation promoting innovation and creative training solutions needed to be able to encourage experimentation and to tolerate 'failure'. It was important that teachers felt that they could discuss such incidents openly and in an atmosphere of trust. This was in line with the 'Beta' management style proposed by Caulley (1993) and Lonsdale's (1998) concept of 'managing *for* performance' rather than the 'management *of* performance'.

Third, decisions on which tenders were and were not contested were made on the basis of a number of criteria, not just economic reasons. Thus only those that fitted with the agreed philosophy of the organisation were attempted. For instance, research projects needed to be seen to build the capacity of the organisation by opening new areas of work, increasing understandings of teachers, or investigating educational issues seen to be at the 'cutting edge' of new knowledge. Projects that were deemed to be in contradiction with the general directions of the organisation were ignored.

Fourth, competition was regarded as counter productive. This was true in relation to the relationship between organisations, where the attitude was one of 'how can we cooperate to our mutual benefit', and also between individuals within the organisation. Whereas a managerial approach was often one of setting individuals against one another as each sought their own advantage, a more collegiate approach meant that people worked together and shared their experience, intellectual and physical resources, collective wisdom and ideas.

While conceding that external institutional pressures affected the organisation in many undesirable ways, it was also recognised that there was a need for government funds to obtain outside business. Therefore concessions had to be made. The business and quality systems, financial management and statistical record keeping all needed to be beyond reproach. The organisation had to remain financially viable in order to survive and it had to be seen to be operating in a way that met all the external criteria in order to retain government funding and attain enterprise contracts. The framework for decision-making that was developed by the researcher as part of this study (see Figure 9, p. 185) assisted to place these considerations in perspective by separating

the reasons for taking decisions into four domains: educational ideals; educational responses; preventative systems; and survival strategies. Just as teachers had to make concessions in their teaching programs, which resulted in less-than-ideal training solutions in a number of cases, so also in management some survival strategies had to be employed despite their possible negative effects on both the organisation and its members. Just as teachers sometimes needed the support of managers in the difficult times, likewise the managers required the support of teaching staff in the implementation of survival and preventative strategies. The sharing of responsibility for compromises was as important to the organisation as the sharing of educational and political values and issues of individual identification or 'belonging'. Those staff members who felt they were part of the organisation, and who became shareholders, understood the necessity for such less-than-ideal measures. Those who remained aloof from the organisation, seeing it only as an employer, sometimes failed to grasp the need to make any compromises adjudging such measures as indicative of a form of managerialism.

Operating in a market environment, and subject to the approval of industry members towards their organisation, its work, its members and its programs, also meant adopting a corporate identity and developing the ability to 'market' the organisation and its products. The need to be part of this discursive practice sat uneasily with most staff members. Thus the contradictions were high and the feeling of entrapment pervasive at times. Nevertheless, the opportunity to have some control over their work kept most people involved and able to cope with this aspect of their work.

The question remains, did this organisation find an alternative to the managerialism that was rife in Australian TAFE institutes in the 1990s? The answer is a qualified 'yes'. For those staff members who understood the basis of the organisation and who could, and did, discriminate between reasons for making decisions, this study demonstrated that the organisation did provide them with an environment in which they felt they could work productively and in line with their ethics and politics. The collegiate atmosphere and supportive environment provided the buffer against outside influences, and the collective nature of the organisation meant that difficult decisions were shared. Policies that encouraged innovation and experimentation inspired teachers to try new approaches, to continually seek the latest ideas and to enter into

the academic debates that surrounded them. Administrative staff felt that they were an important part of the process of workplace education and developed an understanding of what this meant in practice. However, like the model of training the organisation espoused, it is argued that the key to the successful operation of the organisation lay in the political stance of its members. For those staff members who did not share this stance indications were that it was less successful. However, the managers believed that they were able to provide an organisational structure that met the current demands of the external environment while allowing them to work with teachers and administrative staff in a supportive and ethical manner that matched their concepts of what 'management' should be about.

Issues of Methodology & the Theoretical Framework

The methodology that was adopted for this study, like the study itself, grew out of the lived experience of the researcher over the eight years in which the events described here occurred. In that sense they were not decided before the study began, but during and at its conclusion. As was explained in chapter two, even the research question evolved over time in a process of 'emergent design' (Caulley, 1994). The adoption of an heuristic approach (Tesch, 1990) was therefore not a conscious choice but ·
descriptive of a methodology that essentially took another cut through existing data to narrate a story that had remained largely tacit (Polanyi, 1967, 1969, 1983; Gelwick, 1977).

If it had not been necessary to live the experience before 'consuming it productively' (Marx, 1879: 296), and the research question had been clear at the start of the study, a different approach might have been utilised. In terms of usefulness of the outcomes such an approach would probably have been in the form of a participatory action research project (Kemmis, 1985) with the active participation of the group of workplace educators in the research. That a similar process of reflection-in-action did in fact occur was not a planned occurrence in terms of this piece of research, although it was a planned activity *per se*. But it could have been more deliberate and structured, and the results might have been different.

The role of the researcher as participant/observer was not considered problematic in view of the disclosure of her background, outlook, particular world-view and politics.

As Namenwirth (1986: 29) pointed out, to presume that one can assume a neutrality and scientific 'objectivity' is to remain 'unconscious' of one's own biases. Nevertheless, the closeness of the researcher to her data and the personal investment in the research did make it difficult to stand back for purposes of analysis. Her closeness to her colleagues made the collection of new data problematic, as the results would possibly be contaminated by perceived power relationships. However, it was possible to share the results of her (meta-) analyses with colleagues and discuss their relative merits and usefulness. Fortunately the period of the study coincided with all the events described here, so that theoretical understandings and concurrent attempts at analysis were formulated in an on-going fashion, not after the event.

The Marxian theoretical framework permeated the methodology, the analysis and the study itself just as it had permeated the consciousness of the researcher for many years. The choice of this framework was thus inevitable in that it had provided the researcher with a foundational framework that informed and guided the activities described in this study and in her life. At a time when the informational technology revolution was transforming society a macro analysis was also relevant to the study. In addition the neo-liberal philosophies of economic rationalism and managerialism' that formed the context of the study required an economic analysis to place it in perspective with the major trends apparent in society. It also allowed the researcher to stand back from the day-to-day issues and analyse the changes that were taking place from a broader perspective. The general conclusions she drew, utilising this broad framework, included: that information technology was a new means of production; that economic rationalism, and its off-shoot of managerialism, is bound to fail because it does not meet the needs of the new means of production; and that different futures depend on changing the material consciousness of people in relation to possibilities and alternatives. To date these conclusions appear to match the realities of events around the world and as they are reported here. They prompted the asking of different questions, not 'Are there alternatives to managerialism?' but rather, 'Whose alternative to managerialism will prevail? And what are we doing about it now?'

However, this study was grounded in the micro-level of these changes that were taking place in the broader scene, within the 'space for action' provided by changing institutional contexts (Seddon, 1997a: 168). Thus, although Marx's theories provided

a useful and helpful framework, a less abstract level of analysis was also required that provided an extension of the framework in some way or other. Foucault's analysis of the 'micro-physics of power' that was embedded in all institutions and organisations of society was useful in formulating a theory of change based on unravelling, and analysing, the 'mechanisms of power' that existed at an everyday level in the organisations, institutions and workplaces described in this study (Foucault, 1975b: 60). The concept of power proposed by Foucault consisted of a 'productive network which runs through the whole social body', producing knowledge and creating discourses, rather than merely being a repressive function (Foucault, 1977b: 119). His studies of some of the institutions of society such as penal systems and psychiatric internment, provided valuable theoretical insights into discursive practices and the power of normalisation. Similarly some organisational theories were also useful in that they engaged in management issues in a way that was consistent with a Marxian approach (eg. Clegg & Palmer, 1996) and illuminated the way in which the framework could be interpreted at a less abstract level. The dialectical nature of the research was important to this study with the experience/practice 'talking back' to the theory and *vice versa*. This is consistent with notions of the 'co-production of knowledge' (Anderson et al, 1997) and the 'production of useful knowledge' (Seddon, 1998a), whereby researchers join with practitioners to produce knowledge that is useful for both practical application and theoretical purposes. The presupposition of this type of research is that the researchers enter into a different relationship with those they are studying such that both groups become 'co-producers' of that knowledge, rather than the traditional relationship of 'neutral' or 'unbiased' scientific researchers and their 'subjects'. The results of this research would indicate that further research of this cooperative and dialectical nature around the questions raised here would be valuable for the co-production of new knowledge.

Conclusion

This study was grounded in eight years of practice by the researcher and her colleagues in establishing a private training organisation and the evolution of a management system or paradigm to suit the situation and the group of people concerned. It has attempted to analyse this experience within a Marxian theoretical and analytical framework. In so doing it has documented one attempt at overcoming the dominant discourse under certain conditions. While it did not set out to establish

the grand definitive alternative to managerialism, it was expected that the method of analysis and some of the stories and insights might prove useful to others. Also that there would be an application for some of the general principles of what needs to be 'different' in an organisation (Burrell, 1988) in order to combat an economic rationalist and managerialist discourse. However, the results were not expected to be readily transferable to other situations or organisations. Indeed, to take the results and apply them blindly to another situation would be contrary to the methodology and Marxian framework proposed by this study. In the words of Foucault in a discussion with a group of people who were concerned with issues surrounding a field outside his areas of research,

> It's up to you, who are directly involved with what goes on in ... (another field) ..., faced with all the conflicts of power which traverse it, to confront them and construct the instruments which will enable you to fight on that terrain. And what you should basically be saying to me is, 'You haven't occupied yourself with this matter which isn't particularly your affair anyway and which you don't know much about'. And I would say in reply, 'If one or two of these "gadgets" of approach or method that I've tried to employ with psychiatry, the penal system or natural history can be of service to you, then I shall be delighted. If you find the need to transform my tools or use others then show me what they are, because it may be of benefit to me' (Foucault, 1976a: 65).

In a period of intense social change, such as that occurring during the period of this study, the external environment was often volatile and unpredictable. It was necessary to continually re-assess the directions, approaches and the *raison d'être* of the organisation. Thus, what has been described here might well be discarded in the future. The only thing constant was change and that the continual analysis of that change was essential.

> There is continual movement of growth in productive forces, of destruction in social relations, of formation in ideas; the only immutable thing is the abstraction of movement – *mors immortalis* (Marx, 1847:166).

It was the method of analysis that was important in providing the particular transient and conditional alternatives to managerialism discussed here. It is suggested that the ability of the organisation and its people to continue to change, and to manage that change, in a way that is consistent with their ethics, politics and collective wisdom, will determine whether the analyses of the future will provide alternatives that challenge the system.

This educational model, and the organisational form that was developed to support it, provided a glimpse of possible different futures. Hopefully other studies will provide an extended range of different alternatives to the current economic rationalist and managerial discursive practices. What is certain is that different futures depend on the consciousness of people of possibilities and alternatives. Indications were that this could result from transformative learning experiences such as those described in this study. As with all educational work, however, teachers can only continue to sew the seeds. So also in the design of organisational structures, the experience documented here would indicate that a non-managerial organisation can produce excellent managers from members who were formerly 'reluctant' to become involved in management. This resulted directly from a changed consciousness of what it meant to be a 'manager' indicating that a whole new breed of managers may be waiting in the wings for the opportunity to 'manage differently'.

If one accepts the premise that a new means of production is transforming society and that the corporate managerialism that has developed in Australia is not meeting the demands of that new means of production, then it follows that alternative futures are possible. It is therefore argued that a more pro-active approach is required which will create the preconditions for a different future. As Marx proclaimed in 1852,

> Men (sic) make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves; but under circumstances directly encountered, given and transmitted from the past (Marx, 1852: 103).

Thus, if the possibilities for the present lie in the past, then the seeds for the future lie in the present. The project for the present then is to ensure that in the future the past contains the elements of alternatives and possibilities on which new futures can be built.

INTERVIEW NO.

WORK PLACED EDUCATION PROJECT

VEHICLE MANUFACTURING

Survey

Reading
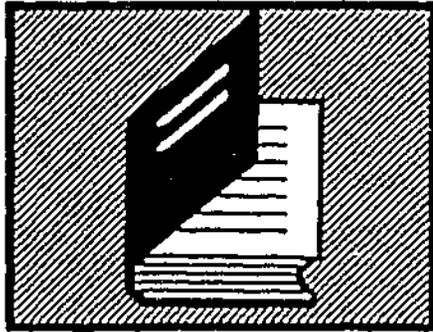
Writing
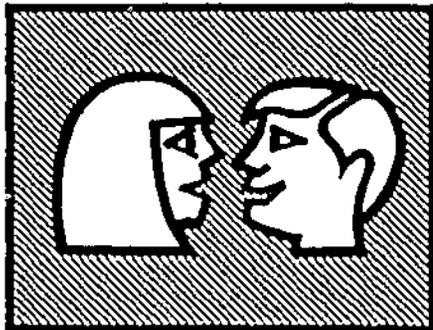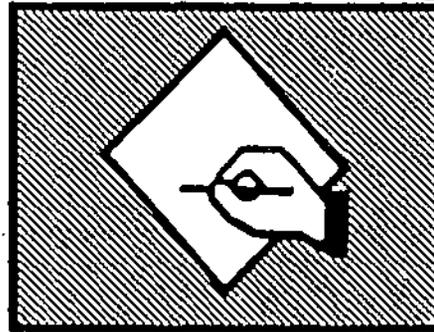
Speaking
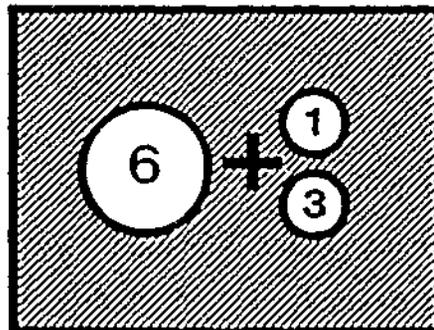
Number

INTERVIEWER _____

INTERVIEW NO.

1. GENDER

    1 MALE
    2 FEMALE   1-2 [   ]

2. HOW OLD ARE YOU?   [   ] YRS

3. WERE YOU BORN IN AUSTRALIA?

    (IF YES, GO TO Q.5)   1/0 [   ]

    IF NO, WHERE?

    01 UNITED KINGDOM/IRELAND
    02 NEW ZEALAND
    03 CHINA
    04 EGYPT
    05 GREECE
    06 INDIA
    07 ITALY   [   ]
    08 LEBANON
    09 PHILIPPINES
    10 SERBO-CROATIA
    11 SRI LANKA
    12 TIMOR
    13 TURKEY
    14 VIETNAM
        OTHER (SPECIFY - DO NOT CODE)

    _____

4. WHEN DID YOU   19 [   ]
    ARRIVE?

    LANGUAGE CODES FOR QUESTIONS 5-8
    (SPECIFY DIALECT IF APPROPRIATE)

ARABIC	*01*	*LEBANESE*	*10*
CANTONESE	*02*	*MACEDONIAN*	*11*
CROATIAN	*03*	*MANDARIN*	*12*
ENGLISH	*04*	*SERBIAN*	*13*
FILIPINO	*05*	*SPANISH*	*14*
GREEK	*06*	*TAMIL*	*15*
INDIAN	*07*	*TIMORESE*	*16*
ITALIAN	*08*	*TURKISH*	*17*
LAOTIAN	*09*	*VIETNAMESE*	*18*
		OTHER - SPECIFY	

5. WHAT LANGUAGE DO YOU   [   ]
    SPEAK AT HOME?

    _____

    SPEAK   1/0   [   ]
    READ   1/0   [   ]
    WRITE   1/0   [   ]

6. DO YOU SPEAK A SECOND   [   ]
    LANGUAGE? WHICH?

    _____

    SPEAK   1/0   [   ]
    READ   1/0   [   ]
    WRITE   1/0   [   ]

7. OTHER LANGUAGE?   [   ]

    _____

    SPEAK   1/0   [   ]
    READ   1/0   [   ]
    WRITE   1/0   [   ]

8. ANY OTHER LANGUAGE   1/0   [   ]

    _____   [   ]

IF ESB - GO TO Q.14

9. DID YOU LEARN ENGLISH BEFORE YOU CAME
    TO AUSTRALIA?

                              1/0   [   ]

10. (IF YES) WHERE?

    1 IN COUNTRY OF ORIGIN   [   ]

    2 REFUGEE CAMP   [   ]

    3 IN TRANSIT   [   ]

       OTHER (SPECIFY - DO NOT [   ]
       CODE)

    _____

11. HAVE YOU BEEN TO ENGLISH CLASSES IN
    AUSTRALIA?

                              1/0   [   ]

12. (IF YES) WHERE?

    1 MIGRANT HOSTEL   [   ]

    2 MIGRANT EDUCATION CNTR   [   ]

    3 TAFE OR OTHER   [   ]
       EDUCATIONAL CENTRE

    4 SCHOOL   [   ]
       (PRIMARY/SECONDARY)

    5 AT WORK   [   ]

       OTHER (SPECIFY - DO NOT [   ]
       CODE)

    _____

13. HOW LONG AGO (WAS THE LAST)?

  1 CURRENT

  2 IN LAST 2 YEARS

  3 2-5 YEARS AGO   1-4 [ ]

  4 5+ YEARS

14. HOW MANY YEARS DID YOU SPEND AT SCHOOL? [ ] YRS

15. HOW OLD WERE YOU WHEN YOU LEFT SCHOOL? [ ] YRS

16. WHAT WAS THE HIGHEST LEVEL OF EDUCATION YOU REACHED?

  1 PRIMARY ONLY

  2 SOME SECONDARY SCHOOL

  3 FINISHED SECONDARY SCHOOL   [ ]

  4 TRADE OR TECHNICAL SCHOOL

  5 TERTIARY (UNI./COLLEGE)

  OTHER (SPECIFY - DO NOT CODE)

  _____

  COMMENT: _____

  _____

17. DO YOU HAVE ANY QUALIFICATIONS? (AUSTRALIAN)   1/0 [ ]

18. IF YES, WHAT? [ ]

  _____ (DO NOT CODE)

  _____

IF ESB GO TO Q.22

19. HAVE YOU BEEN TO PRIMARY SCHOOL IN AUSTRALIA?   1/0 [ ]

20. HAVE YOU BEEN TO SECONDARY SCHOOL IN AUSTRALIA?   1/0 [ ]

21. DO YOU HAVE ANY FORMAL OVERSEAS QUALIFICATIONS?   1/0 [ ]

22. IF YES, WHAT? [ ]

  _____ (DO NOT CODE)

  _____

23. WHAT JOB DO YOU DO? (WHAT IS YOUR CURRENT POSITION?)

  _____

  1 PRODUCTION LINE/OPERATOR

  2 FORKLIFT DRIVER

  3 CLEANER

  4 QUALITY CONTROL   [ ]

  5 TEAM LEADER/LEADING HAND

  6 STORES

  OTHER (SPECIFY - DO NOT CODE)

  _____

24. WHAT SHIFT DO YOU WORK?

  1 NIGHT SHIFT

  2 AFTERNOON SHIFT

  3 DAY SHIFT   [ ]

  4 ROTATING SHIFTS

  OTHER (SPECIFY - DO NOT CODE)

  _____

25. HOW LONG HAVE YOU WORKED AT THIS COMPANY?

  CODE: LENGTH OF SERVICE

  1 LESS THAN 6 MONTHS

  2 6 MONTHS, LESS THAN 1 YEAR

  3 1 YEAR, LESS THAN 2 YEARS

  4 2 YEARS, LESS THAN 5 YEARS

  5 5 YEARS, LESS THAN 10 YEARS

  6 10 YEARS, LESS THAN 15 YEARS

  7 15 YEARS, LESS THAN 20 YEARS

  8 OVER 20 YEARS

  1-8 [ ]

26. HAS THAT BEEN CONTINUOUS EMPLOYMENT?   1/0 [ ]

27. HAVE YOU WORKED AT ANY OTHER VEHICLE MANUFACTURING PLANTS?   1/0 [ ]

28. (IF YES)   WHERE AND HOW LONG?

CODE:

1   LESS THAN 6 MONTHS

2   OVER 6 MTHS, LESS THAN 1 YEAR

3   OVER 1 YR, LESS THAN 2 YRS

4   OVER 2 YRS, LESS THAN 5 YRS

5   OVER 5 YRS, LESS THAN 10 YRS

6   OVER 10 YRS, LESS THAN 15 YRS

7   OVER 15 YRS, LESS THAN 20 YRS

8   OVER 20 YEARS

	TIME
FORD	
GMHA	
TOYOTA	
NISSAN	
MITSUBISHI	

OTHER (SPECIFY)

_____ | |
_____ | |

29. OCCUPATION IN COUNTRY OF ORIGIN
(IF NOT AUSTRALIA)?

_____ | |
_____ | |

30. ANY OTHER OCCUPATION? (IN AUSTRALIA)

_____ | |
_____ | |
_____ | |
_____ | |
_____ | |

31. WHAT COMPANY TRAINING HAVE YOU HAD:

A. THIS COMPANY   (1/0)
B. ANY OTHER COMPANY

	A	B
INDUCTION		
ON-THE-JOB-1 JOB		
-2 JOBS		
-MORE THAN 2		
EMPLOYEE INVOLVEMENT		
QUALITY CIRCLES		
OHS		
UNION		
OTHER _____		

32. HAS THE TRAINING HELPED YOU TO DO YOUR
JOB BETTER?

1   A LOT

2   SOME

3   A LITTLE   1-5 [ ]

4   NO

5   DON'T KNOW

33. HAVE YOU HAD ANY TRAINING IN THE
LAST 12 MONTHS?

1/0 [ ]

34. IF YES, HOW MUCH OF THE TRAINING COULD
YOU UNDERSTAND?

1   EVERYTHING

2   A LOT

3   SOME   1-5 [ ]

4   A LITTLE

5   NONE

35. (IF SOME, A LITTLE OR NONE?)   WHAT
MADE IT DIFFICULT TO UNDERSTAND?

_____ | |

_____

_____

ASSESSMENT TASKS

READING

1. RECORD OF INTERVIEW

   A) WHERE WOULD YOU WRITE YOUR NAME?
   ...... ADDRESS?

   1/0 [   ]

   B) PLEASE WRITE YOUR NAME AND
   ADDRESS?

   1/0 [   ]

   C) PLEASE CAN YOU SIGN HERE?

   1/0 [   ]

   D) THIS IS YOUR INTERVIEW NUMBER
   (POINT). PLEASE COPY THAT HERE.
   (INDICATE)

   1/0 [   ]

   _____

   [RETURN FORM TO INTERVIEWEE]

2. SYMBOLS AND PRINT

   A) (SHOW SIGN: EYE PROTECTION)
   HAVE YOU SEEN THIS SIGN? WHAT DOES
   IT MEAN?

   1/0 [   ]

   B) (SHOW SIGN: HEARING PROTECTION)
   WHAT DOES THIS MEAN?

   1/0 [   ]

   C) (SHOW SIGN: HAND PROTECTION)
   WHAT DOES THIS MEAN?

   1/0 [   ]

   _____

3. PRINTED SIGN WITHOUT SYMBOLS

   A) SHOW ME THE WORD DANGER

   1/0 [   ]

   B) WHAT DOES THIS SIGN MEAN?

   _____

   _____

   _____

   _____

   1-4 [   ]

4. SAFETY TIPS

   THESE ARE SOME SAFETY INSTRUCTIONS.
   LOOK AT THIS PART (POINT).

   A) WHAT DOES IT SAY ABOUT RINGS?

   1/0 [   ]

   B) WHERE DOES IT SAY THAT?
   1/0 [   ]

   C) IS IT OK TO RUN IN THE PLANT?

   1/0 [   ]

   D) WHERE DOES IT SAY THAT?
   1/0 [   ]

   _____

   _____

5. VBU NOTICE

   THIS IS A VBU NOTICE.

   A) WHAT TIME IS THE MEETING?
   1/0 [   ]

   B) WHAT DAY IS THE MEETING?
   1/0 [   ]

   C) WHERE WILL THE MEETING BE?

   1/0 [   ]

   D) WHAT IS THE MEETING FOR?
   1/0 [   ]

   _____

   _____

6. JOB INSTRUCTION SHEET

   A) HERE IS A JOB INSTRUCTION SHEET.
   WHAT IS THE JOB?
   1/0 [   ]

   B) WHAT DO YOU DO FIRST?
   1/0 [   ]

   C) WHAT DO YOU DO WITH THE HEADLIGHTS
   SWITCH?
   1/0 [   ]

   D) WHAT SHOULD HAPPEN WHEN YOU OPEN
   THE DOOR?
   1/0 [   ]

   _____

   _____

Source: Sefton & O'Hara, 1992: 109-149   Appendix 1/5

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7. PORTABLE FIRE EXTINGUISHERS

A) WHAT IS IN THE BLUE FIRE
   EXTINGUISHER?   1/0 [____]

B) SHOULD YOU USE THIS ON
   AN ELECTRICAL FIRE?   1/0 [____]

C) WHERE DOES IT TELL YOU THAT?

   _____ 1/0 [____]

   _____

   _____

8. VBU ACCIDENTS AT WORK

A) THIS IS A VBU NOTICE.
   I WILL GIVE YOU A FEW MINUTES TO
   READ IT AND THEN I WILL ASK YOU
   SOME QUESTIONS.

   .... WHAT IS THE NOTICE ABOUT?

   _____ 1-6 [____]

   _____

B) WHAT DOES "FAIL TO NOTIFY" MEAN?

   _____ 1/0 [____]

   _____

C) WHAT DOES "MINOR" MEAN?

   _____ 1/0 [____]

   _____

D) WHAT DOES "JEOPARDISE" MEAN?

   _____ 1/0 [____]

   _____

E) SHOULD YOU USE YOUR SICK PAY AFTER
   AN ACCIDENT AT WORK?
                         1/0 [____]

F) WHERE DOES IT SAY THAT?

   _____ 1/0 [____]

   _____

G) WHEN SHOULD YOU CLAIM ON WORKCARE?

   _____ 1/0 [____]

   _____

H) WHERE DOES IT SAY THAT?

   _____ 1/0 [____]

   _____

9. THE VEHICLE INDUSTRY CERTIFICATE

A) THIS IS AN ARTICLE FROM A COMPANY
   NEWSLETTER.
   I WILL GIVE YOU SOME TIME TO READ
   IT AND THEN I WILL ASK YOU SOME
   QUESTIONS.

   ..... WHAT IS THE VIC?

                    1/0 [____]

B) WHAT DOES THE ARTICLE SAY ABOUT
   AWARD RESTRUCTURING?

   _____

   _____

   _____

   _____

   _____

   _____

   CONTENT   1-6 [____]

   INTERPRETATION   1-5 [____]

C) WHAT AREAS OF TRAINING WILL THE
   VIC INCLUDE?

   _____

   _____

   _____

   _____

   CONTENT   1-4 [____]

   INTERPRETATION   1-5 [____]

D) WHAT ARE THE GOALS OF THE TRAINING
   MENTIONED IN THE ARTICLE?

   _____

   _____

   _____

                      1-3 [____]

Appendix 1/6

WRITING

TASK 1 - WORDS IN CONTEXT

I'M GOING TO ASK YOU TO WRITE FOUR WORDS.

A) "HAND" (POINT TO HAND). WRITE THE WORD "HAND".

B) HAND PROTECTION <u>MUST</u> BE WORN. WRITE THE WORD "MUST".

C) "EYE" (POINT TO EYE). WRITE THE WORD "EYE".

D) <u>DANGER</u> LIVE WIRES. WRITE THE WORD "DANGER".

HAND	1/0	
MUST	1/0	
EYE	1/0	
DANGER	1/0	

_____

_____

_____

_____

TASK 2 - DICTATED SENTENCE

THIS IS A PICTURE OF AN ACCIDENT.

I'M GOING TO READ A SENTENCE ABOUT THIS ACCIDENT.

I WANT YOU TO WRITE IT HERE (POINT).
"I FELL DOWN THE STAIRS AND HURT MY BACK".

A) CONFIDENCE	1-5	
B) SPELLING ERRORS	1-5	
C) OMISSIONS/ERRORS	1-5	

_____

_____

_____

_____

TASK 3 - WRITE A DESCRIPTION

FROM THE PICTURE, CAN YOU TELL ME WHY THE ACCIDENT HAPPENED? (CAUSE OF THE ACCIDENT) ....

PLEASE WRITE THAT HERE (POINT).

A) CONFIDENCE	1-5	
B) APPROPRIACY	1-5	
C) SPELLING ERRORS	1-5	
D) PUNCTUATION/GRAMMAR	1-5	

_____

_____

_____

_____

TASK 4 - SUGGESTION TO THE SAFETY COMMITTE

HOW WOULD YOU STOP THIS ACCIDENT FROM HAPPENING TO SOMEONE ELSE?

PLEASE WRITE THAT AS A SUGGESTION TO THE SAFETY COMMITTEE.

A) CONFIDENCE	1-5	
B) APPROPRIACY	1-5	
C) SPELLING ERRORS	1-5	
D) PUNCTUATION/GRAMMAR	1-5	

_____

_____

_____

_____

QUANTITATIVE LITERACY / NUMERACY

1. <u>FOUR BASIC OPERATIONS</u>

   PLEASE DO THESE?

_____	1/0	
_____	1/0	
_____	1/0	
_____	1/0	

2. <u>VEHICLE I.D. SHEET</u>

   THIS IS THE MODEL NUMBER FOR A CAR. FIND THAT NUMBER ON THIS SHEET.

_____	1/0	

_____

Appendix 1/7

3. PAY SLIP

   HERE IS YOUR WEEKLY PAY SLIP.
   YOU HAVE WORKED YOUR NORMAL HOURS
   PLUS 3 HOURS OVERTIME FOR THE WEEK.
   PLEASE DO A ROUGH CHECK OF YOUR
   PAYSLIP.

   _____ 1/0 [   ]

   IF NO, PROMPT   1/0 [   ]

4. GRAPHS

   A) THIS IS THE MONTHLY PRODUCTIVITY
      SHEET.
      THIS GRAPH (POINT) SHOWS TOTAL
      ABSENTEES.
      HOW MANY ABSENTEES WERE THERE IN
      FEBRUARY?

      _____ 1/0 [   ]

   B) WHICH MONTH HAD THE LEAST
      ABSENTEES?

      _____ 1/0 [   ]

   C) THIS GRAPH SHOWS TOTAL DEFECTS.
      CAN YOU TELL ME WHAT IS WRONG WITH
      THIS GRAPH?

      _____ 1/0 [   ]

   D) HERE IS A GRAPH SHOWING PRESS
      SCRAP. THIS LINE REPRESENTS THE
      OBJECTIVE (OR TARGET) (POINT TO
      OBJECTIVE LINE).

      WHAT DOES THIS LINE MEAN? (POINT
      TO SCRAP COST - TOP LINE OF GRAPH)

      _____ 1/0 [   ]

   E) THIS LINE (POINT TO MONTHLY SUM)
      IS THE MONTHLY SUM.
      WHAT DOES THIS POINT MEAN
      (INDICATE MAXIMUM - MARCH)?

      _____ 1/0 [   ]

   F) WHAT HAPPENED HERE?
      (INDICATE POINT WHERE LINES MEET -
      NOVEMBER)

      _____ 1/0 [   ]

Source: Sefton & O'Hara. 1992: 109-149   Appendix 1/8

LEARNING NEEDS

36. IN THE LAST 6 MONTHS HAVE YOU READ ANY OF THESE? (IN ENGLISH)

A NEWSPAPER	1/0	
A BOOK	1/0	
ANYTHING ELSE	1/0	

37. WHEN LOOKING AT A NEWSPAPER DO YOU GENERALLY READ OR LOOK THROUGH: (IN ENGLISH)

HEADLINES	1/0
FRONT PAGE	1/0
SPORTS PAGES	1/0
OTHER NEWS	1/0
TV LISTINGS	1/0
ADVERTISEMENTS	1/0
COMICS	1/0
BUSINESS NEWS	1/0
ENTERTAINMENT GUIDE	1/0
LETTERS TO THE EDITOR	1/0
EDITORIALS	1/0
OTHER _____	

38. I AM GOING TO READ OUT A LIST OF THINGS PEOPLE READ OR WRITE AT WORK.
A) IN THE LAST 6 MONTHS HAVE YOU READ
B) IN THE LAST 6 MONTHS HAVE YOU WRITTEN

		A	B
SAFETY SIGNS	1/0		
OHS NOTICES	1/0		
UNION NOTICES	1/0		
COMPANY NOTICES	1/0		
MESSAGES/NOTES	1/0		
PARTS LISTS	1/0		
JOB INSTRUCTIONS	1/0		
STNDRD OPERATING PROCEDURES	1/0		
TRAINING INSTR.	1/0		
NEWSLETTERS	1/0		
REPORTS	1/0		

_____

_____

39. DO YOU ASK FOR HELP WITH READING?

1 NEVER

2 SOMETIMES

3 OFTEN   1-4 [ ]

4 ALWAYS

40. DO YOU ASK FOR HELP WITH WRITING?

1 NEVER

2 SOMETIMES

3 OFTEN   1-4 [ ]

4 ALWAYS

41. DO YOU UNDERSTAND HEALTH AND SAFETY INSTRUCTIONS, SIGNS, NOTICES AND LABELS?

1 NEVER

2 SOMETIMES

3 OFTEN   1-4 [ ]

4 ALWAYS

42. THE BEST WAY FOR ME TO GET NEW INFORMATION ABOUT HEALTH AND SAFETY IS:

_____

_____

_____

_____

DO NOT CODE   [|]

43. HOW IMPORTANT IS READING IN YOUR CURRENT JOB?

1 NOT IMPORTANT

2 FAIRLY IMPORTANT

3 IMPORTANT   1-4 [ ]

4 VERY IMPORTANT

44. HOW IMPORTANT IS WRITING IN YOUR CURRENT JOB?

1 NOT IMPORTANT

2 FAIRLY IMPORTANT

3 IMPORTANT   1-4 [ ]

4 VERY IMPORTANT

1. FREQUENTLY
2. SOMETIMES
3. SELDOM

45. A) WHO DO YOU TALK TO AT WORK?

WORKMATES	☐	1
LEADING HAND/TEAM LEADER	☐	2
SUPERVISOR/GROUP LEADER	☐	3
QUALITY CONTROL	☐	4
MAINTENANCE	☐	5
MANAGEMENT	☐	6
UNION	☐	7
OTHER _____		

WHEN YOU TALK TO THESE PEOPLE;

B) DO YOU HAVE TROUBLE UNDERSTANDING WHAT THEY SAY?
C) DO YOU HAVE TROUBLE MAKING YOURSELF UNDERSTOOD?

	B	C
WORKMATES		
LEADING HD/TEAM LDR		
S'VISOR/GROUP LDR		
QUALITY CONTROL		
MAINTENANCE		
MANAGEMENT		
UNION		
OTHER		

46. DO YOU THINK THAT YOUR SPEAKING SKILLS IN ENGLISH HAVE STOPPED YOU FROM DOING OTHER JOBS IN THIS COMPANY?

0 NO

1 YES   0-2   ☐

2 DON'T KNOW

47. DO YOU WANT TO IMPROVE YOUR SPEAKING SKILLS?

                          1/0   ☐

48. DO YOU THINK YOUR READING SKILLS IN ENGLISH HAVE STOPPED YOU DOING OTHER JOBS IN THIS COMPANY?

0 NO

1 YES   0-2   ☐

2 DON'T KNOW

49. DO YOU WANT TO IMPROVE YOUR READING SKILLS?

                          1/0   ☐

50. DO YOU THINK YOUR WRITING SKILLS IN ENGLISH HAVE STOPPED YOU FROM DOING OTHER JOBS IN THIS COMPANY?

0 NO

1 YES   0-2   ☐

2 DON'T KNOW

51. DO YOU WANT TO IMPROVE YOUR WRITING SKILLS?

                          1/0   ☐

52. HOW MUCH DO YOU KNOW ABOUT THE VEHICLE INDUSTRY CERTIFICATE?

1 NOTHING

2 A LITTLE
                          1-4   ☐
3 SOME

4 A LOT

53. DO YOU NEED MORE INFORMATION ABOUT THE VIC?

0 NO

1 YES   0-2   ☐

2 DON'T KNOW

54. DO YOU WANT TO DO THE VIC TRAINING?

0 NO

1 YES   0-2   ☐

2 DON'T KNOW

55. WILL YOU NEED SUPPORT/HELP WITH VIC TRAINING?

0 NO

1 YES   0-2   ☐

2 DON'T KNOW

56. IF YES,

1 READING	☐
2 WRITING	☐
3 LANGUAGE	☐
4 STUDY SKILLS	☐
5 NUMERACY	☐
OTHER (SPECIFY DO NOT CODE)	☐

THANK YOU FOR COMMING TO THE INTERVIEW.

LISTENING

COMMENTS (GENERAL)

1-9 [ ]

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

SPEAKING

1-9 [ ]

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

```
ERRATA SHEET - SURVEY

QUESTION 25
CODE NUMBER 8 SHOULD READ "20
YEARS OR OVER"

QUESTION 28
CODES SHOULD ALL READ AS FOR
QUESTION 25 (Delete "over"
from each code) i.e.

CODE
 1    Less than 6 months
 2    6 mths, less than 1 yr
 3    1 yr, less than 2 yrs
 4    2 yrs, less than 5 yrs
 5    5 yrs, less than 10 yrs
 6    10 yrs, less than 15 yrs
 7    15 yrs, less than 20 yrs
 8    20 yrs or over
```

Source: Sefton & O'Hara, 1992: 109-149

Appendix 1/11

**EYE PROTECTION
MUST BE WORN**

**HEARING PROTECTION
MUST BE WORN**

**GLOVES
MUST BE WORN**

**DANGER
LIVE
WIRES**

RECORD OF INTERVIEW

NAME:

ADDRESS:

SIGNATURES

    EMPLOYEE:_____

    INTERVIEWED BY:_____

    DATE: / /

INTERVIEW NUMBER:
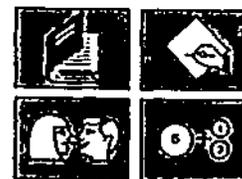
WORK PLACED EDUCATION PROJECT
VEHICLE MANUFACTURING

Survey

Thank you for taking part in the Work Placed Education Project. Your cooperation is greatly appreciated

The information you have given is confidential. No record of your name has been kept.

Your interview number on the other side of this paper is the only way your information can be identified.

If you are taking part in an English language or literacy program you may want to get your original data back to show to your teacher.

If you want to do this please contact Robin Sefton or Lee O'Hara on 866 1294.

After February 1992 your survey form will be of no further use to us or to you and will be destroyed.

Robin Sefton
Coordinator
WORK PLACED EDUCATION PROJECT

SAFETY TIPS

WHILE YOU ARE WORKING:

Do not wear rings

Do not wear loose chains on wrists

Do not wear watches

Do not wear loose clothing

Long hair - wear a hat to protect your hair

Do not wear loose chains around neck

Walk. - Do not run

WALKMAN RADIOS/CASSETTES ARE PROHIBITED WITHIN THE PLANT.

PREVENT FIRES

Protect yourself
Protect your work mates
Protect your job
Keep your area tidy
Observe the safety rules

UNCONTROLLED FIRES

Have no respect for persons or property
THEY WILL DESTROY
Plant, equipment and stop production
In case of fire RAISE ALARM

Tell any group leader or telephone security.

4555 Port Melbourne
6555 Altona
7555 Dandenong

V.B.U. NEWS

ELECTION NOTICE
ALL VBU MEMBERS
SHOP STEWARD ELECTION

PLANT 2   A/NOON SHIFT

AREA: TRIM LINES 1-2-3, SOFT TOP, RECEIVING

DATE: MONDAY 22nd APRIL, 1991

TIME: 6:50 pm.

LOCATION: OUTSIDE MAIN GATE
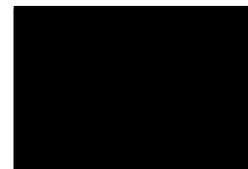
IAN JONES
State Secretary

Mick McCormack
Organiser

VEHICLE BUILDERS EMPLOYEES' FEDERATION OF AUSTRALIA

INSPECTION STANDARDISED WORK SHEET

CHECK NO:	ITEM	STATION
	HEADLIGHT AUTO SHUT-OFF	. 1 . F UP

CONTENTS	WORK SEQUENCE	POINT & SAFETY	STANDARD CRITERION
1.	1. CLOSE DOOR. 2. TURN IGNITION SWITCH TO 'ON' POSITION. 3. TURN HEADLIGHTS FULLY ON. 4. TURN IGNITION TO ACC. POSITION. 5. OPEN DOOR, HEADLIGHTS MUST TURN OFF.	* FITTED TO ALL CS-i ULTIMA SEDANS CS-i CS-X WAGONS. * HEADLIGHTS SWITCH MUST BE IN FULL ON POSITION WHILST CHECK IS BEING CARRIED OUT.	FAULTY N.G H/LIGHTS NOT WORK. N.G
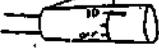
ISSUE	DATE	MNGR.	ENG.	G.FRM	G.LDR	REVISION RECORD	PREPARED DATE: 14.5.91
1	13/1/91						APPROVED
							MANAGER / ENGINEER
							CH. FRM. / G. LEADER

COMMONWEALTH FIRE BOARD

PORTABLE FIRE EXTINGUISHERS
Suitability for different kinds of small fires

	WATER	FOAM	WET CHEMICAL	CARBON DIOXIDE	DRY CHEMICAL	BCF
TYPE OF INDICATOR →						OZONE DEPLETING USE ONLY ON CRITICAL APPLICATIONS AS A LAST RESORT
	Contents: ELECTRICALLY CONDUCTIVE			Contents: ELECTRICALLY NON-CONDUCTIVE		
WOOD, PAPER, TEXTILES RUBBISH, ETC	YES MOST SUITABLE	YES	YES	YES	YES	YES
FLAMMABLE LIQUIDS	NO	YES MOST SUITABLE	NO	YES	YES	YES
LIVE ELECTRICAL EQUIPMENT	NO	NO	NO	YES	YES	YES
COOKING OILS AND FATS	NO	NO	YES MOST SUITABLE	YES	YES	NO
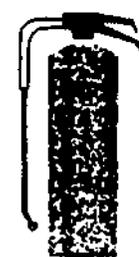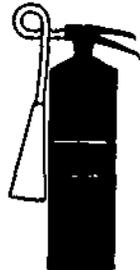
PRECAUTIONS
For special hazards such as water miscible flammable liquids and reactive metals - expert advice should be sought. Rooms and confined spaces should be ventilated before re-entry after fire.

● Switch off power or fuel before attacking fire appliance/equipment.
● In all cases call the Fire Brigade

Source: Sefton & O'Hara. 1992: 109-149

Appendix 1/15

V.B.U. NEWS

FEBRUARY 1991

ACCIDENTS AT WORK

If you have an accident at work:

1. You must report it to the supervisor and/or the Medical Centre even if the accident is minor and does not require medical attention at the time of the accident. If you fail to notify of the accident you could jeopardise your WorkCare claim.

2. If you are not satisfied with the service at the Medical Centre or you want to go to the doctor of your choice - you have the right to do so.

3. If you have time off work, and/or you incur medical expenses, fill out a WorkCare claim form. Workers should not be using their sick pay for days off work when they have an accident at work.

IAN JONES
Secretary

VEHICLE BUILDERS EMPLOYEES' FEDERATION OF AUSTRALIA
State Secretary: IAN JONES, 3-11 Howard Street, WEST MELBOURNE. 3003.

THE VEHICLE INDUSTRY CERTIFICATE

With the car industry in the news almost daily, it would be easy to overlook one of the major advances that will take place in the nineties for both employees and employers. That will be the introduction of the <u>Vehicle Industry Certificate</u> (the V.I.C.).

The V.I.C. is a major part of the Award Restructure agreement between the company and the unions. No doubt you have heard quite a lot about Award Restructuring from fellow workers, union representatives and supervisors.

Award Restructuring provides an opportunity for non-trade employees to have their skills recognised, to be trained and progress to higher rates of pay and most importantly, build a more competitive Australian Vehicle Industry.

How does the V.I.C. work? The V.I.C. is structured so that as you gain skills and knowledge units, you move through 3 pay steps. To reach the final V.I.C. level of pay, an employee must have 20 units of skill and 20 units of knowledge.

<u>Skill Units</u> are gained by employees being assessed as competent in each new skill learned. To be awarded these skill units, you need to be able to meet eight requirements set on a Job Certificate Sheet. These sheets were developed by working parties, here at Plastics, consisting of management, union and shop floor people.

Training officers have been appointed in all plants and by now, you have probably seen your training officer in your area. These people are here to be of help to you in learning new job skills and co-ordinating your path in achieving your V.I.C. units.

<u>Knowledge Units</u> are courses of study in core and elective subjects. These cover a wide range of topics, such as Occupational Health and Safety, Quality Measurement, Continuous Improvement, etc. A unit of knowledge, will be equivalent to ten hours of classroom training and will involve assessment.

Further details about the V.I.C., when it might commence, how to apply and other information will be available shortly. We are certainly looking forward to the challenge and change the V.I.C. will provide.

FROM: PHEONIX - PLASTICS PLANT JOURNAL, NUMBER 3, FEB/MAR 1991
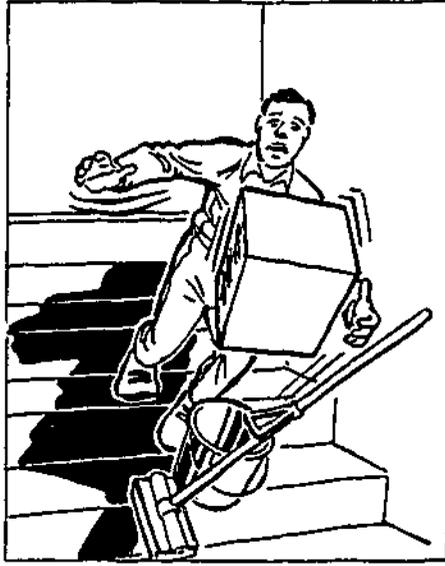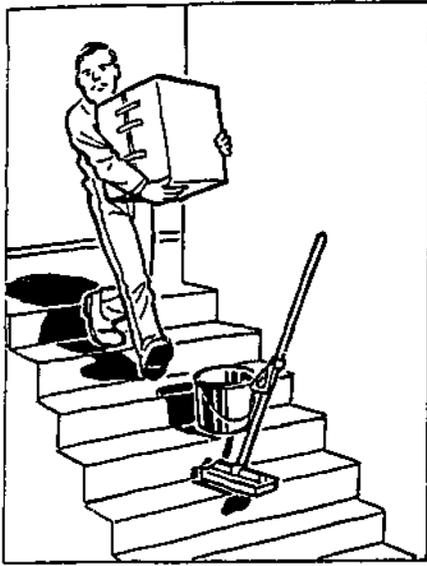
WRITING TASKS

TASK 4

TASK 1

TASK 2

TASK 3

Source: Sefton & O'Hara, 1992: 109-149

Appendix 1/17

$$15 + 24 =$$

$$22 - 9 =$$

$$21 \times 7 =$$

$$36 \div 9 =$$

BODY / ENG NUMBER			SIDO NUM	MODEL	DESCRIPTION			SERIAL	JOB
6FPAAAJG23ML38839			555190	18933	EB GL SEDAN			38839	167

1 ENGINE	2 TRANS	3 INST PANEL	4 TRIM	5 SEATS	6 A/CON	7 ENGINE COMPT	8 SHOCK ABSORB	9 CLOCK	10 TON PACK
D	W	4	G	A	X	B	S	R	

11 ENG CTL SENS LH	12 ENG CPT LOOM	13 REAR LOOM	14 POWER WINDOWS	15 FLOOR COVER	16 UP TRIM PACK'S	17 WAGON R/RACK	18	19 ENG CTL MODULE	20 GRILLE
E	5	A	D	A				4	

21 STEER COLUMN	22 POWER STEER	23 SOUND SYSTEM	24 V SIDE GLASS	25 V LIFT GATE	26 HEAD LIGHTS	27 TAIL LIGHTS	28 HARDTOP	29	30 ACCEL CABLE
B	S	C			F				Y

OSO: "FIT NEW HAND BRAKE CABLES"

31 DRIVE SHAFT	32 RADIAT	33 POINT STAPEL	34 CRUISE CONTROL	35 PROTECT MOULD	36 WHEEL COVERS	37 TYRE DECAL	38 TAXI POLICE	39 SUN VISOR	40 WEATHER SHIELD
6	A	C		G	A	L			

41	42 LOCK CTL PETROL	43 COMPRESS	44 SPRING FRONT	45 SPRING REAR	46 TRANSM MODULE	47 AXLE	48 PAINT	49 PAINT	50 DEST- INATION
		1	B	A	2	3	Z		

18923

19833

18933

18833

P.P. 33	CLIENT NO. 1106235	LOC. 30	EMP. NO .5437	EMPLOYEE NAME G. BAWDEN		PERIOD END 12/04/91	PAY DATE 17/04/91

HOURS X RATE CALCULATIONS

TYPE	HRS./MINS	RATE	VALUE	TYPE	HRS./MINS	RATE	VALUE	TYPE	HRS./MINS	RATE	VALUE
15 NORMAL	38. 00	12.0974	459.70	O/TIME	3 00	18.1461	36.29				

YEAR TO DATE EARNINGS

TAXABLE INCOME	TAX	NET
19400.25	3266.15	15086.46

SUMMARY OF EARNINGS THIS PAY

HOURS X RATE TOTAL VALUE	BEFORE TAX ADDS./DEDS.	TAXABLE INCOME	TAX	AFTER TAX ADDS./DEDS.	NET
459.70	36.29	= 495.99	-107.10	-30.82	= 358.07

DIRECT DEPOSIT DETAILS / THIS PERIOD

BSB CODE	ACCOUNT NO.	ACCOUNT NAME	CREDIT AMOUNT
6-275	765 342 8761	G. BAWDEN	358.07

ADDITIONS/DEDUCTIONS THIS PAY

DESCRIPTION	S c	DESCRIPTION	S c	DESCRIPTION	S c	DESCRIPTION	S c
SUPER	-27.62A					UNION FEES	-3.20A

A - INDICATES AFTER TAX ADD/DED
B - INDICATES BEFORE TAX ADD/DED.

E - INDICATES EMPLOYER PAID
* - INDICATES A NON STANDARD VALUE

EMPLOYER MESSAGE
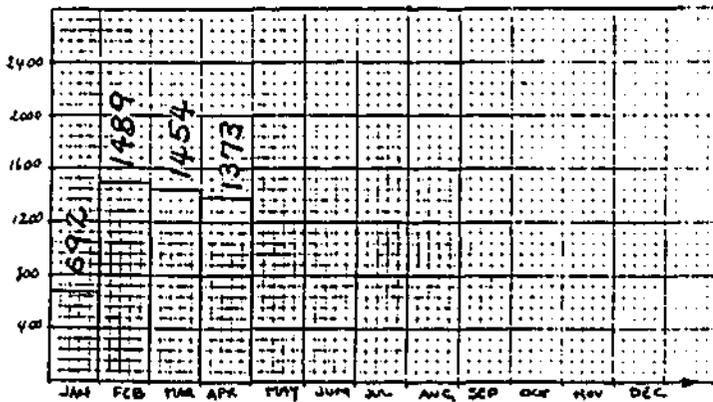
MONTHLY PRODUCTIVITY SHEET   AREA No : 611   1991

TOTAL PRODUCTION

TOTAL INJURIES
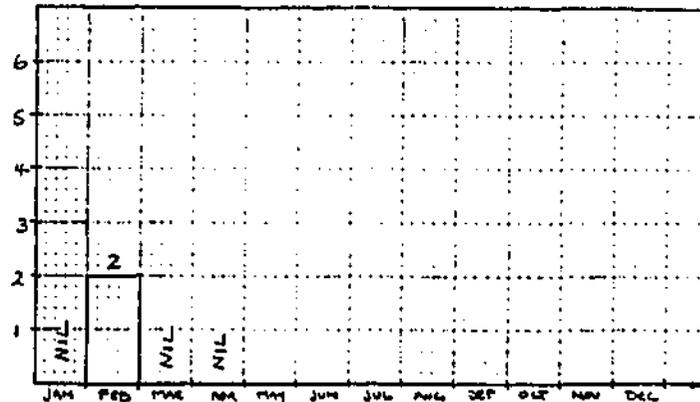
TOTAL IMPROVEMENTS

TOTAL ABSENTEES

Source: Sefton & O'Hara, 1992: 109-149

Appendix 1/19

231

232
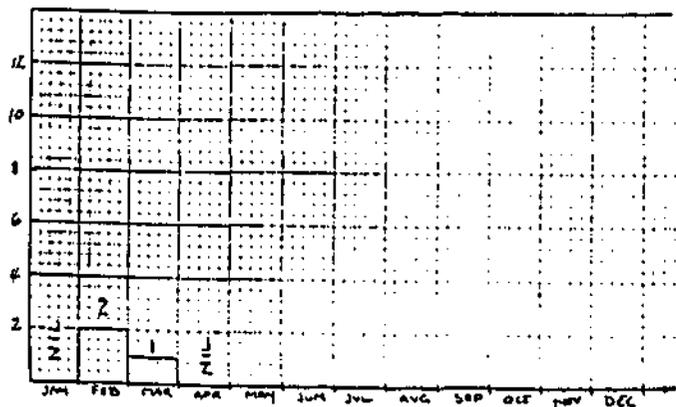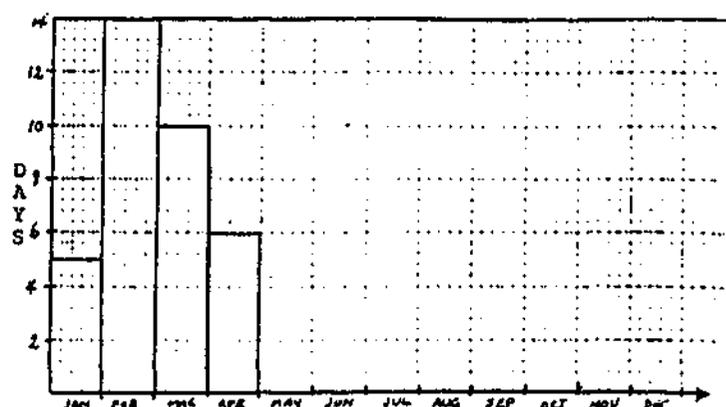
MONTHLY   PRODUCTIVITY   SHEET

TOTAL   DEFECTS

SCRAP REPORT
1990.

SCRA. F,GURES

—+— MTH SUM	—*— OBJECTIVE
—ㅂ— COST BUDGET	—◇— SCRAP COST
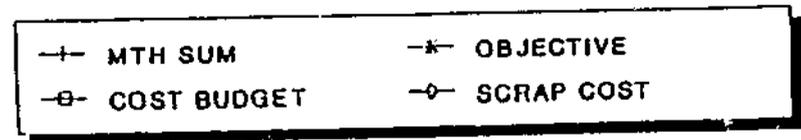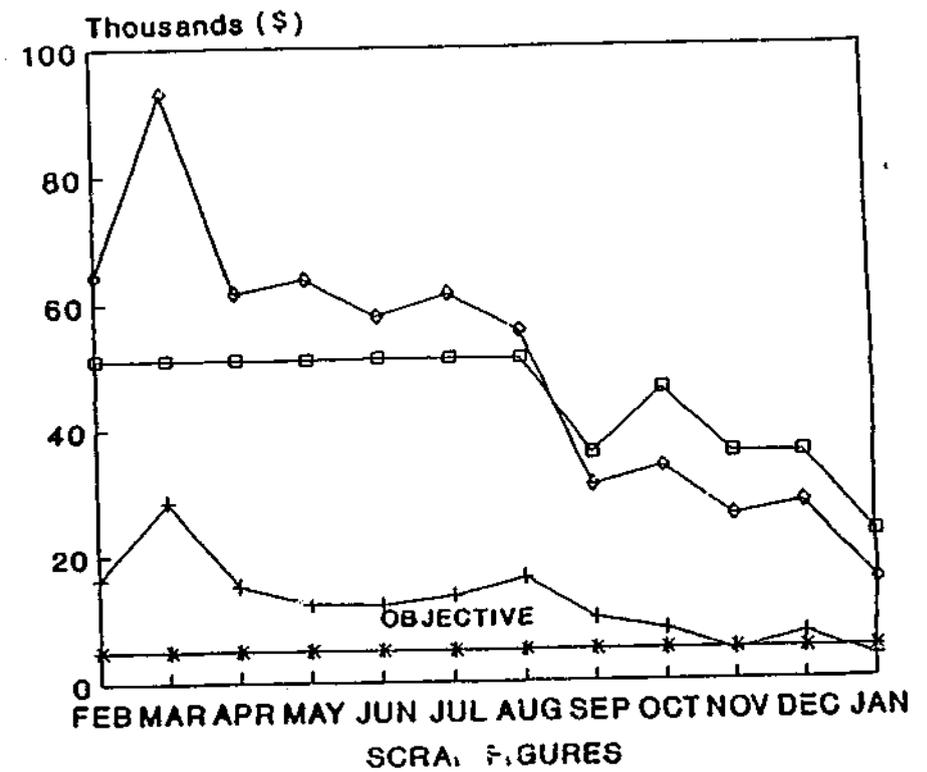
31/1/91

WORK PLACED EDUCATION PROJECT

VEHICLE MANUFACTURING

ASSESSMENT TASKS

INSTRUCTIONS FOR INTERVIEWERS

ASSESSMENT TASKS

GENERAL INTRUCTIONS FOR INTERVIEWERS

1. Before starting show the interviewee the Record of Interview form and explain the purpose of the form - to give them access to their own survey form back (until end February 1992) and that this is the only record with their name on it. Our records have numbers only.

2. Allow sufficient time for the interviewee to read and/or scan the material.

3. Remember that your job is to collect information and to assess the interviewees skills.

4. If necessary repeat the instruction. However, <u>do not</u> prompt or rephrase except where this has been indicated in the instructions.

5. Interviewee's do not need to read aloud and should be encouraged to read silently.

6. There is space on the survey form to comment on the assessment tasks as appropriate. At the end of the assessment tasks there is space to comment on the interviewee's overall performance on the tasks.

7. Listening and speaking skills for NESB's will be assessed at the end of interview on the ASLPR scale. For ESB's you will need to comment as appropriate on listening and speaking skills using the guidelines provided. During the assessment tasks you may find that speaking skills are extended in the last few tasks.

8. Interviewees should progress through the assessment tasks as long as they are coping with the tasks. The notes guide you in deciding when to stop the assessment.

9. The codes   1/0   [   ]   throughout the survey mean: 1 = YES, 0 = NO

   In the assessment tasks this should be interpreted as:

   1 means "YES, the question was answered correctly/task completed correctly"
   0 means "NO, the question was answered incorrectly/task was not completed correctly"

   IF THE TASK WAS NOT ATTEMPTED LEAVE THE CODE BOX BLANK

READING

1. RECORD OF INTERVIEW

235

Q No	PROCEDURE	CRITERIA	CODES
1.	Using the Record of Interview Form, encourage all interviewees to attempt all the preliminary tasks.	The interviewee should fill in their personal details and copy their interview number correctly	
[A]	**NESB's ONLY:** Say "Where would you write your name and address?"	Interviewee should indicate correct place on form	1/0
B	Say "Please write your name and address"	Interviewee should write name and address correctly. If ESB's write name and address in incorrect place please comment	1/0
C	Say "Please sign here" and indicate where they should sign	Interviewee should sign their name	1/0
D	Say "This is your interview number" (point) "Please copy that number here" (point)	Interviewee should copy number correctly.	1/0
	Explain how to obtain their survey (on back of Record of Interview Form).	If interviewee is unable to complete these tasks, do not proceed with the assessment tasks	Make comments on e.g. lack of confidence, anxiety, strategies used, comments made. If personal details are copied please note this. Code 1.

2. SYMBOLS AND PRINT

Q No	PROCEDURE	CRITERIA	CODES
2.	The three safety signs should be familiar to interviewees	The interviewee may use either verbal or non-verbal means to show their understanding of the signs	
A	Show the sign for eye protection, Say "Have you seen this sign? What does it mean?"	Interviewee should say eye protection/you must wear safety glasses (or indicate by using equipment supplied)	1/0
B	Show sign for hearing protection, Say "What does this sign mean?"	Interviewee should say hearing protection/use of ear muffs/ear plugs (or indicate by using equipment supplied)	1/0
C	Show sign for hand protection, Say "What does this sign mean?"	Interviewee should say hand protection/you must wear gloves (or indicate by using equipment supplied)	1/0
	Encourage the interviewee to convey the meaning either verbally or by demonstrating their understanding by using the equipment provided	Do not proceed with the rest of the reading tasks unless you are satisfied that the interviewee has demonstrated reasonable competence with these tasks	Comment as appropriate

3. PRINTED SIGN

Q No	PROCEDURE	CRITERIA	CODES
3.	Show the sign to the interviewee		
A	Say, "Show me the word "Danger"	Interviewee should locate the word "Danger"	1/0
B	Say "What does this sign mean?"	Interviewee's explanation should include: - Electricity - Safety/Dangerous - Don't touch/Don't enter Interviewee may use verbal and/or non-verbal means to indicate understanding of the sign	Record what is said & code at the end of interview 1 = 1 pt mentioned 2 = 2 pts mentioned 3 = 3 pts mentioned 4 = no suitable response
		Allow the interviewee to continue to the next task even if hesitant	

4. SAFETY TIPS

Q No	PROCEDURE	CRITERIA	CODES
4.	Focus attention on the top section of the page	The interviewee should be able to give and locate the appropriate information:	
A	Say, "These are some safety instructions" (indicate top section of page) "What does it say about rings?"	Do not wear rings	1/0
B	Say "Where does it say that?" (Allow time to scan the text)	should indicate correctly	1/0
C	Say "Is it OK to run in the Plant?"	No	1/0
D	Say "Where does it say that?" (Allow time to scan the text)	should indicate correctly	1/0
		If interviewee is unable to locate the appropriate instruction or unable to interpret, end the reading assessment here	Comment on the scanning process and the time taken as appropriate

5. VBU NOTICE

Q No	PROCEDURE	CRITERIA	CODES
5.	Allow time for the interviewee to read/scan the notice	The interviewee should give accurate information:	
A	Say, "This is a VBU Notice" (DO NOT MENTION ELECTION) "What time is the meeting?"	6.50 p.m.	1/0
B	Say "What day is the meeting?"	accept any of: Monday/Monday 22nd April 1991/22nd April 1991	1/0
C	Say "Where will the meeting be?"	outside the main gate	1/0
D	Say "What is the meeting for?"	Shop Steward's election	1/0
		If interviewee is unable to complete these tasks, do not proceed with the reading assessment tasks If only unable to interpret Election allow interviewee to proceed to Reading Task 6	Comment on scanning skills and hesitation as appropriate

6.   JOB INSTRUCTION SHEET

Q No	PROCEDURE	CRITERIA	CODES
6.	Allow time to scan sheet before asking questions	Interviewee should give following correct information:	
A	Say, "This is a job instruction sheet. What is the job?"	Headlight Auto(matic) Shut-Off (check)	1/0
B	Say "What do you do first?"	Close the car door	1/0
C	Say "What do you do with the headlight switch?"	Turn the headlight switch fully ON (Note information is located in two places on the sheet.)	1/0
D	Say "What should happen when you open the door?"	Headlights must turn OFF	1/0
		The interviewee should have an understanding of the check procedure and the expected result Even if the interviewee does not answer all questions correctly allow them to attempt Reading Task 7	Comments as appropriate on interviewees understanding, ability to locate information, interpretation, and ability to understand the written instructions

7. PORTABLE FIRE EXTINGUISHER

241

Q No	PROCEDURE	CRITERIA	CODES
7.	Allow time to scan the chart before asking questions	The interviewee should give the following information:	
A	Say, "What is in the blue fire extinguisher?"	Foam	1/0
B	Say "Should you use this on an electrical fire?"	No	1/0
C	Say "Where does it tell you that?"	Interviewee should indicate one location: <u>either</u> the words "electrically conductive" <u>or</u> the word "No" on the grid	1/0
		Make sure that the interviewee can locate the information from the chart and is not responding from prior knowledge Even if interviewee has some difficulty with Reading Tasks 6 & 7 let them try Task 8, a prose task and a different type of literacy to the previous items	

8. VBU ACCIDENTS AT WORK

Q No	PROCEDURE	CRITERIA	CODES
8.	Say, "This is a VBU Notice. I will give you a few minutes to read it and then I will ask you some questions." (Allow time to read the notice)		
A	Say, "What is this notice about?" (Use prompt if necessary: "Can you tell me more?")	Interviewee should give a brief summary in their own words covering the following main points: - Accidents at work - Report all accidents - Doctor of own choice - Failure to notify - Time off or medical expenses - Do not use sick pay for work related accidents	Write down what is said and code later: 0 = 0 pts covered 1 = 1 pt covered 2 = 2 pts covered 3 = 3 pts covered 4 = 4 pts covered 5 = 5 pts covered 6 = 6 pts covered Comment as appropriate.
B	Say "What does 'Fail to notify' mean?" (Encourage a full response)	Interviewee should demonstrate understanding of the term by explaining it, re-phrasing the sentence or by using the term in a different context.	1/0
C	Say "What does 'minor' mean?"	Interviewee should demonstrate understanding of the word (as for B above)	1/0

D	Say "What does 'jeopardise' mean?"	Interviewee should demonstrate understanding of the word (as for B and C above)	1/0
E	Say, "Should you use your sick pay after an accident at work?"	No	1/0
F	Say, "Where does it say that?"	Interviewee should locate information in the text	1/0
G	Say, "When should you claim on Workcare?"	If you have time off work and/or you incur medical expenses	0 = 0 pts covered 1 = 1 pt covered 2 = 2 pts covered
H	Say, "Where does it say that?"	Interviewee should locate information in the text	1/0
	<u>Note</u>: Interviewees may know the answers to E and G from previous knowledge, so make sure that they can locate the information in the text.	Don't assume that because people have had no trouble with previous tasks that incomplete answers in this task show complete understanding. If the interviewee is unable to locate information for F and H end Reading Tasks here and proceed to Writing Tasks.	

9.   THE VEHICLE INDUSTRY CERTIFICATE

244

Q No	PROCEDURE	CRITERIA	CODES
9.	Say, "This is an article from a Company Newsletter. I will give you a few minutes to read it and then I will ask you some questions" (Allow time for interviewee to read the article)		
A	Say, "What is the V.I.C.?"	The Vehicle Industry Certificate	1/0
B	Say "What does the article say about Award Restructuring?"	Interviewee should mention following points: - The VIC is part of the Award Restructuring agreement - Recognition of skills - Provides training opportunities - Higher pay - More competitive car industry	Write down response, code later. Content: 1 = 1 pt covered 2 = 2 pts covered 3 = 3 pts covered 4 = 4 pts covered 5 = 5 pts covered 6 = no suitable response Interpretation: 0 = Shows no understanding 1 = Grasps only one or two pts 2 = Misses some of the main pts 3 = Understands main points, has general concepts 4 = Understands main points, shows good understanding 5 = Understands main pts & shows full understanding

245

C	Say "What areas of training will the V.I.C. include?"	Interviewee should indicate skills and knowledge units as follows: - skills units - 8 requirements as specified on job certificate sheet - knowledge units - core and elective subjects - Actual subject listing may be given	Write down what is said and code later: Content: 1 = either skills or knowledge units mentioned 2 = both skills and knowledge units mentioned 3 = list of subjects only 4 = no suitable response Interpretation: 0 = shows no understanding 1 = lists one or two subjects, shows no understanding 2 = misses some of the main pts 3 = grasps main pts, has general concepts 4 = understands main pts & shows good understanding 5 = understands main pts & shows full understanding
D	Say, "What are the goals of training mentioned in the article?"	Interviewee should mention three points from article: - More competitive car industry - Help workers to learn new job skills - Access to higher pay	0 = 0 pts covered 1 = 1 pt covered 2 = 2 pts covered 3 = 3 pts covered
	The interviewer may refer to the article whilst answering the questions		Make comments as appropriate on approaches, strategies, anxiety, confidence, etc.

WRITING

TASK 1 WORDS IN CONTEXT

Q No	PROCEDURE	CRITERIA	CODES
1.	Say, "I'm going to ask you to write four words."	Interviewee should write the words correctly	
A	Say, "Hand" (point to hand) "Write the word hand"	HAND	1/0
B	Say "Hand protection must be worn. Write the word must."	MUST	1/0
C	Say "Eye" (Point to eye) "Write the word eye"	EYE	1/0
D	Say, "Danger Live Wires. Write the word danger"	DANGER	1/0
		If the interviewee has not attempted one or two of these words stop the writing tasks at this point and proceed to the numeracy tasks Even if the interviewee has not written all the words correctly let them try the Writing Task 2	

TASK 2 DICTATED SENTENCE

Q No	PROCEDURE	CRITERIA	CODES
2.	Show the picture sequence of an accident to the interviewee. Say, "This is a picture of an accident. I'm going to read you a sentence about this accident. I want you to write it here" (point)		Comment on any support the interviewee asks for. Also on other indicators such as body language, comments, anxiety, etc.
	Dictate, "I fell down the stairs and hurt my back"	Rating to be done in areas of - confidence - spelling errors - omissions/errors (words left out or basic errors e.g. fall instead of fell) Even if the interviewee has completed this sentence but has some basic errors allow them to attempt the Writing Task 3 If unable to complete, end writing assessment here.	Rate <u>Confidence</u> on a 5 pt scale where 1 = no confidence and 5 = total confidence <u>Spelling Errors</u> 0 = no spelling errors 1 = 1 spelling error 2 = 2 spelling errors, etc. and 5 = 5 or more spelling errors <u>Omissions/Errors</u> 0 = 0 errors 1 = 1 error 2 = 2 errors, etc

TASK 3 COMPOSE AND WRITE A DESCRIPTION

Q No	PROCEDURE	CRITERIA	CODES
3.	Say, "Look at the picture. Can you tell me why the accident happened?" (What caused the accident)	Interviewee should describe what caused the accident verbally	
	Say, "Please write that hear" (Point) Encourage the interviewee to write more than one sentence if possible	Rating to be done in areas of - confidence - appropriacy of response - spelling errors - mistakes in punctuation or basic grammar Note differences between what is said & what is written	Make notes while interviewee is writing and code later Rate <u>Confidence</u> on a 5 pt scale where 1 = no confidence and 5 = total confidence <u>Appropriacy</u>: 1 = brief telegraphic message, one idea 2 = one sentence with one idea 3 = More than one idea, uses simple sentences 4 = More than one idea, well connected sentences and/or complex sentences 5 = Writes two or more sentences, mentions employees responsibility, cleaner's responsibility, safety rules. Ideas are well linked. <u>Spelling errors</u> 0 = 0 spelling errors 1 = 1 spelling error 2 = 2 spelling errors, etc. and 5 = 5 or more spelling errors <u>Punctuation/Grammar</u> 0 = 0 errors 1 = 1 error 2 = 2 errors, etc

TASK 4 SUGGESTION TO THE SAFETY COMMITTEE

Q No	PROCEDURE	CRITERIA	CODES
4.	(Picture sequence) Say, "How would you stop this accident from happening again?"	Interviewee should make an appropriate suggestion	
	Say, "Please write that as a suggestion to the Safety Committee" Encourage the interviewee to write a short paragraph. <u>Note</u> time will not permit the extension of writing tasks or the spending of too much time on this task.	Rating to be done in areas of - confidence - appropriacy of response - spelling errors - mistakes in punctuation or basic grammar Note if you feel the interviewee has not been fully extended and any differences between what is said & what is written	Make notes while interviewee is writing and code later <u>Confidence</u>: 1 = no confidence and 5 = total confidence <u>Appropriacy</u>: 1 = brief telegraphic message, one idea 2 = Writes in sentences, makes reference to what he/she would do 3 = Covers general points and makes a suggestion. Uses simple sentences and/or one complex sentence 4 = Appropriate content, makes suggestions, gives some detail and covers a number of points. Connected sentences and/or complex sentences 5 = Appropriate format and style, addresses suggestion to the Safety Committee, covers a number of points appropriately. <u>Spelling Errors</u> 0 = 0 spelling errors 1 = 1 spelling error 2 = 2 spelling errors, etc. and 5 = 5 or more spelling errors <u>Punctuation/Grammar</u> 0 = 0 errors 1 = 1 error 2 = 2 errors, etc. & 5 = 5 or more errors

QUANTITATIVE LITERACY/NUMERACY

Interviewees should be encouraged to attempt all 4 tasks in this section.
If the interviewee has difficulty with the first graph do not proceed to the other graphs.
Code responses YES/NO (1/0)   where 1 = correct answer, 0 = incorrect answer and leave the code box blank if no attempt is made at the question

1. FOUR BASIC OPERATIONS

Q No	PROCEDURE	CRITERIA	CODES
1.	Use the sheet provided for numeracy tasks.	Can complete the tasks correctly using appropriate operations	
	Say, "Please do these" (Write the answers)	$15 + 24 = 39$	1/0
		$22 - 9 = 13$	1/0
	Encourage interviewee to attempt the task. Do not provide any assistance.	$21 \times 7 = 147$	1/0
		$36 - 9 = 4$	1/0

2. VEHICLE I.D. SHEET

Q No	PROCEDURE	CRITERIA	CODES
2.	Use the Vehicle I.D. sheet, point to model number. Say, "This is the model number for this car. Find that number on this sheet" (Point to numbers on separate sheet)	Interviewee should identify the right number. Note any self-correcting or if interviewee makes more than one attempt.	1/0

3.   PAY SLIP

Q No	PROCEDURE	CRITERIA	CODES
3.	Show the interviewee the pay slip. Say, "Here is your weekly pay slip. You have worked your normal hours plus 3 hours overtime for the week. Please do a rough check of your pay slip."	The interviewee should pick up the mistake in his/her overtime payment [3 hours X $18 = $54 Payslip shows $36].	1/0 If "1" go to next task If "0" give prompt
	If the interviewee did not pick up the error in overtime, give a prompt about checking overtime ("What about your overtime?" "Is your overtime alright?" or "Have you checked your overtime?")	Interviewee should then pick up the error in overtime	1/0

4.   GRAPHS

Q No	PROCEDURE	CRITERIA	CODES
1 A	**Monthly Productivity Sheet** Say, "This is a Monthly Productivity Sheet. This graph (point) shows Total Absentees. How many absentees were there in February?"	14	1/0
B	Say "Which month had the least absentees?"	January <u>Note</u>: If interviewee cannot do A&B cease assessment tasks here	1/0
C	Show interviewee Graph called **Monthly Productivity Sheet: Total Defects**. Say, "Can you tell me what is wrong with this graph?"	Interviewee should point out that the scale is wrong or any explanation that shows an understanding of this	1/0
D	Show interviewee graph called **Press Scrap**. Say, "Here is a graph showing press scrap. This line represents the objective or target (point to Objective line on graph). What does this line mean?" (point to scrap cost - top line of graph)	scrap cost	1/0

E	Say, "This line is the Monthly Sum" (point) "What does this point mean?" (point to maximum - March)	Highest scrap/maximum scrap	1/0
F	Say, "What happened here?" (indicate point where lines meet - November)	Objective/Target met	1/0

Extract from *Breathing Life Into Training*

5.4 Documenting the Pilot Projects

The way in which the documentation of the case studies was to proceed was influenced by current trends in educational research. In particular, the project was shaped by conceptions of action-research[1] and qualitative research[2]. The following account of the case study methodology is intended to explain the approach to be taken and to outline the expected methodological sequence[3].

The pilot programs were to be designed as a trial of a new approach to developing and implementing training curriculum within workplace contexts. The intent was to demonstrate that integrated approaches could work. In each case there was to be a conscious attempt to stimulate the development of an effective workplace learning culture, to address issues of change in the workplace and to develop a training program which would meet the diverse needs of multiple stakeholders.

The project officers were to be cast in the role of teacher-researchers. They were to be responsible, not only for the development and conduct of the training program, but also for its documentation and for reflection upon the experience - (and then documenting the results of that reflection). They were not expected to be neutral. They were clearly to be players in the process, and it was recognised that they would bring to the task their own particular values and aspirations[4].

Importantly, they were to be asked to carefully document the processes, resultant curriculum and salient features of strategies and techniques used in the delivery of the pilot programs. In particular they would be expected to document the ways in which they identified and met the literacy, English language and numeracy needs of the program participants in the context of the accredited training. Project officers were to be requested to keep records of these features of their work and to write them up for the case studies.

It was understood that the work of each project team would be shaped by the history, culture, politics and practices of the particular workplace they entered. The case studies would be expected to reflect these factors and convey some sense of the diverse, subtle and significant differences of workplace cultures which make up the vehicle manufacturing industry in Australia[5].

One aspect of this project was to be directed towards the investigation of to what extent integrated approaches to training would affect attitudes towards training, workplace learning and change.

Writing about vocational training and workplace reform Professor Ford notes:

> "There is an urgent need for people to understand their traditional 'mind sets', a need driven by the very pace, diversity and pervasiveness of interrelated organisational transformations. Often many years of experiential learning need to be replaced by new frameworks"[6]

Elsewhere in the same paper he speaks of *reconceptualising* production and service systems, of *major conceptual shifts*, and of the need for *revisualising* programs and policies[7].

There was, therefore, to be an endeavour to explore and document the 'mind sets', perceptions, understandings and reactions of the various stakeholders involved in the pilot projects. It was expected that some of the changes which would be of interest would not be easily quantified in numerical terms, and that they would need to be described. The stakeholders being interviewed for the case study were to be fully informed about the nature of the research. The process of interviewing, transcribing and using individual comments were to be explained. Permission would be sought to include individuals' comments, and opportunities provided for amendment, elaboration or withdrawal. Thus qualitative research methods were expected to be important[8].

The development of the case studies was expected to occur in three phases:

1. Data Gathering and Documentation

The intention was to give a comprehensive account of projects, including the processes, strategies, outcomes and remarkable features of each. Thus several interrelated strategies would be used, including participant observation, detailed documentation by project officers, interviews and analysis of documents.

2. Reflection and Inductive Data Analysis

The second phase of the research, which was not to be entirely separate from the first, would involve the analysis of the data gathered. Ongoing reflection, analysis and discussion about work in progress would be part of the day-to-day activity of project officers. These discussions would be related to the on-

going action-research project which was to be considered an integral and important part of the unit's operation. This approach was consistent with the practice of naturalistic or qualitative research.

3. Collaborative writing and negotiated outcomes

It was expected that the analysis of the data would lead naturally into the drafting of the case studies. A process of revising and re-drafting was anticipated, particularly since part of the intent was to record interpretations of events which would need to be double checked and ratified.

Two quite different types of written products were anticipated from each pilot project[9]. There would be an enterprise specific learning program which would remain with the company. This would include details of the learning activities, the company-specific content and data on which they were based, and the assessment tasks.

There would also be a descriptive case study to document each project chronologically and comprehensively. Comprehensive and public reporting was a condition of funding and this would be made clear at the outset of each project. It was hoped that the companies and the individual stakeholders would be pleased to identify themselves in the published document. To achieve this objective it was expected that the final report would be subject to scrutiny by all the stakeholders.

It was planned that drafts of the case studies would be prepared by Peter Waterhouse, the project teams and other staff. These drafts would be circulated to the stakeholders for comment. Direct quotations of individuals would be referred back to them for confirmation that they were prepared to be quoted in the given context. Following changes and agreement from the parties directly involved in the project on site, agreement would be sought from the union and the company regarding the content and analysis of the case study.

Finally, each Project Steering Committee would be asked to endorse their case study as a true and accurate representation of the project for publication.

5.5 Analysing the Results

Following the completion of the case studies a process of comparative analysis of the results of each project was to be undertaken, to ascertain the extent to which the aims and objectives of the project had been achieved in each case and

---

Appendix 2/3

to sift through the qualitative data for common themes and issues which may have emerged from the data collected.

In addition it was expected that a post-project analysis would take place to document any new understandings that may have emerged as a result of the project, the implications that these understandings may have for future training practice and the recommendations that could be reasonably made as a result of the experience gained from the project. It was anticipated that this analysis would occur through individual contributions and from group sessions.

5.6 The Final Report

The final process to be undertaken in the project would be ratification of the final report by the Project Management Committee, the industrial partners, the Manufacturers Advisory Group and the National Automotive Industry Training Board.

To this extent it was understood that the final report would reflect the results of these negotiations which may or may not change the content and/or the nature of the report from one of pure reporting of an action research project to one that will also probably reflect the understandings and political positions of the players in relation to the project.

Endnotes

[1]   The basic orientation of the project was one of action research. Action research stresses the importance of documenting, analysing and critically reflecting upon work in progress. Through conscious and structured cycles of action and reflection the researchers, and often their collaborators, gain new insights and modify their actions. In this way action-research is ideally suited to the development and continuing refinement of professional practice.

   Action research is distinguished from some other forms of research by the positioning of the researcher who does not stand apart, at a distance from the phenomena being researched, but rather is directly involved, seeking to influence the outcomes of the action research processes. In this sense the action-researcher makes no pretence to being detached, or impartial. As players within the action-research process the researchers have an interest in its outcomes. This was the case with this project.

[2]   Secondly, the case studies have been influenced by qualitative approaches to educational research. Put simply, these research approaches are used to investigate changes in quality or type, rather than quantity or number. They draw upon techniques used by social scientists, such as anthropologists, to study the culture and social dynamics of human populations

[3]   This section draws upon the work of Dr. Darrel N. Caulley, Senior Lecturer in Research and Evaluation Methodology at La Trobe University.

4 Researchers such as Lather point out that researchers always have an interest in the results or outcomes of their work, although they are not always explicit about this interest. The way experiments are framed, the way environments are controlled and the choice of variables to be taken into account, are all influenced by the values adopted by the researcher. Namenwirth notes:

> "scientists firmly believe that as long as they are not *conscious* of any bias or political agenda, they are neutral and objective, when in fact they are only unconscious", Namenwirth, M. (1986) in Lather, P. (1993) *Feminist Research in Education: within/against,* Deakin University, Geelong.

5 The term cultures here is intended to reflect not only the multiple ethnic and linguistic groups within the workforce, but also the diverse policies, practices and philosophies of the enterprises within the industry. As the project unfolded it became more and more evident that the companies each have their own cultures - and even within companies there are sub-cultures operating within particular manufacturing plants, warehouses, offices and groups of workers. Differences may be seen for instance between day and night shift workers even within the one plant. The research design was sensitive, as far as possible, to these multiple differences.

6 Ford, G.W. (1990) Rethinking *Skilling for a Restructured Workplace: Occasional paper,* Commission of the Future, AGPS, Canberra, p.2.

7 The Senate report *People and Technology: New Management Techniques in Manufacturing Industry* is also relevant in this context. It gives several pages to the issue of changing attitudes and sums up:

> "If there is a key element ... one that is perhaps more difficult than the others, it is that of *attitudes*. Technologies should not be just installed as if they were the new model of existing machinery. Instead they require *comprehensive change in the whole way of thinking and operating* in particular organisations." (AGPS 1991 p.44)

8 Boud, D. and Griffin, V. (1987) in *Appreciating Adults Learning: From the Learner's Perspective*, Kogan Page, London, note:

> "Qualitative research is not easy; it has its own standards of rigour, and not everyone is capable of doing it. It requires not only research skills but also personal skills. Like any research approach, it is suitable for exploring only some kinds of questions - the meaning people attribute to their experiences, how people perceive themselves and their worlds and how they communicate their understandings to others ... the qualitative approach is the one which we believe is appropriate for an appreciation of learners' perspectives on the experience of learning." (p.9)

It was these sorts of questions; of meaning, attitude and perception which the project sought to document. In these areas even subtle changes can be significant, for as Professor Ford and others have noted, it is these changes in 'mind set' and understanding that are the precursors to genuine and sustainable changes in the workplace.

9 In fact, as the discussion in Chapter 14 indicates, several of the projects created an additional outcome, e.g. the generation of a revised syllabus for the Warehousing Elective.

ANTA Research Project

Workplace Learning and Change:
The Workplace as a Learning Environment

COMPANY PROFILE

1. Company ....

2. Address ....

    .... Postcode ....

3. Contact Person .... Phone ....

4. Main business of Company ....

5. Total number of employees in Company ....

6. What unions are represented on site? ....

    ....

    ....

7. Does the Company have a documented training plan?   YES ☐   NO ☐

    Comment:

    ....

    ....

    ....

8. Has the Company any current formal enterprise bargaining agreements?   YES ☐   NO ☐

    If YES, is training a component of this agreement?   YES ☐   NO ☐

    Comment:

    ....

    ....

    ....

Source: Sefton. Waterhouse & Cooney. 1995: Appendix 6   Appendix 3a/1

9. Is there a formal training committee?　　　　　　　　　YES ☐　　NO ☐

If YES.

How is the committee constituted?	YES	NO
Management representatives		
Union Representatives		
Other Employee Representatives		
Other (please specify)		

Comment:

....

....

....

....

10.

Does the Company have:	YES	NO	Number	Full Time	Part Time
Human Resource Manager					
Training Manager					
Shop Floor Trainers					

11. If only one section/ division of the Company is to be surveyed (only applicable to Companies with over 100 employees), what is the main business of that section/ division? ....

....

....

....

Number of employees in section/division ....

Source: Sefton. Waterhouse & Cooney. 1995: Appendix 6　　　　　　　　　Appendix 3a/2

12.

Position	Number
Managers and Administrators	
Professionals	
Para-Professionals	
Technical Staff	
Tradesperson	
Clerks	
Salespersons & Personal Service Workers	
Plant & Machine Operators,& Drivers	
Labourers & Related Workers	
Other (please specify)	

13.

In the last twelve months training has been provided for:	YES	NO	If YES,	
			Number Trained	Comment (eg. short course, one day seminar, regular weekly training etc.)
Managers and Administrators				
Professionals				
Para-Professionals				
Technical Staff				
Tradesperson				
Clerks				
Salespersons & Personal Service Workers				
Plant & Machine Operators,& Drivers				
Labourers & Related Workers				
Other (please specify)				

Appendix 3a/3

14.   **POSITION**

This training has been provided by means of:		Managers & Administrators	Professionals	Para-Professionals	Technical Staff	Tradesperson	Clerks	Salespersons & Personal Service Workers	Plant & Machine Operators & Drivers	Labourers & Related Workers	Other (specify)
Professional Development	on-site										
	off-site										
Accredited Vocational Training	on-site										
	off-site										
Non-Accredited Vocational Training	on-site										
	off-site										
On-the-Job											
Informal Training (eg. participation in groups/ committees)											
Other (please specify)											

Comment:

....

....

....

....

15.

<div align="center">POSITION</div>

Who provided the training?	Managers & Administrators	Professionals	Para-Professionals	Technical Staff	Tradesperson	Clerks	Salespersons & Personal Service Workers	Plant & Machine Operators & Drivers	Labourers & Related Workers	Other (specify)
University										
TAFE College										
Private Consultant										
In-house Trainers										
Industry Association										
Unions										
Other (please specify)										

Comment:

....

....

....

....

16. Is there a formal recognised career structure for employees in the Company?

YES ☐   NO ☐

Comment:

....

....

....

....

If YES, does this relate to a formal skills development/training structure?

YES ☐ NO ☐

Comment:

....

....

....

....

17. How many job vacancies in the last six months have been filled?

	Number
Internally	
Externally	

18.

What is the current focus of change for the Company?	YES	NO	Comment
Introduction of new technology			
Quality accreditation			
Development of new product/business, new customers			
Decline in business/contracts			
Changes in work systems & processes			
New systems of training & human resource management			
Other (please specify)			

Source: Sefton. Waterhouse & Cooney. 1995: Appendix 6   Appendix 3a/6

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19.

What means are being used by the Company to create changes?	YES	NO	Comment
Multi-skilling			
Continuous Improvement			
Down sizing			
Employing new people			
Increasing training			
Organisational review & development			
Introduction of new work systems/ procedures			
Other (please specify)			

20.

How does the company measure the effectiveness of its training?	YES	NO	Comment
Lost time (injuries)			
Labour turnover			
Employee participation (eg. no. of suggestions made)			
Labour hours/unit			
Quality measures (eg. scrap/ defect rates)			
Absenteeism			
Increased Productivity			
Employee Attitudes			
Skills Assessments			
Other (please specify)			

Comment:

....

....

....

....

....

....

....

....

Source: Sefton. Waterhouse & Cooney. 1995: Appendix 6   Appendix 3a/8

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21. How effective are the Company's training strategies?

Not Effective   **Very Effective**

1   2   3   4   5

Comment:

....

....

....

....

22. How would you rate the quality of the training provided by the Company?

Low Quality   **High Quality**

1   2   3   4   5

Comment:

....

....

....

23.

Has the Company received any funds from outside Company to support training?	YES	NO	Source of Funds (0.5 State, Federal)	Approx value in last year
Apprentice Subsidies				
Trainee subsidies (eg. NETTFORCE)				
Curriculum development				
Delivery of accredited training				
TASK/ATFIC				
Other (please specify)				

Source: Sefton. Waterhouse & Cooney. 1995: Appendix 6   Appendix 3a/9

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24. Were the availability of government funds influential in the development of the Company's training strategies?

Not Influential				Very Influential
1	2	3	4	5

Comment:

....

....

....

....

25.

What are the barriers to training experienced by your Company?	YES	NO	Comment
Costs			
Lack of experience/expertise in training			
Size of Company/range of required skills (trades/ non-trades/ office/ sales etc)			
Other (please specify)			

26.

What has the Company invested their money in?	Approx amount in 1994/95 financial year
Release of employees to attend training	
Provision of training facilities	
Payment of consultants (TNA, skills audits, curriculum development, delivery)	
Payment of fees (external provider) private provider status	
Dedicated trainees (wages and training)	
Other (please specify)	

27. Does the Company have a policy on the development of a learning culture?

YES ☐   NO ☐

Comment:

....

....

....

....

28. Final Comment:

....

....

....

....

....

....

Date: ....   Interviewer: ....

Interview Schedule: Workplace Learning and Change

This interview schedule has been developed with enterprises and the Vehicle Division of the Australian Manufacturing Workers Union. The results of interviews will be compiled as part of a research project on Workplace Learning and Change.

You are not asked to identify yourself in this interview. Individual data will not be used in any way that could identify you.

Thank you for your help and participation.

PART A: INDIVIDUAL INFORMATION

1.   Position (tick one box)

		Are you in charge of your area?	
		YES	NO
Managers and Administrators			
Professionals			
Para-Professionals			
Tradesperson			
Clerks			
Salespersons & Personal Service Workers			
Plant & Machine Operators,& Drivers			
Labourers & Related Workers			
Other (please specify)			

2.

Male	
Female	

Source: Sefton, Waterhouse & Cooney, 1995: Appendix 5   Appendix 3b/1

3.   Age: (please tick relevant box)

15-24 ☐   25-34 ☐   35-44 ☐   45-54 ☐   55-64 ☐   65-74 ☐

4.   Country of Birth ....

5.   First Language Spoken ....

6.   Qualifications: (tick relevant boxes)

Type	Name (eg. Metal Fab, Fork Lift, Crane)	Completed (Yes/No) institute)	Where you completed the course (country &	Is your qualification recognised	
				In Company (YES/NO)	In Australia (YES/NO)
Higher Degree (eg. M.B.A)					
Postgraduate Diploma (eg. Grad. Dip)					
Bachelor Degree (eg. B.Sc.)					
Undergraduate Diploma (eg. Dip.Civil Engineering)					
Associate Diploma (eg. Assoc. Dip. Civil Engineering)					
Skilled Vocational Qualifications (eg. Trade Certificate)					
Basic Vocational Qualifications (eg. V.I.C.)					
Licence (eg. DLI. Crane, Forklift)					
Other (please specify)					

7.   Are you employed in a position based on your qualification(s)?

☐   ☐

YES   **NO**

8.   How long have you worked for this company?

Years ....   Months ....

Source: Sefton. Waterhouse & Cooney. 1995: Appendix 5   Appendix 3b/2

PART B: WORKPLACE CHANGE

9.   How would you rate the changes (if any) that have taken place in your workplace over the last twelve
     months:

     No Change   **Massive Changes**

     1   **2**   **3**   **4**   **5**

Comment:

....

....

....

....

10.

What do you think is the current focus of change for the Company?	YES	NO	Comment
Introduction of new technology			
Quality accreditation			
Development of new product/business, new customers			
Decline in business/contracts			
Changes in work systems and processes			
New systems of training and human resource management			
Other (please specify)			

Source: Sefton. Waterhouse & Cooney. 1995: Appendix 5   Appendix 3b/3

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11.

What means are being used by the Company to create changes?	YES	NO	Comment
Multi-skilling			
Continuous Improvement			
Down sizing			
Employing new people			
Increasing training			
Organisational review & development			
Introduction of new work systems/ procedures			
Other (please specify)			

12. What has been the effect of changes for you and your work?

No Effect   **Drastic**

1   2   3   4   5

Comment:

....

....

....

....

....

....

....

13. Have the changes that have occurred in the last year been better:

a)   for the Company?

Worse   **Better**

1   2   3   4   5

Comment:

....

....

....

....

b)   for you and your workmates?

Worse   **Better**

1   2   3   4   5

Comment:

....

....

....

....

Source: Sefton. Waterhouse & Cooney. 1995: Appendix 5   Appendix 3b/5

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PART C: TRAINING

14. Have you received any formal training in the last twelve months?

    YES ☐   NO ☐

    If NO, go to Question 22

    If YES, answer questions 15-21

15.

What was the training about?	YES	NO
Company policies		
Machinery and equipment used in the company		
Introduction of new technology		
Company work systems and processes (eg. stock control, ordering, inspection & quality control processes)		
Customer & suppliers of the company		
New products		
Industry/business context (eg. the effect of tariff changes on the car market)		
Informal communications, networks, systems & relationships		
Formal communication systems, processes, skills		
Rights and responsibilities of employees		
Occupational Health & Safety		
Other (please specify)		

Source: Sefton, Waterhouse & Cooney, 1995: Appendix 5   Appendix 3b/6

16.

In thinking about training opportunities during the past twelve months, have you experienced any of the following:	YES	NO	If YES, approximate time spent in last 2 weeks			
			Less than 10 min	About 30 min	About 1 hour	2 hours or more
On-the-job instruction						
On-site classroom training						
Participation in gr eg. consultative committees. OH&S mittees)						
Off-site instruction/training (eg. TAFE)						
Other (please list)						

Source: Sefton. Waterhouse & Cooney. 1995: Appendix 5   Appendix 3b/7

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17. During the past twelve months have you experienced any of the following training methods?	YES	NO	If YES (please indicate opinions by circling appropriate numbers)														
			Was it useful?					How much did you learn that was new?					Did you enjoy the training?				
			useless			very useful		nothing				a lot	not at all				very much
			1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Computer based training			1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Self paced work books			1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Job related projects/assignments			1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Trainer and trainees' discussing work knowledge/experience			1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Trainees' presentations/workshops			1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Special presentations/workshops (eg. visiting experts. engineers. technicians)			1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Distance education			1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Lecturer and question/answer			1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Other			1	2	3	4	5	1	2	3	4	5	1	2	3	4	5

18. When you are involved in these training activities, do you have the chance to put forward your own opinion?

Never   Frequently

1   2   3   4   5

Comment:

....

....

....

....

19. Are you able to disagree with the presenter/instructor/trainer/supervisor, during learning activities?

Never   Frequently

1   2   3   4   5

Comment:

....

....

....

....

20. Was the training relevant to your daily work?

Not   Very
at all   Relevant

1   2   3   4   5

Comment:

....

....

....

....

Source: Sefton, Waterhouse & Cooney, 1995: Appendix 5   Appendix 3b/9

21. Are there any topics that cannot be discussed?

YES ☐   NO ☐

If YES, please give an example

....

....

....

....

22. Have you had any influence on the development of training program(s) in the past twelve months?

YES ☐   NO ☐

If YES, please indicate how much

a little ☐   some ☐   quite a lot ☐

Comment:

....

....

....

....

23. Are there any barriers or problems which may prevent or discourage people from participating in the training activities?

YES ☐   NO ☐

If YES, please give an example

....

....

....

Source: Sefton. Waterhouse & Cooney, 1995: Appendix 5   Appendix 3b/10

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PART D: LEARNING

Not all workplace learning takes place in formal training. Thinking more broadly about what you have learnt at work during the last twelve months, can you answer the following questions?

24. Have you learned about areas/aspects of the company that you did not know before?

YES ☐   NO ☐

If YES, please give an example

....

....

....

....

25. Have you had the opportunity to experiment/innovate or do something differently?

YES ☐   NO ☐

If YES, please give an example

....

....

....

....

26. Can you recall any learning which has changed your thinking about your work?

YES ☐   NO ☐

If YES, please give an example

....

....

....

....

27. Have you worked on new tasks in your current job in the last twelve months?
(eg. routine maintenance, set-ups,quality checks)

YES ☐   NO ☐

If YES, please list

....

....

....

....

Did the new task involve learning new knowledge/skills?

YES ☐   NO ☐

If YES, please give an example

....

....

....

....

How much did you learn from doing these new tasks:

Nothing   **A lot**

1   2   3   4   5

28. Have you rotated jobs in the past twelve months?

YES ☐   NO ☐

If YES, was this   (a) within your section/department   YES ☐   NO ☐

(b) to other sections/departments   YES ☐   NO ☐

Did the job rotation involve learning new skills/knowledge.

YES ☐   NO ☐

If YES, please give an example:

....

....

....

....

How much have you leant from job rotation:

Nothing   **A lot**

1   2   3   4   5

29.   How much have you learnt about the company's customers and the destination of its products in the last
       twelve months?

Nothing   **A lot**

1   2   3   4   5

Comment:

....

....

....

....

30.   Over the past twelve months, how many of your customers have visited your workplace?

       None ☐   **One** ☐   **A Few** ☐   **Many** ☐

Comment:

....

....

....

31. How many of your customers/suppliers or other workplaces have you visited in the last twelve months?

None ☐   One ☐   A Few ☐   Many ☐

Comment:

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Appendix 3b/14

PART E: COMMUNICATING ACROSS THE ENTERPRISE

Part of our interest in workplace learning is in the way new knowledge, ideas or information are passed through the organisation. In thinking about the communication networks currently operating within your organisation ...

32.   Can you comment on the degree of cooperation or collaboration between various departments/sections?

Poor				Excellent
1	2	3	4	5

Comment:

....

....

....

....

33.   Are there significant problems/issues which are not being addressed?

None ☐   A Few ☐   Many ☐

Comment:

....

....

....

....

34.   Can you give an example of a significant problem, project, or new initiative which your department/section has worked on with other sections/departments?

YES ☐   NO ☐

If YES, please give an example

....

....

35.

Do you have contact with your counter-parts in other sections/departments to discuss problems, projects or initiatives?	YES	NO	If YES, how much time do you usually spend per week on these activities?				in the last week
			less than 10 min	about 30 min	about 1 hour	2 hours or more	(state time)
Formal meetings, eg. staff meetings, quality groups etc.							
Informal discussions, eg. lunch time or brew breaks							
On-job conversations, eg. whilst in another department collecting or delivering goods							
Travel time, eg. to - from work in car							
Other (please specify)							

Comment:

....

....

....

36. Is information shared between departments/sections using any of the following methods?

	YES	NO
Informal discussions, conversations		
Interdepartmental Meetings		
Supervisors Meeetings		
Memos, Documents, Notices		
Other (please specify)		

Comment:

....

....

....

Source: Sefton. Waterhouse & Cooney, 1995: Appendix 5   Appendix 3b/16

37.

Who puts forward new ideas/suggestions?	YES	NO	N/A	Comments
Managers and Administrators				....
Professionals				....
Para-Professionals				....
Tradesperson				....
Clerks				....
Salespersons & Personal Service Workers				....
Plant & Machine Operators,& Drivers				....
Labourers & Related Workers				....
Other (please specify)				....

38.

How do new ideas/ suggestions get put forward?			Are new ideas/suggestions or solutions implemented?			
	YES	NO	Never	Rarely	Sometimes	Regularly
Suggestion Scheme						
Consultative Committee (eg OH&S)						
Management/Meetings						
Production Team/Group Meetings						
Project/Continuous Improvement Groups						
Change Notices -Memos						
Training Groups/ Classes (eg. VIC)						
Informal Discussions						
Other (please specify)						

Source: Sefton, Waterhouse & Cooney, 1995: Appendix 5   Appendix 3b/17

39.

Who decides on the implementation of new ideas, suggestions etc?	YES	NO	N/A
Managers and Administrators			
Professionals			
Para-Professionals			
Tradesperson			
Clerks			
Salespersons & Personal Service Workers			
Plant & Machine Operators,& Drivers			
Labourers & Related Workers			
Other (please specify)			

Comments:

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40.

How are changes routinely implemented?	YES	NO	N/A
Try-outs/field studies			
Standard procedures			
Memos/ management direction			
Other (please specify)			

Comments:

....

....

....

....

41.

Are these changes monitored using any of the following methods?	YES	NO	N/A
Management/supervision observation			
Statistical processes/data collection			
Routine shift/work reports			
Quality groups			
Quality Assurance Department/Section			
Feedback from employees/committees			
Other (please specify)			

Comments:

....

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Appendix 3b/19

Appendix 3b/20

42.

Are they characterised by:		Trust					Confidence					Cooperation				
Do you have working relationships with:	Y/N or NA	no trust 1	2	3	high level of trust 4	5	no confidence 1	2	3	full confidence 4	5	no cooperation 1	2	3	full cooperation 4	5
Manager & Administrators (eg. Production Manager, Purchasing Administrator etc.)		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Professional (eg. accountants, engineers etc.)		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Para-Professionals (eg. inspectors, supervisors etc.)		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Tradespersons (eg. maintenance fitter, electrician etc.)		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Clerks (eg. receptionist, pay clerk etc.)		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Salespersons & Personal Service Workers (eg. vehicle salesperson)		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Plant & Machine Operators, & Drivers (eg. forklift driver, press operator etc.)		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Labourers & Related Workers (eg. cleaners, canteen hands etc)		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5

43. Do people across the company make an effort to maintain working relationships?

    Rarely   **Frequently**

    1   2   3   4   5

Comment:

....

....

....

....

44. How well does this company look after the interests of its employees?

    Poor   **Excellent**

    1   2   3   4   5

Comment:

....

....

....

....

45. Is this a good company to work for?

    Poor   **Excellent**

    1   2   3   4   5

Comment:

....

....

....

46. Do you see opportunities in this company to gain new knowledge skills?

None ☐   Few ☐   Many ☐

Comment:

....

....

....

47. Are there opportunities for promotion within the company for people who have completed training and gained new knowledge or skills?

None ☐   Few ☐   Many ☐

Comment:

....

....

....

48. Will you be seeking promotion as a result of gaining new knowledge/skills?

Unlikely ☐   Possibly ☐   Definitely ☐

Comment:

....

....

....

49. Final Comment:

....

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....

Source: Sefton, Waterhouse & Cooney, 1995: Appendix 5   Appendix 3b/22

TABLE 4.5: A framework for investigating workplace learning and change

Characteristics of a workplace learning environment	Indicators		

Acquisition, transfer & use of knowledge

* groups and individuals are skilled at creating, acquiring and transferring knowledge, and at modifying their behaviour to reflect new knowledge and insights;
* the transfer and application of new knowledge and insights in the workplace includes movements across and between organisational hierarchies, functional areas and traditional barriers (eg. trade/non-trade);

reforming internal boundaries to facilitate knowledge transfer	-	learning within functional units with knowledge held by expert individuals
monitoring & transfer of new learning into new practices	-	lack of interest in new learning

Links between workplace learning & change

* employees at all levels have an understanding of their job in relation to the whole of the plant/company/enterprise/ industry;
* learning programs
  - complement the introduction of new technology;
  - are linked to appropriate changes in work organisation;
  - are contextualised to the workplace systems, technology, & work practices;
  - provide enquiry-based experiential learning;
  - promote reflection on practice
  - are developed collaboratively with all stakeholders
  - have holistic, performance-based assessment processes

transformative learning	-	accumulative learning
holistic thinking	-	reductionist thinking
embedded technical knowledge	-	task specific learning

Cultural factors

* a climate of participation and trust
* tolerance of divergent views;
* openness to new ideas from internal and external sources;
* preparedness to share information and ideas (internally & externally)
* valuing workplace knowledge, skills & experience

trust/confidence	-	distrust/suspicion
maintenance & repair of relationships	-	lack of interest in relationships
dissension tolerated	-	concurrence expected
organisational openness	-	insularity
collaboration/cooperation	-	running with separate/ independent agendas

Organisation of formal and informal workplace learning

* company policies exist in terms of an internal labour market for promotion and higher skilled jobs;
* recognised procedures exist for identifying existing skills and future skill requirements;
* opportunities for formal and informal learning are created for all employees;
* training:
  - is the result of identified strategic needs;
  - is linked to structured progression for employees
  - occurs within agreed parameters and has agreed rewards and benefits for participants as well as for the enterprise;
  - is equally accessible to all employees;
  - is monitored in terms of productive outcomes for the company and the individual;
* the above are formalised (eg. a training agreement in an EBA, Company policies, Consultative Committee minutes), are part of accepted practice within the Company, and are understood by all employees.

internal development of knowledge, skills & people	-	external acquisition of knowledge, skills & people
formal career structures	-	informal career structure/progression
development for all	-	development of selected individual
identified strategic needs	-	reactive needs identification
structured opportunities for learning	-	learning is informal & incidental
time is available for employee participation/ training	-	time is fully utilised on production/work

Source: Sefton, Waterhouse & Cooney, 1995:62   Appendix 3c/1

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Demonstrating Best Practice in VET at Tickford Vehicle Engineering Pty Ltd

Educational Effectiveness Criteria	Critical Success Factors for Enterprise-Based Training	Indicators of Success at Tickford Vehicle Engineering
contextualising & customising accredited curriculum for enterprise based training	* all stakeholders within the enterprise have the opportunity to contribute to the content of the training program	* non-training personnel & managers in Quality. Engineering. Design. Project Management. Finance. Sales & Marketing & Production areas and General Manager contribute to program * union personnel contribute through Tripartite Steering Committee * program participants contribute to continuous improvement of training program * at least 80% of shop floor employees participate in training
	* program is designed to take account of individual trainees' learning needs. experience and cultures	* Learning Needs Assessment (LNA) of all shop floor personnel conducted * LNA data reflected in program design and implementation
	* program is designed to meet the goals of the enterprise	* goals of Company identified by General Manager * match between company goals and program design verified by General Manager
	* program reflects actual processes & systems. work practices, language/ terminology of the enterprise	* processes, practices and terminology verified by stakeholders in Company * 90% of manufacturing processes covered in this unit
	* program is flexible & responsive to change in the workplace	* stakeholders contribute to continuous improvement of training program to reflect changes * identifiable points of change and development between the first and second training programs
	* competency standards are achieved	* Unit covers 45% of off-the-job training of Vehicle Industry Certificate * key competencies integrated throughout the program
effective teaching/ training practices & learning strategies	* experiential learning strategies are employed	* program is based on an extended simulation practical project that mirrors the processes and practices of the company * 70% of the program is based on experiential learning strategies
	* individual learning needs are addressed * account is taken of the backgrounds, cultures, experience and skills of trainees	* evidence from program evaluation by participants and interviews with stakeholders
	* work-based projects (individual & group) ensure real problems are addressed and solutions presented to management	* each group to name the problems identified and solved as part of the program
	* managers, supervisors, technical & office staff are actively involved in aspects of the training	* evidence that these personnel - present to classes - assist trainees with relevant aspects of project, outside class times - take an active role in assessment processes
	* training makes a positive contribution to change in the workplace	* communication channels established in the workplace: - between shop floor and office personnel/management - across cultural and social divides on the shop floor - between the Company and the community * evidence of above from program evaluation by participants and other stakeholders and supplementary interviews with stakeholders

implementation and evaluation of enterprise based program (delivery mechanisms)	* expectations, processes, timelines, roles & responsibilities are clearly understood by all parties
	* implementation of training is negotiated to meet needs of enterprise & learners, & flexible to meet unforeseen changes throughout training
	* program is monitored throughout & evaluated during and at the conclusion of training
		* representative Tripartite Training Committee established on site to:
		  - negotiate, and agree to, a Project Brief which includes expectations, processes, timelines, roles and responsibilities, to be signed by the three parties
		  - negotiate all delivery arrangements & participants in training
		  - monitor program including participation, barriers to training and program content and agree to changes
		  - evaluate the effectiveness of the program
		* monitoring and documenting of costs, time of production, development, design and processes, and customer satisfaction, incorporated into the program:
		  - functional fit test
		  - market and customer satisfaction surveys
		  - process sheets
		  - budget and financial records
		* documentation of continuous improvement of program.
		* evidence from:
		  - minutes of Tripartite Training Committee meetings, reports and other official documentation
		  - formative and summative evaluation of program by participants
		  - interviews with stakeholders

assessment strategies	* fair & equitable to all trainees	* processes identified in program * methods explained * processes adapted to learning needs of individuals
	* competency based	* performance and outcomes based * individual competencies recognised

	* appropriate	* team based
		* various methods to cover range of criteria:
		  - self and peer
		  - expert (quality, design, processes)
		  - performance (speed, handling)
		  - market/customer (durability, design)
		  - team effectiveness (communications, working together, management, various roles, documentation)

THE TICKCART PROJECT

VIDEO SCRIPT

OPENING DOORS: ENTERPRISE BASED TRAINING IN ACTION

VOICE OVER:

8 BLOKES, TIGHT TIMELINES AND SIXTY BUCKS.

THEIR CHALLENGE... TO BUILD A HIGH PERFORMANCE RACING MACHINE.....

STEVE DE CARLO   **Interview No:1**
Team Leader:

I'm pretty confident actually. As soon as we built the first ones, we all decided to go test them. We just had drags down the side of the factory and we won four out of five so....what else can I say.

VOICE-OVER:

...FOR THE MOST DISCERNING AND CRITICAL CUSTOMERS IN AUSTRALIA.

KID'S COMMENTS: **Interview No: 2**

Good steering..... Fast....... Grey....... Good brakes........ Brown.....
Fast working......... And safety

VOICE-OVER:

IT MIGHT LOOK LIKE A LOT OF FUN.... AND IT IS.

BUT IT DOES HAVE ITS SERIOUS SIDE.... AS PART OF AN INNOVATIVE APPROACH TO WORKPLACE TRAINING THAT IS OPENING DOORS AND FORGING NEW OPPORTUNITIES FOR WORKERS.

TODAY IS JUDGEMENT DAY WHEN THE EXPERTS FROM TICKFORD AND FORD COME TO ASSESS EACH TEAM'S CART.

STEVE DE CARLO   **Interview No: 3**
Team Leader:

It'll lift up on three wheels, but it won't flip and I'm pretty confident we'll win.

Appendix 4b/1

ROBERT MIRIBILIO   Interview No: 4
Team Member:

I feel good that we've completed something that's different.... something the kids can enjoy I think, something the kids will look at and want to get in...I think they'll want to jump in that...

VOICE OVER:

TEAMS PRESENT THEIR FINISHED CARTS, AS WELL AS FULL DOCUMENTATION OF DESIGNS, SPECIFICATIONS AND BUDGETS.

TONY MARSHALL   Interview No: 5
Quality Manager
Tickford Vehicle Engineering:

What we were really interested in is how well each of the teams incorporated what the customers were asking for in their designs. We also took into account quality, costings and hours spent. Most of the teams we think, did a terrific job. They had done extensive surveys. They'd done some very detailed analysis on the results of those surveys and had incorporated almost all of the requirements that the children had asked for.

VOICE-OVER:

THIS TRAINING LEADS TO THE NATIONALLY RECOGNISED VEHICLE INDUSTRY CERTIFICATE THROUGH A PROGRAM DESIGNED AROUND THE COMPANY AND THE WAY IT OPERATES.

ROBIN SEFTON   Interview No: 6
Managing Director
Workplace Learning Initiatives:

When you start developing a program you start in the workplace. And then, when you've got the curriculum that has grown out of the workplace, you have a look at the Vehicle Industry Certificate, and you can actually match the competencies across.

DAVID FLINT   Interview No: 7
Managing Director
Tickford Vehicle Engineering:

It seemed to me that to actually teach guys on the shop floor in black boxes, that is you teach them about health and safety, and you teach them about marketing, and you teach them about engineering and you teach them about costing, without actually nailing all those together, it's quite a dangerous thing to do.

Because the process of actually engineering a vehicle, taking it through the planning and then the development, and the purchasing of the materials, is a cross functional thing, and unless each of the functions understands what the other function either side or top and bottom does, then it's going to fail.

How can we achieve that then, working with the guys in the shop? Well, we obviously can't build a car. It's too expensive, and it takes too long. But if we could find something that was related to a car, that is it might have wheels ... it may be something to carry someone or something, the development of which carries similar characteristics, similar questions to building cars, then that might be the solution.

And we fell on billy-carts....

GRAEME WADSWORTH   **Interview No: 8**
Senior Designer
Ford Motor Company:

We go through the same process in development as these people do here with these billy carts...We go out, we look at the demographics and the people we are trying to sell our cars to, we research, we actually go into the cost and weight and feasibility issues. We also then go out and we look at...we market research our products...we can associate what these guys are going through, you know, with the frustrations and disappointments, and the elations, of actually designing a car.

DAVID FLINT   **Interview No: 9**
Managing Director
Tickford Vehicle Engineering:

They've got the intellectual exercise of actually designing it, they've got the inquisitive exercises of going to talk to people to find out just what the market needs.

They've got the risks involved in - 'Goodness we're not actually going to make this date. We've got to work overtime and destroy some of our plans in order to meet a promise.' They've got the challenge of being in a race, because, you know, there's going to be a winner. And that's what happens in the real world.....It is a process that is very, very close to what we do today.

IAN JONES   **Interview No: 10**
National Secretary
Australian Manufacturing Workers' Union (Vehicle Division):

The development of integrated learning models has been a real boon, both to the industry because of what it delivers and to our members because of what it delivers to them.

The type of training that Workplace Learning Initiatives have delivered here is not entirely dissimilar to training that they have delivered elsewhere and the response is good everywhere we go. It creates and generates a desire in people to participate.

VOICE-OVER:

LIKE TICKFORD'S CUSTOM BUILT HIGH PERFORMANCE CARS, THE TRAINING PROGRAM IS CUSTOMISED TO MEET THE SPECIFIC GOALS OF THE ENTERPRISE.

DAVID FLINT   **Interview No: 11**
Managing Director
Tickford Vehicle Engineering:

That really comes back to one of our strategies, this strategy of empowering our people...

...they've got to feel motivated. They've got to feel as though they have a purpose. They've got to feel as though they belong. They've got to feel as though they are appreciated. But they've also got to feel they're responsible for their actions. And they've got to feel that both, individually and collectively.

...they're going to improve their minds. Whether they're working for us or whether they're working for the milk bar, that's important - for us to continue to keep learning, and, I do actually want to do that. I want to have an environment inside Tickford where people can learn, and can feel free to learn, and it doesn't cost them money. And at the same time, quite obviously, as a business manager I would like that learning process to be of use to our company. So if I can put the two together, we're meeting a number of objectives.

VOICE-OVER:

THE TRAINING MUST ALSO MEET THE GOALS OF OTHER STAKEHOLDERS.

IAN JONES   **Interview No: 12**
National Secretary
Australian Manufacturing Workers' Union (Vehicle Division):

If you are able to tailor programs that provide, I think, some clear linkage with what takes place in the workplace, some practical hands-on approach to life that delivers an outcome, then of course people are going to enjoy it.

    Appendix 4b/4

Apart from, I think, a more varied and enjoyable program, it delivers to them wage outcomes consistent with learning that they are able to do on the job. And that, in real terms, is seen to be relevant to them and relevant to what they do.

VOICE-OVER:

NOT ONLY DOES THE PROGRAM DUPLICATE THE PROCESS INVOLVED IN DEVELOPING HIGH PERFORMANCE CARS, IT ALSO OFFERS LEARNING CHALLENGES.

CRINA VIRGONA   **Interview No: 13**
Industry Trainer
Workplace Learning Initiatives:

Throughout the program...people who have.....been a bit reluctant, and a little bit uncertain about what this was all about and ended up becoming really absorbed in putting in and struggling with words. 'Oh God! How do you write this on a process sheet? How do you describe what we're doing now? How do you deal with these language issues? Why am I filling out this form? What does it really matter?'

So when they're beginning to probe those sorts of questions, and there are a number of people who've come up with those sorts of questions, they've really wanted to know what goes on behind the brick wall that separates the shop floor from the office.

TONY DIPASTENA   **Interview No: 14**
Team Leader:

You feel like you're going back to school, you don't want to sit, well, supposedly in a classroom but it's not a classroom, it's not, it doesn't feel like that at all. It's a real relaxed atmosphere. No one tells you what to do or how to do it. You go about it your own way - you do what you have to do. You listen to the teachers ... they're guiding you through.

ROBIN SEFTON   **Interview No: 15**
Managing Director
Workplace Learning Initiatives:

Teachers immerse themselves in the culture and the practices of the workplace. And in doing that they recognise the opportunities that are all around them for learning to take piace and they have to grasp hold of those opportunities and make them into good learning strategies for the classroom.

DAVID FLINT   Interview No: 16
Managing Director
Tickford Vehicle Engineering:

...and I've got to say that they're doing it very well. They're bringing together thoughts and aspirations of the company with thoughts and aspirations of the guys on the shop floor, with teaching practice.

CRINA VIRGONA   Interview No: 17
Industry Trainer
Workplace Learning Initiatives:

I think we've had a very, very supportive managing director who's put a lot of energy and enthusiasm into this program, and that's been invaluable. He's allowed us to have that sort of, creativity and, he's encouraged us to move with that sort of program. They've trusted us to be educationally sound.

VOICE-OVER:

WORKING TOGETHER IN TEAMS HAS BEEN A NEW EXPERIENCE FOR MANY OF THE PARTICIPANTS

DAVID STULE   Interview No: 18
Team Member:

In our group ...we've probably got the most different nationalities and we all really worked together.

JIM KATSARIS   Interview No: 19
Team Leader:

Some need encouraging, some don't, some you got to leave alone and do the job on their own... it just all, at the end, came together.

Leadership is not about the leader, I think. Leading is about putting the whole group together to work together.

DOMINIC CLEMENTE   Interview No: 20
Team Member:

....before we started it was a little bit divided between us. We didn't really understand, I think, the structure, that goes behind the whole company. I think this program has brought us a lot closer together, sort of understanding their way of thinking.

Source: Virgona & Marshall. 1998: Appendix 1   Appendix 4b/6

ANTHONY BAILEY　　　　　　　**Interview No: 21**
Team Member:

... it's been a great experience, getting all different people together, different opinions. And, having them all come together, and ending up with three good carts.

CRINA VIRGONA　　　　　　　**Interview No: 22**
Industry Trainer
Workplace Learning Initiatives:

The low points are when the guys are really frustrated when they've designed themselves this state of the art machine and realise that, Oh dear, this means overtime, every night, and unpaid.

And they've got all their other commitments, and 'Who got me into this anyway? We ought to do this simple little billy-cart and here we are, we've got this monster bigger than life.'
Those sort of things go wrong all the time and you always find that there are people who are feeling as if the project has drained their last ounce of energy.

They all come back with learning from that, and I think that's very valuable.

STEVE DE CARLO　　　　　　　**Interview No: 23**
Team Leader:

Well, we started off really well when it came to designing, and telling everyone what they had to do and everyone had their specific tasks.

When we built the first one, 'cause that was meant to be our pilot car, there was a bit of stress there. Some people just charged off and did their own thing and, I sort of had to just pull everyone back into line and say 'Look, we've got to do it this way and we've got to get it done in our time because if we start screwing around, just doing our own thing, we're just not going to get it done. It's not going to be successful.' So...we pulled everyone together and it happened. We did really well.

CAMERON LIVINGSTONE　　　　**Interview No: 24**
Project Manager
Tickford Vehicle Engineering:

There's a whole lot of complexities behind managing a project that, even though the end result might seem to be a simple sort of billy-cart. There are a lot of complex issues that arose along the way. And I think everyone's to be commended on addressing the issues and the lessons learnt that's come out of it.

VOICE OVER:

THE OUTCOMES FROM THE TRAINING COURSE CONTINUE TO FLOW THROUGH INTO OTHER AREAS AT TICKFORDS ...

DAVID FLINT   **Interview No: 25**
Managing Director
Tickford Vehicle Engineering:

There are interpersonal relationships now developing between the guys on the shop and the guys in the office, along the lines different from building XR6's or putting LPG onto cars.

Some of the people down there're doing some astonishing things. I mean they would have been absolutely terrified of talking to the cameras, but they did it. And when they came out of it at the other end they felt great because they had actually achieved something. Something different, and, quite different from their normal business and work time practices. And that's spreading across the factory

TONY DIPASTENA   **Interview No: 26**
Team Leader:

We start from nothing and design a concept to build a vehicle. And to do that takes a lot of time, a lot of people working together, a lot of patience, a lot of paperwork. The paperwork that we went through was relatively nothing to what the guys go through building a vehicle.

CRINA VIRGONA   **Interview No: 27**
Industry Trainer
Workplace Learning Initiatives:

I was really pleased because.... some groups that had really put in... felt as if they didn't have a chance. And I think everybody got a guernsey, everybody won, on one criteria ...

... I think everybody comes away feeling they've achieved something that was worth achieving.

DAVID FLINT   **Interview No: 28**
Managing Director
Tickford Vehicle Engineering:

You've done a startling job in producing these machines. You've put a lot of thought into it. You've also broken new ground for the trainers, for me and for yourself in the way in which the project has been organised and extended. And you've actually taken the carts into the community. And, I think that's a wonderful thing for a bunch of blokes to do.

Tuesday August 17th ...

There are some words from a song that goes
- 'Nobody told me there'd be days like this.'
Right now everyday is 'like this in the beginning.'
In the beginning there is a lack of focus and momentum.
Everything about the program must be built.
There is certainly desire and interest.
The initial breakthrough occurs when individuals push through perceived time constraints to create space and time.
This is the first task - the first test. If this can be achieved then more can be achieved: possibilities created.

Everywhere there is activity and noise
The flat crash of plastic on plastic
That click of air powered rivet guns and snap fasteners
There's music drifting over the top
Forklifts as they whirr and whine, blink, blare and rev
High hum of machinery
Sometimes there's this sound like steam being released.
Whistles and short loud attention-seeking calls punctuate this cacophony.

I'm walking through the Door Trim section heading towards Fuel Tanks.
There are two group leaders down there that I want to arrange meetings with.
A figure walking towards me in another aisle catches my eye. He has a paper over his face in an exaggerated humorous attempt to avoid me.
He is coordinator of Fuel Tanks.
'Sergio' greets me with a smile. We spoke last week about organising a time with him and his Fuel Tank group leaders. We think 3.30 would be fine. I need to confirm arrangements with the Door Trim coordinator before I can commit.
Continuing towards Fuel Tanks, I pass the Heater Line. I interviewed two group leaders from here a while ago. One was interested, the other not. I notice a guy standing at the edge of the area giving instructions and checking some things in one of those tiny Spirax notepads that group leaders tend to use these days. I think its 'Ismael' but I'm not sure. I introduce myself and ask if he is interested in doing the program we talked about.
Yes he is.
I explain as much as I can and promise that I will organise a meeting with his coordinator to get the ball rolling.
Great. Another taker.
Reaching the Fuel Tank area, I ask for 'Tran', I mean I yell for Tran.
A short garbled reply (with gestures) in a thick Indian accent, points me to an 'island'.
'He's having a break'
Walking past the island I notice that Tran is concentrating hard on following a game of chess between two workmates. I won't disturb him. His time off is precious.
Just then a forklift that is hurtling past me, slides to a halt. 'Tom', one of the people on the program, smiles out of the cabin.
'Gday, can I catch you later this morning?'
'Yeah, no worries.'
I head back towards Door Trim to catch the coordinator (to confirm our meeting). He is nowhere to be seen.
I see a business manager that I want to talk to, but he's in heavy conversation with four others.
Move on. Back to Fuel Tanks.

The bright orange door that separates the inside from an outside
storage area rises unexpectedly (for me) to allow a forklift to pass through. The driver neatly places his load of containers next to the others that are stacked beside the wall and jumps out and begins stretching plastic covers over each container. Its Tran, he sees me, hits his forehead, smiles broadly and says:

'10.30, 10.30 OK?'

It's now 10.00.

Just a quick trip back to Door Trim. He's not there. Back to Fuel Tanks. The other group leader there (Spiros) spies me and raises his huge arms in the air in a motion of 'its futile'. Then he indicates with his right hand horizontally in front of his nose, that he's 'up to here'.

'No chance mate - look!'

OK OK

10.30 has passed and Tran is nowhere to be seen.

Quick check back to Door Trim. Yes, he's here! Contact. The meeting is made for tomorrow at 3.30 p.m.

I also see the Fuel Tanks coordinator and confirm our 3.30 for today.

The coordinator 'Sergio' comments that it is very difficult to take these two guys off the line. I request a meeting with him and the Heater Line group leader. Sergio can't give me a time. As we walk towards the admin area, I explain that what we are trying to do is make a breakthrough as far as time management and organisation is concerned. He agrees that this is a very important issue at the moment. I talk about the 'too busy, flat chat' responses from group leaders. Sergio nods knowingly.

He doesn't have a mobile-contact by radio.

Sweeping around the Paint Shop I arrive at Shipping and Receiving. I want to organise some time with two group leaders.

I greet 'Frank' 'Gday, what are you faced with today? Can you make some time?'

'No can do mate. I got six trucks to get out. You can wait in the office there, but what for?'

'Maybe tomorrow, huh?'

'Mate, I got no time! Good luck'

'Where can I find 'Paco' (coordinator)?'

'He could be anywhere!'

I decide to write this down. Under a heading 'Achievements and Progress This Morning'.

Returning to the office space where I dumped my stuff (based on the logic that it was OK to dump it there last week), I find that its taken up by a planning meeting. Don't want to interrupt.

So I continue to HR to get a list of telephone numbers for coordinators. They do not have a list and refer me to reception. I go to reception - reception is not there. Perhaps at tea break.

The office is still occupied. I quietly retrieve my stuff, go to the canteen and write up.

Progress so far...

I arrived at 8.30, it's now 11.15

I think there's a little bit of momentum.

Impression: Time is tight.

Coordinators are hard to find.

Group leaders are working.

Just where do I make my next chip, inroad?

Return to reception. Still not there.

The maintenance manager is still going with his charges

Think I'll have a cup of coffee and a strategic think.

(Ray Townsend writing of a day at a plastics plant- entry in 'Red Book', 17/9/99)

BIBLIOGRAPHY

Australian Council of Trade Unions/Trade Development Council (1987) *Australia Reconstructed.* Canberra: Australian Government Printing Service.

Alford, J & O'Neill, D (1994) *The Contract State: Public Management and the Kennett Government.* Geelong: Centre for Applied Social Research, Deakin University.

Anderson, D (1994) *Blurring the Boundaries.* Adelaide: National Centre for Vocational Education Research.

Anderson, D (1996) *Reading the Market: A review of literature on the vocational education and training market in Australia.* Melbourne: Monash University – ACER Centre for the Economics of Education and Training.

Anderson, T, Clemans, A & Seddon, T (1997) Teaching, learning and disadvantaged groups in vocational education. Paper for National Centre for Vocational Educational Research Conference, Melbourne.

Apple, M (1985a) *Education and Power.* London: ARK Paperback edition, Routledge & Kegan Paul (first published 1982).

Apple, M (1985b) Are teachers losing control of their jobs? *Social Education*, May, 372-375.

Apter, D.E (1991) Institutionalism reconsidered, *International Social Science Journal,* 129, 464-482.

Attwood, M & Beer, N (1990) Towards a working definition of a learning organization. In Pedlar, M, Burgoyne, J, Boydell, T & Welshman, G (eds) *Self-Development in Organizations.* Berkshire, UK: McGraw-Hill Book Company, 234-251.

Australian Committee on Technical and Further Education (1974) (Chair, Kangan) *TAFE in Australia: Report on needs in Technical and Further Education.* Canberra: Australian Government Printing Service.

Australian Council for Adult Literacy (1992) *The Adult Literacy and Numeracy Scales: The ACAL View.* Northcote, Victoria: ACAL.

Australian Education Union, Victorian Branch (1997) Industrial Report 1996, Annual Federal Conference agenda. Melbourne: Australian Education Union, 1-20.

Automotive Industry Authority (1984 - 1994) (Annual Reports on) *The State of the Automotive Industry (1983 – 1993)*. Canberra: Australian Government Printing Service.

Baker, R (1990) *Computer Integrated Manufacturing: Physical Modelling Systems Design*, Adelaide: TAFE National Centre for Research and Development.

Ball, S.J (1990) Management as Moral Technology: A Luddite analysis, in Ball, S J, *Foucault and Education: Disciplines and Knowledge.* London: Routledge, 153-166.

Bell, D (1976) *The Coming of Post-industrial Society: A venture in social forecasting.* New York: Basic Books (First published 1973).

Berggren, C (1992) *Alternatives to Lean Production: Work organization in the Swedish Auto Industry.* Cornell International Industrial and Labor Relations Report Number 22. New York: ILR Press.

Billett, S (1993) Authenticity and a culture of practice within modes of skill development, *Australian and New Zealand Journal of Vocational Education Research,* 1(2), 1-28.

Billett, S (1994) Authenticity in workplace settings, in Stevenson, J (1994) *Cognition at work: The development of vocational expertise.* Adelaide: National Centre for Vocational Education Research, 36-75.

Blackmore, J (1993) 'In the Shadow of Men': The Historical Construction of Educational Administration as a 'Masculine' Enterprise, in Blackmore, J & Kenway, J (1993) *Gender Matters in Educational Administration.* Geelong: Deakin University Press, 27-48.

Boje, D.M & Winsor, R.D (1993) The Resurrection of Taylorism: Total Quality Management's Hidden Agenda, *Journal of Organizational Change Management,* 6 (4).

Boomer, G (1982) *Negotiating the Curriculum.* Ashton Scholastic: Sydney.

Boomer, G (1988) Negotiation Revisited. In Green, B (ed) *Metaphors & Meanings: Essays in English Teaching.* Melbourne: Australian Association for Teachers of English.

Boud, D, Keough, R & Walker, D (eds) (1985) *Reflection: Turning Experience into Learning.* London: Kogan Page.

Boud, D, Keough, R & Walker, D (eds) (1993) *Using Experience for Learning.* London: Society for Research into Higher Education, Open University Press.

Bowles, S & Gintis, H (1976) *Schooling in Capitalist America: Educational reform and the contradictions of economic life.* London: Routledge & Kegan Paul.

Braverman, H (1974) *Labor and Monopoly Capital: The degradation of work in the twentieth century.* New York: Monthly Review Press.

Brennan, G (1996) Selection and the Currency of Reward. In Goodwin, R E (ed) *The Theory of Institutional Design.* Cambridge: Cambridge University Press, 256-275.

Brown, L, Seddon, T, Angus, L, & Rushbrook, P (1996). Professional practice in education in an era of contractualism: Possibilities, problems and paradoxes, *Australian Journal of Education* 40(3), 311-327.

Brown, M (1991) Competency-based training: Skill formation for the workplace or classroom Taylorism. Conference Paper for Australian Curriculum Studies Association Conference, Adelaide, July.

Bryson, L (1988) Women and Management in the Public Sector. Unpublished paper. Sydney: University of N.S.W.

Burke, G (1987) Reforming the Structure and Finance of Education in Australia in G. Burke and R.W. Rumberger, (eds) (1987) *The Future Impact of Technology on Work and Education.* East Sussex, UK: The Falmer Press.

Burns, R (1995) *The Adult Learner at Work.* Sydney: Business & Professional Publishing.

Burrell, G (1988) Modernism, Post Modernism and Organizational Analysis: The Contribution of Michael Foucault, *Organization Studies,* 9 (2), 221-235.

Buswell, C (1988) Pedagogic change and social change. In Ozga, J (ed) (1988) *Schoolwork: Approaches to the Labour Process of Teaching.* Milton Keynes, UK: Open University Press.

Calvert, G, Mobley, S & Marshall, L (1994) Grasping the Learning Organisation, *Training & Development,* 48 (6): 38-43.

Cammack, P (1992) The New Institutionalism: predatory rule, institutional persistence, and macro-social change, *Economy and Society,* 21 (4), 397-429.

Campbell, A & Warner, M (1992) *New Technology, Skills and Management: Human resources in the market economy.* London: Routledge.

Carr, W & Kemmis, S (1983) *Becoming Critical: Knowing through Action Research,* Geelong, Victoria: Deakin University Press.

Castells, M (1996) *The Information Age: Economy, Society and Culture, Volume 1 –*
The Rise of the Network Society. Oxford, United Kingdom: Blackwell Publishers.

Castells, M (1997) *The Information Age: Economy, Society and Culture, Volume 2 –*
The Power of Identity. Oxford, United Kingdom: Blackwell Publishers.

Castells, M (1998) *The Information Age: Economy, Society and Culture, Volume 3 –*
End of Millenium. Oxford, United Kingdom: Blackwell Publishers.

Caulley, D (1993) Overview of Approaches to Program Evaluation: The Five
Generations in Guthrie, J (ed) (1993) *Australian Public Sector: Pathways to*
Change in the 1990s. North Sydney: IIR Conferences Pty Ltd, 124-132.

Caulley, D (1994) Notes on the basic characteristics of postpositive interpretive
inquiry, in Neville, B, Willis, P & Edwards, M (eds) (1994) *Qualitative*
Research in Adult Education: A colloquium on theory, practice, supervision
and assessment. Underdale, South Australia: Centre for Research in Education
and Work, University of South Australia, 3-20.

Clarke, J & Newman, J (1997) *The Managerial State.* London: Sage Publications.

Clarke, S (1990) New Utopias for old: Fordist dreams and Post-Fordist fantasies
Capital and Class No 42, 131-155.

Cleaver, H (1998) The Zapatistas and the Electronic Fabric of Struggle. In Holloway,
J & Peláez, E (1998) *Zapatista! Reinventing Revolution in Mexico.* London: Pluto
Press, 81-103.

Clegg, S.R (1990) *Modern Organizations: Organization studies in the postmodern*
world. London: Sage Publications.

Clegg, S.R, Barrett, M, Clarke, T, Dwyer, L, Gray, J, Kemp, S & Marceau, J (1996)
Management Knowledge for the Future: Innovation, Embryos and New
Paradigms. In Clegg & Palmer (eds) (1996), *The Politics of Management*
Knowledge. London: Sage Publications, 190-235.

Clegg, S.R, & Palmer, G (1996) (eds) *The Politics of Management Knowledge.*
London: Sage Publications.

Connell, R.W (1977) *Ruling Class, Ruling Culture: Studies of conflict power and*
hegemony in Australian life. London: Cambridge University Press.

Connell, R.W (1983) *Which Way Is Up? Essays on Class, Sex and Culture.* North
Sydney, Australia: Allen & Unwin.

Connell, R.W (1987) *Gender and Power.* Sydney: Allen & Unwin.

Conti, R.F & Warner, M (1993) Taylorism, New Technology and Just-In-Time Systems in Japanese Manufacturing, *New Technology, Work & Employment,* 8 (1), 31-42.

Cooney, R (1993) Learning from Experience in the Integrated Curriculum, *Critical Forum,* 2(2), 52-58.

Cooney, R (1999) Group Work and New Production Practices in the Asustralian Passenger Motor Vehicle Manufacturing Industry. PhD Thesis. Melbourne: Melbourne University.

Darrah, C (1992) Workplace Skills in Context, *Human Organization* 51(3), 264-273.

Darrah, C (1994) Skill Requirements at Work: Rhetoric versus Reality, *Work and Occupations,* 21 (1), 64-84.

Darrah, C (1997) Complicating the Concept of Skill Requirements in Hull, G (ed) *Changing Work, Changing Workers: critical perspectives on language, literacy and skills.* New York: State University of New York, 249-272.

Dawkins, J.S (1987) *Higher Education: A Policy Discussion Paper* Canberra: Australian Government Printing Service.

Dawkins, J.S (1992) *Working For The Future: Jobs, skills ard innovations.* Canberra: Australian Government Printing Service.

De Angelis, M (1998) 2nd Encounter for Humanity & Against Neoliberalism, *Capital & Class,* No. 65, 135-157.

Deakin, R (1992) VIC: Myths, Realities and Possibilities, unpublished paper. Melbourne: NALLCU.

Deakin, R (1995) Maths and Science in the Foundry: Integral components of accredited training, *Good Practice in Australian Adult Literacy and Basic Education,* No. 27, 14-17.

Deakin, R (1996) Reflections of a Practitioner, *Transfer: VET research and Practice,* 1(1), 9-11.

Delbridge, R, Turnbull, P & Wilkinson, B (1992) Pushing back the frontiers: management control and work intensification under JIT/TQM factory regimes, *New Technology, Work and Education,* 7 (2), 97-106.

Department of Industry Science & Technology (1995 - 1998) (Annual Reports on) *Report on the State of the Automotive Industry 1994 - 1997.* Canberra: Australian Government Printing Service.

Dodgson, M (1993) Organizational Learning: A Review of Some Literatures *Organizational Studies* 14(3), 375-394.

Drucker, P (1993) *Post Capitalist Society.* New York: Harper Collins.

Edelsky, C (1991) *With Literacy and Justice for All.* London: The Falmer Press.

Edwards, J (1996) *Keating: The Inside Story*, Penquin Books Australia Ltd, Harmondsworth, Middlesex.

Ewer, P, Hampson, I, Lloyd, C, Rainford, J, Rix, S & Smith, M (1993) *International Best Practice? A Critical Guide.* Australia: Pluto Press.

Fairbrother, P, Svenson, S & Teicher, J (1997) The Ascendancy of Neo-Liberalism in Australia, *Capital and Class*, No 63, 1-12.

Fairclough, N (1989) *Language and Power.* New York: Harper Business.

Falk, I, Sefton, R & Billett, S (1999) What does research tell us about developing a training culture? In Robinson, C & Arthy, K (eds) (1999) *Lifelong Learning: Developing a training culture.* Adelaide: National Centre for Vocational Education Research, 95-121.

Field, L (1990) *Skilling Australia: A Handbook for Trainers and TAFE Teachers.* Melbourne: Longman Cheshire.

Fitzgerald, I, Rainnie, A & Stirling, J (1996) Coming to Terms with Quality: UNISON and the Restructuring of Local Government *Capital and Class* No 59, 103-134.

Flood, D (1994) The Learning Organization *Organizational Dynamics* 22(3), 1-4.

Ford, G.W (1990) *Rethinking skilling for a restructured workplace: Commission for the Future Occasional Paper No 10.* Canberra: Australian Government Printing Service.

Foucault, M (1975a) Prison Talk. In Gordon C. (ed) (1980) *Power/ Knowledge: Selected interviews and other writings 1972-1977 by Michel Foucault.* Hertfordshire: The Harvester Press, 37- 54.

Foucault, M (1975b) Body/Power. In Gordon, C (ed) (1980) *Power/ Knowledge: Selected interviews and other writings 1972-1977 by Michel Foucault.* Hertfordshire: The Harvester Press, 55-62.

Foucault, M (1976a) Questions on Geography. In Gordon, C (ed) (1980) *Power/ Knowledge: Selected interviews and other writings 1972-1977 by Michel Foucault.* Hertfordshire: The Harvester Press, 63-77.

Foucault, M (1976b) Two Lectures. In Gordon, C (ed) (1980) *Michael Foucault: Power/Knowledge, selected interviews and other writings 1972 –1977*, The Harvester Press, Hertfordshire, UK, 78-108.

Foucault, M (1977a) Powers and Strategies. In Gordon, C (ed) (1980) *Michel Foucault Power/Knowledge: selected interviews and other writings 1972 – 1977*. Hertfordshire, UK: Harvester Wheatsheaf, 134-145.

Foucault, M (1977b) Truth and Power, in Gordon, C (ed) (1980) *Michel Foucault Power/Knowledge: select·· · interviews and other writings 1972 – 1977*. Hertfordshire, UK: Ia. vester Wheatsheaf, 107-133.

Foucault, M (1979a) *The History of Sexuality, Volume 1*. Harmondsworth, UK: Peregrine Books.

Foucault, M (1979b) *Discipline and Punish: The birth of the prison*. Harmondsworth, UK: Peregrine Books.

Foucault, M (1982) *The Archaeology of Knowledge*. Translated by A M Sheridan Smith. Pantheon Books: New York.

Freire, P (1971) *Pedagogy of the Oppressed*. Herder & Herder: New York.

Garvin, D.A (1994) Building a Learning Organization, *Business Credit*, January, 19-28 (reprinted from *Harvard Business Review* July/August 1993).

Gee, J.P (1990) *Social Linguistics and Literacies: Ideology in Discourses*. Hampshire, United Kingdom: The Falmer Press.

Gee, J.P (1992) *The Social Mind: Language, ideology, and social practice*. Bergin & Garvey: New York.

Gee, J.P (1994) New alignments and old literacies: Critical literacy, postmodernism, and fast capitalism. In O'Connor, P (ed) (1994) *Thinking Work, Vol. 1: Theoretical perspectives on workers' literacies*. Sydney: Adult Literacy and Basic Skills Action Coalition, 82-104.

Gee, J.P (1997) Beyond Culture: Communities of Practice in the New Capitalism, *Critical Forum*, 5 (1&2), 70-82.

Gee, J.P, Hull, G & Lankshear, C (1996) *The New Work Order*. St Leonards, NSW: Allen & Unwin.

Gelwick, R (1977) *The Way of Discovery*. New York: Oxford University Press.

Gill, J & Whittle, S (1992) Management by Panacea: Accounting for Transience, *Journal of Management Studies*, 30 (2), 281-295.

Giroux, H (1981) Schooling and the myth of objectivity: Stalking the politics of the hidden curriculum, *McGill Journal of Education*, 16 (3), 282-304.

Goldman, S.L & Nagel, R.N (1993) Management, Technology and Agility: the Emergence of a New Era in Manufacturing, *International Journal of Technology Management*, 8(1), 18-38.

Goodwin, R.E (1996) (ed) *The Theory of Institutional Design*. Cambridge: Cambridge University Press, 1-53.

Gordon, C (ed) (1980) *Michel Foucault Power/Knowledge: selected interviews and other writings 1972 – 1977*. Hertfordshire, UK: Harvester Wheatsheaf.

Gorz, A (1982) *Farewell to the Working Class: An Essay on Post-Industrial Socialism*, Pluto Press, London.

Gorz, A (1985) *Paths to Paradise: on the Liberation from Work*, Pluto Press, London.

Gowan, S.G (1993) Briefs about literacy: measuring women into silence, hearing women into speech, *Critical Forum* 2 (3), 15–27.

Gramsci, A (1971) *Selections from the Prison Notebooks*. London: Lawrence & Wishart.

Grant, A.N (1987) *Opportunity to do Brilliantly: TAFE and the challenge of adult literacy provision in Australia*, (3rd edition, first published 1985). Canberra: Commonwealth Department of Education, Australian Government Printing Service.

Gribble, H (1990) Resisting Hijack and Seduction, *Literacy Exchange*, 2, 41-55.

Griffin, P & Forward, A (1991) *Adult Literacy and Numeracy Competency Scales*, Assessment Research Centre, Phillip Institute of Technology, Melbourne.

Grundy, S & Kemmis, S (1983) *The Action Research Reader*. Geelong, Victoria: Deakin University Press.

Guba, E.G & Lincoln, S (1989) *Fourth Generation Evaluation*. Newbury Park, California: Sage.

Hadjimichalis, C & Vaiou, D (1990) Whose Flexibility? The politics of informalisation in Southern Europe, *Capital & Class* No. 42, 79-106.

Hage, J, Collins, P.D, Hull, F & Teachman, J (1993) The Impact of Knowledge on the Survival of American Manufacturing Plants, *Social Forces*, 72 (1), 223-246.

Hampson, I, Smith, M & Ewer, P (1994) Post-Fordism and Workplace Change: Towards a Critical Research Agenda *The Journal of Industrial Relations*, June, 231-257.

Hase, L, Cairns, L & Mallock, M (1998) *Capable Organisations: the implications for Vocational Education and Training.* South Australia: National Centre for Vocational Education and Research.

Higher Education Review Committee (D. Hoare Chair) (1995) *Higher Education Management Review: Report of the committee of inquiry.* Canberra: Australian Government Printing Service.

Hill, E (1990) *Migrant Workers and Award Restructuring.* Office of Multicultural Affairs, Department of the Prime Minister, Canberra.

Hilmer, F, Rayner, M & Taperell, G (1993) *National Competition Policy,* report by the Independent Committee of Inquiry. Canberra: Australian Government Printing Service.

Hoare, D (1988) Managing for Success, in *Directions in Government,* August.

Hodgetts, R.M, Luthans, F & Lee, S.M (1994) New Paradigm Organizations: From Total Quality to Learning to World-Class, *Organizational Dynamics,* 22(3), 5-9.

Hodkinson, P (1991) Liberal education and the new vocationalism: a progressive partnership? *Oxford Review of Education* 17(1), 73-88.

Holloway, J (1994) Global Capital and the Nation State, *Capital and Class* No 52, 23–49.

Hoyle, E (1995) Changing conceptions of a profession. In Busher, H & Saran, R (eds) (1995) *Managing teachers as professionals in schools.* London: Kogan Page, 59-70.

Huczynski, A.A (1993a) *Management Gurus: What Makes Them and How to Become One.* London: Routledge.

Huczynski, A.A (1993b) Explaining the Succession of Management Fads, *International Journal of Human Resource Management,* 42 (2), 443-463.

Hull, G (1993) Hearing Other Voices: a critical assessment of popular views on literacy and work. In O'Connor, P (ed) (1994) *Thinking Work Volume 1: Theoretical Perspectives on Workers' Literacies.* Adult Literacy and Basic Skills Action Coalition, Sydney, 41-71.

Industry Task Force on Leadership and Management Skills (D.S. Karpin, Chair) (1995) *Enterprising Nation: Renewing Australia's managers to meet the challenges of the Asia-Pacific century.* Canberra: Australian Government Printing Service.

Ingram, D.E & Wylie, E (1991) *Australian Second Language Proficiency Ratings (ASLPR): Self Assessment Version 1991.* Adult Migrant Education Service, Sydney.

International Standards Organization (ISO) (1999) ISO 9001:2000 Quality Management Systems- Requirements (draft document). Switzerland: ISO Central Secretarial.

Jackson, N (1993) Reforming vocational learning? Contradictions of competence. In Hall, WC (ed) (1993) *What future for technical and vocational education and training?* Adelaide: National Centre for Vocational Education Research, 105-122.

Jackson, N (1994) Rethinking vocational learning: The case of clerical skills. In Erwin, L & MacLennan, D, (1994) *Sociology of Education in Canada: Critical perpectives on theory, research & practice.* Toronto: Copp Clark Longman Ltd.

Jackson, N (1995) Quality and Learning: Who's Minding the Agenda? Conference Paper for the Australian Council of Adult Literacy Conference, La Trobe University, Melbourne, November.

Jacobi, O, Kruse, W & Voswinkel, S (1992) Goals and Activities of the Study Group 'International Labor Relations'of the Hans Böckler Foundation. In *Japanization, or going our own way?* Graue Reihe – Neue Folge 48. Dusseldorf, Germany: Hans-Böckler-Stifling, 1-71.

Johnson, R (1982) Reading for the best Marx: history-writing and historical abstraction. In Johnson, R, McLennan, G, Schwarz, B & Sutton, D (1982) *Making Histories: studies in history writing and politics.* London: Hutchinson, 153-201.

Jones, O (1997) Changing the balance? Taylorism, TQM and work organisation, *New Technology, Work & Employment*, 12 (1), 13-24.

Kearney, P (1992) *Collaborative Assessment Techniques: for competency based training and enterprise learning.* Hobart: Artemis Publishing.

Kemmis, S (1985) Action Research and the Politics of Reflection. In Boud D, Keogh R. & Walker D (eds) (1985) *Reflection: Turning Experience into Learning.* London: Kogan Page, 139-163.

Kiraly, J. & Siat, J. (eds) (1997) *Good Better Best practice: Putting the principles of adult learning into practice.* Melbourne: Office of Training and Further

Education, Council of Adult Education and Australian National Training Authority.

Knowles, M (1990) *The Adult Learner: a neglected species* (4th edition, first published 1973). Houston: Gulf Publishing Company.

Kofman, F & Senge, P.M (1993) Communities of Commitment: The Heart of Learning Organizations *Organizational Dynamics* 22(2), 5-23

Lankshear, C (1994) *Critical Literacy*, Occasional Paper No 3. Canberra: Australian Curriculum Studies Association Inc.

Laur Ernst, U (1993) Learning within a work context: training concepts, experience, developments, in Hall, W C (ed) (1993) *What future for technical and vocational education and training?* Adelaide: National Centre for Vocational Education Research, 34-46.

Lawn, M (1996) *Modern Times? Work, professionalism and citizenship in teaching.* London: Falmer Press.

Levidow, L (1990) Foreclosing the Future, *Science as Culture,* No. 8.

Lincoln, S.Y & Guba, E.G (1985) *Naturalistic Inquiry.* Beverley Hills: Sage Publications.

Lonsdale, A (1998) Performance appraisal, performance management and quality in higher education: Contradictions, issues and guiding principles for the future, *Australian Journal of Education* 42(3), 303 – 320.

Lytle, S & Schultz, K (1990) Assessing Literacy Learning with Adults: an ideological approach. In Beach, R & Hynds, S (eds) *Developing Discourse Practices in Adolescence and Adulthood.* Vol. XXXIV. Advances in Discourse Practices. Norword New Jersey: ANLEX.

Macfarlane, B & Lomas, L (1994) Competence-based Management Education and the Needs of the Learning Organization *Education & Training 36(1), 29-32.*

McGill, M.E, Slocum, J.W & Lei, D (1992) Management Practices in Learning Organizations, *Organizational Dynamics* 21(1), 5-17.

Mant, A (1997) *Intelligent Leadership.* St Leonards, NSW: Allen & Unwin.

Marginson, S (1993) *Education and Public Policy in Australia.* Melbourne: Cambridge University Press.

Marginson, S (1997) *Markets in Education.* St Leonards, Australia: Allen & Unwin.

Marshall, C & Mitchell, D (1989) Women's careers as a critique of the administrative culture. Paper presented to American Education Research Association, San Francisco, March.

Martin, H.P & Schumann, H (1997) *The Global Trap: Globalization and the Assault on Democracy and Prosperity*. UK: Zed Books Ltd.

Marx, K (1845) Theses on Feuerbach. In *Collected Works, Volume 5: Marx & Engels 1845-1847*, 1976 edition. London: Lawrence & Wishart, 3-5.

Marx, K (1847) The Poverty of Philosophy. In *Karl Marx Frederick Engels: Collected Works, Volume 6 (Marx & Engels: 1845-1848)*, 1976 edition. London: Lawrence & Wishart, 111-212.

Marx, K (1852) The Eighteenth Brumaire of Louis Bonaparte. In *Collected Works, Volume 11: Marx & Engels 1851-1853*, 1979 edition. London: Lawrence & Wishart, 103-197.

Marx, K (1858) The Chapter on Capital, Notebook VII. In *Grundrisse*. Harmondsworth, Middlesex: Penquin Books (1973).

Marx, K (1864) Inaugural Address of the Working Men's International Association. In *Karl Marx Frederick Engels: Collected Works, Volume 20 (Marx & Engels: 1864-1868)*. London: Lawrence & Wishart, (1985 edition), 5-15.

Marx, K (1867) *Capital Volume 1*. London: Lawrence & Wishart (1954 edition).

Marx, K (1879) Marx to Nikolai Frantsevich Danielson in St Petersburg. In *Marx Engels, Selected Correspondence*, Translated by I Lasker, Edited by S.W. Ryanskaya, Third revised edition (1975). Moscow: Progress Publishers, 296-300.

Marx, K & Engels, F (1846) The German Ideology. In *Collected Works, Volume 5: Marx & Engels 1845-1847*, 1976 edition. London: Lawrence & Wishart.

Mathews, J (1989) *Tools of Change: New Technology and the Democratisation of Work*. Sydney: Pluto Press.

Merleu-Ponty, M (1960) Le philosophe et la sociologie, *Éloge de la Philosophe, Collection Idées*. Paris: Gallimard, 136-137.

Mills, D.G, & Friesen, B (1992) The Learning Organization, *European Management Journal*, 10(2), 146-156.

Mitchell, R & Naughton, R (1994) Radical Labour Reform and the Demise of the Victorian Industrial Relations System, *New Zealand Journal of Industrial Relations*, 19 (3), 257-287.

Morrigan, P (1996a) Learning for Results in the Public Sector: A Qualitative Study of the Development of a Learning Organisation in the Australian Taxation Office. Unpublished PhD in progress, Melbourne Business School, University of Melbourne (cited in Taylor et al, 1996).

Morrigan, P (1996b) Finding Inspiration in the Learning Organisation, *HR Monthly*, May (cited in Taylor et al, 1996).

Muller, J & Watts, D (1993) Modelling & Muddling: The Long Route to New Organisations, *European Management Journal*, 11(3), 361-366.

Namenwirth, M (1986) Science seen through a feminist prism. In Bleir (ed) (1996) *Feminist Approaches to Science*. New York: Permagon, 18-41.

Neville, B (1994) Teaching and Transformation. Paper presented at the 6th Annual La Trobe University Summer School for Adult Literacy and Basic Education Practitioners.

Newman, M (1994) *Defining The Enemy: Adult Education in Action*. Stewart Victor Publishing: Paddington, NSW.

Nunan, D (1988) *The Learner-Centred Curriculum*. London: Cambridge University Press.

Nunan, D (1992) *Collaborative Language Learning and Teaching*. London: Cambridge University Press.

Offe, C (1996) Designing Institutions in East European Transitions. In Goodwin, R E (ed) *The Theory of Institutional Design*. Cambridge: Cambridge University Press, 199-226.

Office of Training & Further Education (OTFE) (1999) *An Organisational Self-Assessment Manual for Registered Private providers of TAFE*. Melbourne: OTFE.

Oliver, N (1991) The dynamics of just-in-time, *New Technology, Work and Employment*, 6 (1), 19-27.

Ozga, J (1995) Deskilling a profession: Professionalism, deprofessionalism and the new managerialism. In Busher, H & Saran, R (eds) *Managing teachers as professionals in schools*. London: Kogan Page, 21-27.

Ozga, J (1996) Professional re-formation: Issues in teacher restructuring, *Leading and Managing*, 2(2), 133-149.

Parker, M & Slaughter, J (1988a) *Choosing Sides: Unions and the Team Concept*. Detroit: Labor Notes.

Parker, M & Slaughter, J (1988b) Management by Stress, *Technology Review*, October, 37-44.

Pedler, M, Bordell, T & Burgoyne, J (1989) The Learning Company, *Studies in Continuing Education*, 11(2), 91-101.

Pettit, P (1996) Institutional Design and Rational Choice. In Goodwin, R E (ed) *The Theory of Institutional Design*. Cambridge: Cambridge University Press, 54-89.

Polanyi, M (1967) *The Tacit Dimension*. London: Routledge & Kegan Paul.

Polanyi, M (1969) *Knowing and Being: Essays by Michael Polanyi*, ed. by Grene, M. London: Routledge and Kegan Paul.

Polanyi, M (1983) *Tacit Knowing*. Gloucester, Massachusetts: Peter Smith.

Pollert, Anna (1988) Dismantling Flexibility in *Capital & Class*, No. 34, 42-75.

Porat, M (1977) *The Information Economy: Definition and Measurement*. Washington D C: US Department of Commerce, Office of Telecommunications, publication 77-12 (1).

Prigogine, I & Stengers, I (1985) *Order Out of Chaos: Man's new dialogue with nature*. Glasgow: Fontana Paperbacks, Flamingo Edition (first published 1985).

Pusey, M (1991) *Economic Rationalism in Canberra: a nation-building state changes its mind*. Cambridge: Cambridge University Press.

Ramsay, H (1996) Managing Sceptically: a Critique of Organizational Fashion. In Clegg & Palmer (eds) (1996), *The Politics of Management Knowledge*. London: Sage Publications, 155-172.

Rees, S (1995) The Fraud and the Fiction. In Rees, R & Rodley, S (eds) (1995) *The Human Costs of Managerialism*. Australia: Pluto Press, 15-27.

Rees & Rodley (1995) *The Human Costs of Managerialism*. Australia: Pluto Press.

Rothschild-Whitt, J (1979) The Collectivist Organization: an Alternative to Rational-Bureaucratic Models, *American Sociological Review*, 44, 509-527.

Sayer, A (1986) New developments in manufacturing: the just-in-time system in *Capital and Class* No 30, 43-72.

Sayer, D (1979) *Marx's Method: Ideology, Science and Critique in Capital.* Sussex: The Harvester Press.

Schön, D (1987) *Educating the Reflective Practitioner*. San Francisco: Jossey-Bass.

Scott, G (1991) How clever are we in the way we train our workers? The Great Australian Competence Caper, *Training and Development in Australia*, 18 (2), 7-12.

Seddon, T (1994) Reconstructing social democratic education in Australia: versions of vocationalism, *Journal of Curriculum Studies*, 26 (1), 63-82.

Seddon, T (1997a) Education: Deprofessionalised? Or regulated, reorganised and reauthorised, *Australian Journal of Education*, 41 (3), 228-246.

Seddon, T (1997b) Markets and the English: rethinking educational restructuring as institutional design, *British Journal of Sociology of Education*, 18 (2), 165-185.

Seddon, T (1998a) Appendix 3: Literature Review 1 – Research in VET and VET enterprises, in Seddon, T & Malley, J (1998) *A Staff Development Strategy for Supporting Research Priorities in the State Training Service, Part 2.* Melbourne, Victoria: Office of Training and Further Education, 20-41.

Seddon, T (1998b) Emerging patterns of enterprise-based research and articulations with organisational development in vocational education and training providers. Conference Paper presented at the first Australian Vocational Education & Training Research Association (AVETRA) Conference, Sydney, February.

Sefton, R (1989) Open Learning, Inequality and the New Means of Production. Dissertation for Masters of Educational Studies, Monash University.

Sefton, R (1993) An Integrated Approach to Training in the Vehicle Manufacturing Industry in Australia, *Critical Forum*, 2 (2) 39-51.

Sefton, R (1996a) A Progressive Model of Education for Workers, in Union Research Centre on Organisation and Technology Ltd (URCOT) Working Paper No. 11, *Vocational Education and Training: From whence have we come and where are we going?* Melbourne: URCOT .

Sefton, R (1996b) Research in Workplace Learning, paper for ANTA Research Advisory Council Conference, Melbourne.

Sefton, R (1998a) Navigating the Murky Waters: Research, Change & Knowledge in the 'New' Workplace. Conference Paper for the Australian National Training Authority Conference (*Creating our Future – a new training culture for Australia*), August 23-26.

Sefton, R (1998b) Managerialism – Is there an alternative? Conference Papers for 6th Annual International Conference on Post-Compulsory Education and Training, (*Vocational Knowledge and Institutions: Changing Relationships*), Volume 4.

Brisbane: Centre for Learning and Work Research, Griffith University, 164-173.

Sefton, R & O'Hara, L (1992) *Report of the Work Placed Education Project on behalf of the Vehicle Manufacturing Industry*. Melbourne: Victorian Automotive Industry Training Board .

Sefton, R & Waterhouse, P (1996) Workplace Learning & Change: Reflections upon an investigation of workplaces as learning environments. Conference Paper for National Centre for Vocational Eduction & Research Conference, Launceston, Tasmania, July.

Sefton, R & Waterhouse, P (1999) Developing a Culture of Research in a VET Provider. In Selby-Smith, C (ed) (1999) *The Impact of R & D on VET Decision Making: A Range of Case Studies*. South Australia: National Centre for Vocational Education Research, 136-141.

Sefton, R, Waterhouse, P & Cooney, R (1995) *Workplace Learning and Change: The workplace as a learning environment*. Melbourne: National Automotive Industry Training Board.

Sefton, R , Waterhouse, P & Deakin, R (eds) (1994) *Breathing Life Into Training: A Model of Integrated Training*. Melbourne: National Automotive Industry Training Board.

Selznick, P (1957) *Leadership and Administration*. New York: Harper & Row.

Senate Standing Committee on Industry, Science and Technology (1990) *People and Technology: New Manufacturing Techniques in Manufacturing Industry*. Canberra: Australian Government Printing Service.

Senge, P M (1990) *The Fifth Discipline: The Art & practice of the Learning Organisation*. Australia: Random House.

Seyf, A (1998) Book Review of Martin & Schumann (1997) *The Global Trap*, in *Capital & Class*, No 66, 172-175.

Sharp, R (1986) (ed) *Capitalist Crisis and Schooling: Comparative Studies in the Politics of Education*. South Melbourne, Australia: Macmillan.

Sharratt, P & Field, L (1993) Organizational learning in Australian organizations: hollow rhetoric or attainable reality? *Asia Pacific Journal of Human Resources* 31(2), 129-141.

Smith, F (1988) *Joining the Literacy Club: Further Essays into Education.* London: Heinemann Educational Books.

Smith, L (1997) Beyond Convergence: Towards a Multidimensional Conceptualisation of the Post-Compulsory School Curriculum. Conference Paper for National Centre for Vocational Education Research Conference, Melbourne.

Spaull, A.D (1997) Deprofessionalisation of state school teaching: A Victorian industrial relations saga in *Australian Journal of Education* 41(3), 289-303.

Stephenson, J & Cairns, L (1999) Capability, Work and Training, How Capability Moves Beyond Competence: An International Perspective. Paper for the Annual Meeting of the American Education Research Association held in Montreal, Canada, April.

Stevenson, J (1994) *Cognition at Work: The development of vocational expertise.* Adelaide: National Centre for Vocational Education Research.

Sweet, R (1993) An Anthropological Perspective on the Missionary Position: Employers and the National Training Reform Agenda, *Critical Forum,* 2 (1), 55-69.

Taylor, F W (1911) *The Principles of Scientific Management.* New York: Harper & Row.

Taylor, M, Jones, L, Meredith, S & Wheelens, M (1996) *Learning in the Workplace: A Study of Three Enterprises.* Melbourne: Western Metropolitan Institute of TAFE Publishing Service.

Tesch, R (1990) *Qualitative Research: Analysis types and software tools.* New York, Falmer Press.

Thomas-Walsh, P (1995) Warehousing in the Automotive Industry: Practical Examples of Integrated Training, *Good Practice in Australian Adult Literacy and Basic Education,* No. 27, 12-13.

Thomas-Walsh, P (1997) *The Training Implications of Changes in Regulations in the Food Processing Industry.* Melbourne: Victorian Food Industry Training Board.

Touraine, A (1969) *La Société post-industrielle.* Paris: Denoel (cited in Prigogine & Stengers, 1985).

Townsend, T (ed) (1997) *Restructuring and quality issues for tomorrow's schools.* London: Routledge.

Turnbull, P (1988) The limits to Japanisation: 'just-in-time', labour relations and the UK automotive industry, *New Technology, Work and Employment,* 3 (1), 7-20.

Unterweger, P (1992) *Lean Production: Myth and Reality*, paper produced by the IMF Automotive Department, October.

Vintila, P, Philimore J & Newman P (eds) (1992) *Markets, Morals and Manifestos.* Perth: Institute for Science & Technology, Murdoch University.

Virgona, C (1991) *Peer Tutoring: language and literacy training for NESB workers in industry.* Melbourne: Adult Migrant Education Services.

Virgona, C (1996) Building Castles in the Air? *Education Links,* No 53, 25-28.

Virgona, C (1999) Voices of the Workplace: a comparative analysis of the role of management in mediating worker identity. Conference Paper for the Third International Workshop on Teamworking, School of Management, Royal Holloway, University of London, 14-15 September.

Virgona, C (2000) Seeking Convergence - workplace identity in the conflicting discourses of the industrial training environment of the 90s: a case study approach. M.Ed. Thesis in progress, Melbourne: Monash University.

Virgona, C & Marshall N (1998) *Opening Doors: Enterprise Based Training in Action – Professional Development Kit.* Melbourne: Workplace Learning Initiatives Pty Ltd.

Virgona, C, Sefton, R Waterhouse, P & Marshall, N (1998) *Opening Doors – Enterprise Based Training in Action: The Tickcart Project Case Study*, prepared as part of an ANTA 'demonstrating best practice in VET Project 1997'. Melbourne: Workplace Learning Initiatives Pty Ltd.

Virgona, C, Waterhouse, P & Sefton, R (1998) Teamwork, Collective Competence and Team-based Assessment in Action: Critical reflections of industry-based vocational educators. Conference Paper for the Second International Workshop on Teamworking, University of South Australia, 23-25 September.

Waterhouse, P (1994) Becoming a Researcher: Reflections of a student-teacher-writer-researcher. In Neville, B, Willis, P & Edwards, M (1994) *Qualitative Research in Adult Education.* Adelaide: Centre for Research in Education and Work, University of South Australia, 66-74.

Waterhouse, P (1996) Multiple Tales for Training, *Education Links*, 53, 4-8.

Waterhouse, P (1999a) Authenticity of Stance in the Shifting Swamps of VET Practice. Unpublished paper for RMIT VET Leadership program, 21 June.

Waterhouse, P (1999b) Good Beginnings: A Search for Authenticity in Adult Education Practice and Identity. Ph.D Thesis: Latrobe University.

Waterhouse, P & Deakin, R (1995) Changing Approaches to Workplace Literacy, *Journal of Reading*, 38(6), 498-500.

Waterhouse, P & Miller, R (1996) Environmental auditing and waste minimisation: Workplace education for ecological and economic reward. Conference Papers, 4th International Conference on Post-Compulsory Education and Training, (*Learning and Work: The Challenges*), Volume 4. Brisbane: Centre for Learning and Work Research, Griffiths University, 131-141.

Waterhouse, P & Sefton, R (1992) Assessing Learning Needs in the Automotive Industry, *Good Practice in Australian Adult Literacy and Basic Education*, No. 17, 10-11.

Waterhouse, P & Sefton, R (1997) Teachers at Work: Utilising professional teaching skills in industry settings, *Australian Journal of Education*, 41(3), 262-275.

Waterhouse, P, Wilson, B & Ewer, P (1999) *The changing nature and patterns of work and implications for VET*. Adelaide: National Centre for Vocational Education Research.

Watkins, K.E & Marsick, V.J (1992) Building the learning organization: a new role for human resource developers, *Studies in Continuing Education* 14(2), 115-129.

Watkins, K.E & Marsick, V.J (1993) *Sculpting the Learning Organization: Lessons in the Art & Science of Systemic Change*. San Francisco: Jossey-Bass.

Watkins, P (1992) *Class, The Labour Process and Work: Focus on Education*. Geelong, Victoria: Deakin University Press.

West, P (1994) The Concept of the Learning Organization, *Journal of European Industrial Training* 18(1), 15-21.

Wickert, R (1990) *No Single Measure: A Survey of Australian Adult Literacy, Summary Report*. Canberra: Commonwealth Department of Employment, Education and Training.

Wilkinson, A & Willmott, H (eds) (1995) *Making Quality Critical: New Perspectives on Organizational Change*. London, UK: Routledge.

Womack, J P, Jones D T & Roos D (1991) *The Machine That Changed The World: The Story of Lean Production*. USA: Harper Perennial (first published 1990).

Wood, S J (1989) The Japanese Management Model: Tacit skills in shop floor participation, *Work and Occupations*, 16 (4), 446-460.

Yeatman, A (1987) Administrative Reform and Management Improvement - A New 'Iron Cage'? *Flinders Studies in Policy and Administration.* Adelaide: Flinders University.