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## **A policy analysis of a private sector company's response to the career start traineeship**

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# **A POLICY ANALYSIS OF A PRIVATE SECTOR COMPANY'S RESPONSE TO THE CAREER START TRAINEESHIP**

**BY SHERRY DONALDSON BEd (Hons)**

A thesis submitted in partial fulfilment of the requirements for the Award of Master of Education at the Faculty of Education, Edith Cowan University.

Date of Submission: 25 July 1994



## USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

# **ABSTRACT**

During 1994 BHP Iron Ore is investigating the costs benefits and possibilities of introducing a new Traineeship scheme called Career Start for the Metals and Engineering sector of its workforce.

This study explores the factors which impact upon the introduction of the new competency based training scheme. It provides BHP with information for determining whether to adopt the Traineeship scheme as the sole entry level training program for the company, whether to reject the Traineeship scheme altogether, whether to run the Traineeship scheme side by side with the Apprenticeship scheme or to integrate it with the current Apprenticeship scheme in some form or other, within the Metals and Engineering sector.

In order to make this determination BHP needs to decide upon a policy making process that is rational, comprehensive, objective, considered and that presents a range of alternatives with means to defined ends.

A variation of the rational model for policy making is used to provide a broad framework for developing an answer to the major research question which is: What considerations does BHP need to take into account to determine whether or not to introduce the Career Start Traineeship scheme? To answer the major research question several subsidiary questions based on the five steps of the rational model were pursued.

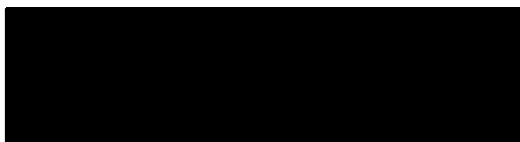
A qualitative study, using naturalistic data collection methods was undertaken to allow participants freedom of response and to permit insight into reasons for those responses. The main emphasis of the study was on discovery rather than the testing of theory. As a study of nine BHP Iron Ore

employees' responses it was not intended to produce generalisations that cover all corporate employees' thoughts on the Traineeship scheme.

# DECLARATION

I certify that this thesis does not incorporate without acknowledgment, any material previously submitted for a degree or diploma in any institution of higher education; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signature

A solid black rectangular box used to redact the signature of the author.

Date 10/7/95.

# ACKNOWLEDGMENT

I would sincerely like to thank Dr Rod Chadbourne for his encouragement, patience, support, guidance and assistance in the production of this thesis.

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# **SECTION ONE**

## **PLANNING AND PREPARATION**

# CHAPTER ONE

## BACKGROUND TO THE STUDY

### INTRODUCTION

During 1994 BHP Iron Ore, like many other large corporations, is investigating the costs, benefits and possibilities of introducing a new Traineeship<sup>0</sup> scheme called Career Start for the Metals and Engineering sector of its workforce. Under the proposed system a typical Traineeship includes nine months of 'on the job' training and three months of 'off the job' training under an Agreement which is lodged with the Department of Employment, Vocational Education and Training. Traineeships offered in a range of industries and occupations, are now available in areas which have been traditionally covered by the Apprenticeship scheme.

The launch of Career Start Traineeships is another step in a program of training reform which began in the mid 1980s and which aims to address the economic challenges facing Australia. According to Dawkins and Holding (1987, p.3),

The world's most successful economies over the past two decades have given high priority to education, skills and competence at work as vital factors in economic performance, and supported their skills development policies accordingly. Now we must do likewise.

---

<sup>0</sup> The words Traineeship, Apprenticeship and Tradesperson are written with capital letters in accordance with the preferred BHP style.

Recognising that a concerted effort is required to bring Australia's productivity into line with those of technological nations, the Federal Government signalled its commitment to ensuring adequate training arrangements by creating a new portfolio to co-ordinate all Commonwealth policies in the fields of employment, education and training.

During 1988 the Minister for Employment, Education and Training, John Dawkins, tackled the restructuring of awards. Prior to this, occupations, and consequently training arrangements, were rigidly defined by horizontal and vertical segmentation which inhibited the development of entry and advanced level training programs. Dawkins (1988, p.15) said that,

In many areas of industry, the number of job classifications and demarcations between them must be reduced. This will allow training to be more broadly based and have a multi-skilled approach.

As part of award restructuring, the provision of clearly articulated career paths was identified as an incentive for workers to increase their skills and rectify labour market inefficiencies, referred to by Dawkins (1988, p.15) as 'a high rate of wastage'. Table 1 shows that over 40% of qualified tradespeople in most trade groups did not work in the trade for which they were trained. Table 2 shows that in the occupation of boilermaker/welder, which specifically relates to the metals and engineering sector, over one quarter of newly qualified tradespeople left their trade within one year of completing their Apprenticeship.

TABLE 1

LABOUR FORCE STATUS OF PERSONS AGED 15-64 YEARS HOLDING QUALIFICATIONS IN MAJOR TRADES - AUSTRALIA 1981

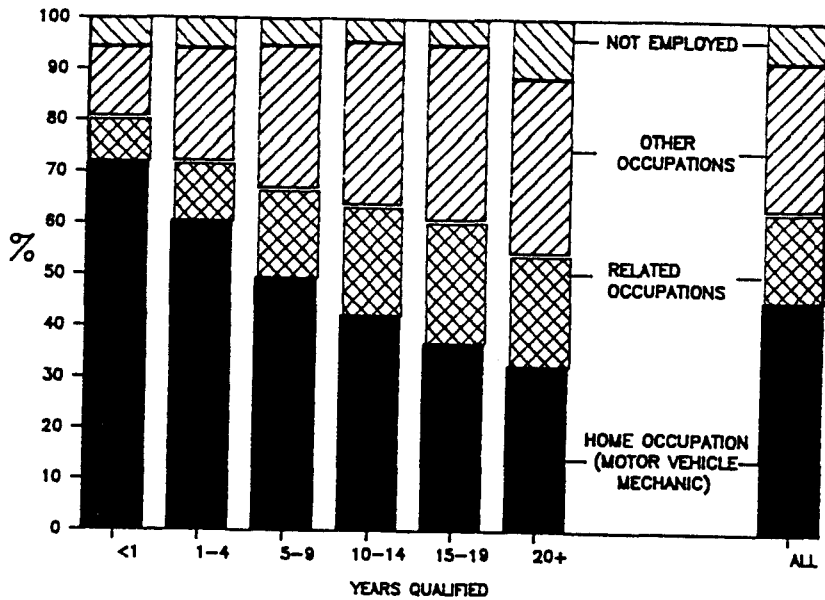
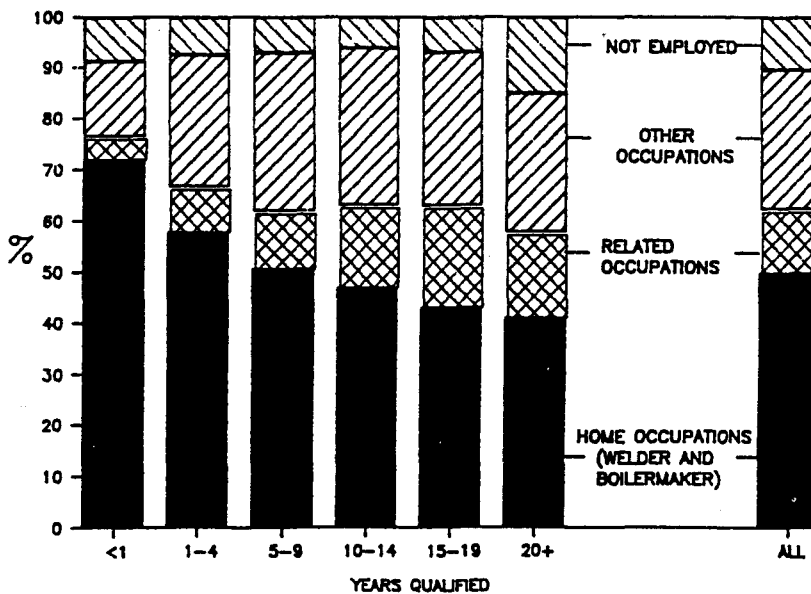


TABLE 2

LABOUR FORCE STATUS OF PERSONS AGED 15-64 HOLDING QUALIFICATIONS IN WELDING AND BOILERMAKING (TRADE LEVEL) - AUSTRALIA 1981



SOURCE : ABS, 1981 Census of Population and Housing

This 'wastage' is a major contributor to skill shortages and reduces the incentive for employers to invest in ongoing training. Therefore, the Federal Government considered it necessary to introduce a system of training which provides appropriate skill related career paths and a set of broad based, transferable skills.

In addition, action was necessary in order to address the restrictive training provisions contained in many Federal Awards. For example, Dawkins (1988, p.23) pointed out that,

About seventy awards contain provisions which limit the age by which an apprenticeship must be completed, do not allow reductions in the period of apprenticeship (on the basis of previous education or training), restrict the ratio of tradespeople to apprentices and so on.

The Metals and Engineering Industry was no exception. So in 1988 the Metals Trade Federation of Unions and the Metal Trades Industry Association negotiated the reform of work and training arrangements. The principles pursued in the negotiations were to a large extent consistent with the Federal Government's objectives for micro economic reform.

Before 1985 the training system was characterised by a school to work flow with only a small amount of training being given by outside institutions such as TAFE. The accreditation process varied between the states and was based on time served rather than competency attained. This system was dominated by men and limiting in so far as many of the Apprentices moved into occupations which were not necessarily related to their training once they had served their indenture.

In August 1985 the Australian Traineeship System was announced. It was an initiative directed towards appropriate reform of the training system. It was introduced as part of the Government's response to the Kirby Report which found that up to 100,000 young people left school each year without substantial vocational preparation or marketable employment skills. The Australian Traineeship system linked 'on the job' and 'off the job' training, providing systematic assessment which led to a recognised qualification. It worked on the premise that productivity and quality depend not only on the level and type of skills of the workforce, but also on the effectiveness with which those skills are used. Halton (1989, p.8) described this as,

...combining higher level cognitive skills which foster team work with multi-skilling, that is the type of motor skills which are being combined into one job becoming more complex.

While this scheme improved training prospects for young people it had to be further refined to allow workers to adapt to the changing patterns of employment and the impact of new technology in the workplace.

To address the problems inherent in the system the Federal Government put training reform at the top of the agenda. A national strategy framework for the implementation of a Competency Based Training System was endorsed by a Special Ministers' Conference on Training on 2 November 1990. The Confederation of Australian Industry (1991, p.1), describes competency based training as,

... an emphasis on what a person can actually do in relation to industry specific standards rather than the individual's performance in relation to others in a group.



In 1991 the National Training Board was constituted to facilitate a consistent and responsive vocational education and training system with national benchmarks for the delivery, assessment and certification of competency based training.

The Career Start Traineeship scheme arose from discussions at the 1991 Youth Summit held in Canberra and its introduction was announced by the Prime Minister on 27 July 1992 as part of the National Employment and Training Plan for Young Australians. The Career Start Traineeships are intended to serve as a bridge between current training arrangements and the Australian Vocational Certificates.

The Employment and Skills Formation Council, chaired by Mr Laurie Carmichael set the national competency standards as outlined by the National Training Board . The standards are contained in 'The Australian Vocational Certificate Training System' ( Carmichael, 1992) more commonly known as the 'Carmichael Report'. The report advocates the introduction of certification based on the attainment of key competencies which are cross industry, industry specific and enterprise specific.

These Australian Vocational Certificates will be in existence by 1995, according to the Department of Employment, Education and Training. Their introduction is likely to place pressure on companies such as BHP to consider how the recommended changes to entry level training will affect their industry. This may mean beginning the

process of determining the best arrangements for the training of their work force.

As will be shown in this thesis representatives from the Department of Employment, Education and Training believe that the introduction of the new Traineeship system will be of benefit to both employers and employees. They also consider it will redress inefficiencies in training, widen the concept of 'off the job' training and improve international competitiveness.

Currently, BHP Iron Ore in Western Australia runs a four year Apprenticeship Scheme in the Metals and Engineering sector. With the advent of the new Career Start Traineeships which are competency based, BHP can consider a number of training options. For example, it can consider a twelve month Traineeship as an alternative to a first year Apprenticeship. As will be documented in the 'Findings Chapter' the company expressed an interest in offering this type of training if it is more attractively subsidised by the Government (see Appendix 1), more flexible in its curriculum and capable of giving employees nationally recognised certification when competencies are achieved in specified areas.

The following table highlights some of the major features of, and differences between the Apprenticeship and Career Start Traineeship schemes as they were presented on 1 September 1993. (See Appendices 4-8 for Traineeship general details.)

**TABLE 3**

**FEATURES OF THE APPRENTICESHIP AND PROPOSED  
TRAINEESHIP SCHEMES IN THE METALS AND ENGINEERING  
SECTOR**

**APPRENTICESHIP**

**DURATION:**

4 years with provision to reduce term

**AGE GROUP:**

15 years upwards

**AWARD:**

Defined by Industrial Inspector and applicable to this particular trade

**ON THE JOB TRAINING**

Detailed in training schedules provided by the Office of Industrial Relations

**OFF THE JOB TRAINING**

National modules form core, elective and streams eg 24 modules over a 4 year period

**ASSESSMENT**

2 visits by training consultants over 4 year period  
A trade certificate is issued when the full term is completed

**EMPLOYER GOVT ASSISTANCE**

\$1 500 upon indenture  
\$1 500 upon discharge

**TRAINEESHIP**

**DURATION:**

Average 1 year, based on achievement of competency

**AGE GROUP:**

16 to 64

**AWARD:**

A variation but based on Trainee's age

**ON THE JOB TRAINING**

Plan prepared by the employer with the assistance of DEET training staff

**OFF THE JOB TRAINING**

Selected national modules which have specific occupational skills and major competencies eg maths, technology etc

**ASSESSMENT**

3 visits by field training staff  
Certificate issued when trainees have attained all competencies

**EMPLOYER GOVT ASSISTANCE**

\$2 000 max sign up payment  
\$2 000 additional for disadvantage  
\$2 000 curriculum development

Source: Department of Employment, Education and Training Entry Level Training Discussion Papers

## **SIGNIFICANCE OF THE STUDY**

Evidently, BHP is at a critical point in the development of its training for entry level employees. According to staff (see page 72), it is coming to realise that if it focuses on longer term interests it can achieve a company commitment to develop common goals and national plans. How BHP's training sector responds to this challenge is likely to determine whether it can provide a dynamic learning environment for its employees and at the same time meet the growing demands of the government for a more highly skilled workforce and promote the increase in productivity necessary for improved profitability.

This study explores the factors which impact upon the introduction of the new competency based training scheme. It provides BHP, one of the largest mining industry employers in Australia, with information relevant to determining whether to adopt the Traineeship scheme as the sole entry level training program for the company, whether to reject the Traineeship scheme altogether, whether to run the Traineeship scheme side by side with the Apprenticeship scheme or to integrate it with the current Apprenticeship scheme in some form or other, within the Metals and Engineering sector. The information would be relevant to the company if it wishes to take advantage of the opportunity to write its own training curriculum.

By defining enterprise standards in accordance with those outlined by the Department of Employment, Education and Training (1990), BHP

can produce training material which is aligned to the National Training Board's industry standards while focussing on its own desired outcomes. This may allow employees to become competent in a shorter time because their learning would be responsive to the specific needs of the company. A Senior Officer from the Personnel Department at BHP Iron Ore identified the topic as being significant and sought a researcher to carry out the task. In doing so, the Senior Officer provided an opportunity for an independent academic approach to an industry problem, though to some extent this independence was constrained by industrial relations sensitivities. Initial drafts of the research findings provided BHP with information relevant to 1993 interim policy decisions regarding entry level training. The complete study will provide BHP with information relevant to long term policy decisions for the 1995-1997 entry level training programs.

So far there has been little 'academic' research conducted in the area of vocational training directly involved with industry. McDonald et al (cited in Wiltshire, 1993, p.38) point out that,

Only about half as much is spent on research in vocational education and training (as a proportion of recurrent expenditure) as is spent on research in other categories of education. Furthermore, the proportion of total funding allocated to research in vocational education and training is extremely small, at 0.2 per cent of total recurrent expenditure for the sector.

Exploring the complexity of participants' feelings and perceptions in one company could provide a basis for developing hypotheses in the future. While the study is not intended to generalise about all corporate education and training policy making, it is traversing new

ground. As such it may be considered as a pilot study for future research.

The significance of the study extends beyond that of its potential usefulness to BHP. It sets out some of the issues which need to be debated by employers and training institutions before they push ahead with competency based entry level training. The issues include whether the competency based entry level approach is realistic, who benefits from the approach and whether such an approach is in the future interests of Australia.

The Department of Employment, Education and Training, in this time of stretched financial resources, may benefit from the analysis of a large corporation perspective on competency based entry level training. The Department could use the participants' feedback and subsequent discussion to inform future policy on the dissemination of information to employers and the type of support it needs to supply in order to assist employers understand and adopt the Career Start Traineeship as a viable entry level training option.

## **THE PURPOSE OF THE STUDY: STATEMENT OF THE PROBLEM**

BHP Iron Ore in Western Australia currently operates a Metals and Engineering Apprenticeship system whereby approximately twenty four Apprenticeships are offered each year. If BHP moved to a

Traineeship system as well, the company could provide employment for more than the normal Apprenticeship intake because the Government provides a subsidy for each Trainee. At the end of twelve months (depending on the progress of the employee) the Traineeship contract would end and BHP would have a further choice of either, offering Apprenticeships to the best/most suitable Trainees or finding them alternative work. This would give BHP a larger pool from which to select its Apprentices. Since the Trainees would have already completed a number of 'off the job' training modules one option is to consider the Traineeship as an alternative to the first year of an Apprenticeship. The problem is that this has not been done before, which leaves the researcher the task of investigating whether the integration of the two systems will be beneficial or more trouble than it is worth or if other Traineeship schemes are feasible. For example, the perceived negative cost of the new program may be far greater than the benefits derived from extra employment placements for the unemployed. The placement of employees who were not offered an Apprenticeship could prove to be difficult given that BHP is currently reducing the size of its workforce through voluntary redundancies

Another facet of the problem is the temporary nature of the Career Start Traineeship Scheme. While there is uncertainty about the proposed end date for implementation of the Australian Vocational Certificate Training Scheme, Department of Employment, Education and Training representatives believe that the Federal Government will cease to offer subsidies for Apprentices by the end of 1995 and that the introduction of the Australian Vocational Certificate Training

Scheme is inevitable. The Career Start Traineeships are intended as an interim measure between the phasing out of the apprenticeship scheme and the introduction of the Australian Vocational Certificates Scheme. This places companies such as BHP in the situation of having to weigh up the consequences of adopting a policy on an entry level training scheme which may become outdated in a matter of a few years. One approach to this task involves deciding upon a policy making process that is rational, comprehensive, objective, considered and that presents a range of alternatives with means to defined ends. A possible outcome of this might be the need for corporations to make a conscious choice between at least two courses of action, namely, to introduce the new Career Start Traineeship or not to introduce the new Career Start Traineeship.

## **STATEMENT OF RESEARCH QUESTIONS**

A variation of the rational model for policy making is used to provide a broad framework for developing an answer to the major research question. Several reasons underlie the choice of the rational model. First, the rational model advocates what a process of policy making should consist of rather than an account of what such a process actually consists of. The study involves looking at a situation prior to BHP making a policy rather than analysing a policy that has already been formulated, adopted and implemented. Second, as will be explained in the literature review and the methodology chapters, the



assumptions underlying a variation of the rational model are more likely to fit the modus operandi of BHP than some other models.

The major research question for the study is this: What considerations would BHP need to take into account to determine whether or not to introduce the Career Start Traineeship Scheme?

Because the major research question will be investigated within the framework of a variation of the rational model of policy making, a number of subsidiary research questions arise accordingly. Based on the five steps of the rational model which Carley (1980, p.11) identifies, the subsidiary questions are as follows:

- 1 With respect to the introduction of the Career Start Traineeship what problem have the participants in this study identified which require action and what goals, values, and objectives related to the problem have the participants classified and organised?
- 2 What are the important possible ways of solving the problem or achieving goals and objectives that are listed and are these options viable?
- 3 Of the important consequences that are predicted to follow from each alternative strategy, which ones are important and what is the estimated probability of them occurring?
- 4 How can the consequences of each strategy be compared and weighted in relation to the goals and objectives identified by the company?
- 5 Which policy or strategy should be selected to most closely match goals and objectives, or most nearly solve the problem, or show the most benefit from equal cost, or show equal benefit at least cost?

It should be emphasised that these quotes are cited with participants' perspectives in mind. The term participant here refers to the fifteen

people who were interviewed for the study. They include BHP Apprentices and Officers and representatives of the Metals and Engineering Industry, Department of Employment, Education and Training and the Trades and Labor Council of Western Australia.

**SECTION TWO**

**RESEARCH FRAMEWORK**

# **CHAPTER 2**

## **REVIEW OF LITERATURE**

### **INTRODUCTION**

The purpose of the literature review is to determine what has already been done in relation to the research question and to facilitate the interpretation of the findings of the study. In order to answer the research question it is essential to access information about competency based education and the National Training Reform Agenda as well as policy making approaches. This chapter is divided into two parts. The first part reviews literature on training and the second part reviews literature on policy making. The literature on methodology is discussed in the next chapter entitled Research Design.

In the context of vocational education and training much has been written about the National Training Reform Agenda. However, few discrete academic studies have been undertaken on Apprenticeships and Traineeships. The main debate centres on competency based education and training and the contribution it can make to Australia's economic recovery.

The literature review in this chapter is also used to provide a conceptual base for the selection of a policy making model for the

purpose of the study. It serves to outline the meaning of policy and alternative views on the policy making process. In linking these roles it develops a framework for a variation on the rational policy making model and attempts to show why the variation on the rational policy making model is appropriate for an analysis of BHP's decision making needs.

## **TRAINING**

The focus of this section of the review is a survey of some of the recent literature on training, with reference to the implications for entry level training and attempts to reform educational programs. A large proportion of the literature does not provide objective appraisal of training reform. Instead, there is a plethora of 'how to articles' and manuals, written for the busy employer contemplating various training schemes. In many cases new procedures are advocated as superior to previous models, but on the basis of personal experience or subjective opinion. This represents practical wisdom but is deliberately persuasive and often not backed by established research findings. The emphasis in this chapter, therefore, is on critical reviews, articles that reflect on certain aspects of training or on its mechanics and procedures which have been published recently, that is post 1980; some reference though, is made to important original sources or key texts published before that year.

Two highly pertinent questions are kept in mind during this section: how do training schemes work, and do they offer the benefits claimed for them? The review of training begins with a background to the current industrial relations climate which has fostered training reform in Australia. Following on from that it provides an analysis of the purpose of training. It then examines the mechanics of training to show how it is supposed to work. Finally, it reflects upon the implications for entry level training in the light of current debates about competencies and the introduction of reformed training programs for corporations such as BHP

## **Industrial Relations**

The motive for training reform is now clearly defined in terms of the national interest with its strong economic overtones. Traditionally the management of industrial relations, often based on conflict resolution principles, between unions and employers has been a state matter. However, since the 1980s industrial relations has shifted into the national arena. The driving forces behind the co-operative reform of the workplace have been the Australian Council of Trade Unions and the Federal Labor Government. Recognising that a structural change and the promotion of a productive culture are necessary to enhance international competitiveness and Australian living standards, tackling the problems of skill formation became necessary for both government and unions alike.

During the 1980s the Federal Labor Government instituted a number of reforms, in order to resolve the divisions in Australian society and to draw Australia together as one nation. In response to these reforms the Australian Council of Trade Unions sought to identify potential ways of co-operatively restructuring the Australian workforce.

1987 saw the introduction of a two tiered wage system geared to productivity increases which was negotiated with the Australian Council of Trade Unions. In 1988 the 'Structural Efficiency Principle' produced an agreement whereby unions reviewed their work processes and industrial awards to improve industry efficiency in return for more varied fulfilling and better paid jobs. Zbar (1991, p.5) described this as,

...seeking simultaneously to improve career paths for workers, linked to training and skill acquisition, whilst also improving efficiency and flexibility within the particular industry or sector under consideration.

1989 brought the endorsement of the Federal Government's plan for award restructuring by the Australian Council of Trade Unions. The notions of multi-skilling and competence based achievement were inbedded in the plan for award restructuring. According to Knight et al, (1993, p.5), it was during this period that training and its reform became central to an effective program of microeconomic reform.

Training was required to respond more directly to the needs of the economy and to provide the skills and competencies needed for a restructured, globally competitive, and unprotected private sector.

Finn (1991), Mayer (1992) and in particular Carmichael (1992) chaired committees which made recommendations on how to harness training to the demands of economic reform while also addressing equity and social justice issues.

## **The Purpose of Training**

In the field of training there appears to be a general consensus that training is a vital part of human resource management and is likely to be a permanent feature of organisations. Even writers concerned to point out the limitations, or false claims about training schemes,<sup>2</sup> regard them as an indispensable part of the nature of modern organisations. For example, the West Australian Chamber of Mines (1989, p.1) see some kind of training as essential because the industry is resource based and has 'long realised that its workforce, both management and employees, constitute the most important part of that base.'

The hope that training can increase organisational effectiveness and economic development is commonly asserted as a fact in the sort of training journals which seek to persuade readers of the satisfactory outcome of a scheme being proposed. For example, in a report on factors influencing the turnover of skilled personnel Warn (1993, p.29) argues that the operational viability of a corporation can be influenced

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<sup>2</sup> For more detailed explanation see Braverman (1974), Steinberg (1990), Storper and Walker (1989) and Wajcman (1991).



by the investment in human capital, 'that is in the development of the skills, knowledge and experience of the employee'.

Training schemes may have more than one purpose: staff development, management selection, salary planning and organisational planning are those most commonly cited. But it seems that these purposes, desirable as they might be, sometimes conflict. Employers, employees and government agencies can hope for very different things from training. According to Storper and Walker (1989), Crompton and Jones (1984) and Spenner (1990) the major barrier to training, for fulfilling the needs of all groups, is the absence of a shared meaning about the purpose of training. Training, according to Robbins et al (1986, p.202) can be defined as,

A learning experience in that it seeks a relatively permanent change in an individual that will improve his or her ability to perform on the job. It involves the changing of skills knowledge, attitudes and social behaviour.

Rowe (1964), more than twenty years earlier, came to similar conclusions as a result of a four year study of British development training schemes. She argued that personality, potentiality and promotability were also integral factors in successful training but discovered a marked confusion between the management's purpose for training, which was to meet short term skill needs, and the employee's purpose which was to increase long term employment prospects.

Empirical studies, such as the survey of training practices by Fombrun and Laud (1983, p.31) suggest that the role of training as a strategic organisational tool for systematically improving organisational and

individual performance is 'largely unappreciated by organisations'. Their survey was based on questionnaire returns from large companies. They approached 1 300 American firms of which 256 replied, a return rate of 20 per cent. Of these, 89 per cent used appraisal linked to training as a general guideline for salary increases.

More important, the firms ignored clues arising from training about non-monetary rewards, such as increased job autonomy, learning opportunity and peer support which would have almost certainly increased employee motivation and in turn productivity. Training was used as a short term mechanism to increase specific skills but was not exploited as a management tool for the purpose of identifying high potential, succession planning or even career planning. The authors conclude that management in most organisations fails to integrate training systematically with other parts of the human resource system.

This analysis raises a question which is under discussed in the literature: why an organisation, at a particular point in time choses to change its training methods? All organisations, particularly in a recession are under pressure to rationalise resources and to be more productive. The sorts of official purposes outlined may mask an intention to use training as a way of solving productivity or other problems. Attempts by government to win greater control of the curriculum and training schemes offered by private enterprise and in particular the accreditation are seen by Drewer (1990, p.143) as being 'early warning shots in a coming conflict', whereby government, employers and employee representatives face a crisis in the legitimisation process of training purposes.

Since the early 1980s Carmichael has proposed a restructuring of training to improve Australian industry and keep it competitive on the international market. There are those who express doubts that formal training processes engaged for this purpose are always objective and fair, or that they even serve as the true basis for employee skill enhancement. Soucek (1993, p.176) in his dissertation on training and education sees training as being an organisational ritual in which the actual purpose is an aid to decision making, a means of organisational control and a reaffirmation of the employment contract which fosters the trainee's 'dependence on moral guidance from authority'. This argument is extended by feminists such as Steinberg (1990) and Wajcman (1991) to include a dependence on male dominance in the workplace. In this case they predict that a gender struggle over the priority given to traditional 'male skills' is inevitable and that this will impede skill enhancement.

## **The Mechanics of Training**

A large proportion of the literature is devoted to persuasive advocacy of the merits of one method over another, in particular the debate concerning the introduction of competency based training. This discourse on training has dominated publications in Australia during the past ten years. It has been the subject of an intense controversy not only in Australia but also in the United Kingdom, Canada and the United States. According to its opponents, the competency approach has been shown to be a 'theoretically and methodologically vacuous

strategy' (Hyland 1992, p.35). For its supporters, it remains 'as close to a panacea for educational ills as one might find ... '(Fagan 1984, p.8).

The most influential element in the recent competency movement in Australia according to Borthwick (1993, p.21) 'has been the work of the Mayer Committee on key competencies.' However, the Quality Education Review Committee Report chaired by Karmel (1985, p.70) almost a decade before, devoted some space to the notion of competence,

The Committee has approached the definition of desirable outcomes through the concept of competence, that is, the ability to use knowledge and skills effectively to achieve a purpose. This allows emphasis to be placed on the results of learning which should be purposeful and have demonstrable effects.

The 'Employment Related Key Competencies For Post-Compulsory, A Proposal For Consideration' (1992) or 'Mayer Report' is one of three national reports since the 'Karmel Report' which have sought to explain the context for changes in training and provide the direction for training. First came the 'Review of Young People's Participation in Education and Training' (1991) or the 'Finn Report' which recommended the development of 'employment related key competencies' which are considered to be essential for all young people to achieve in their preparation for employment, regardless of the education or training pathway they follow in the post-compulsory years. Moran (1993, p.9) asserted that Australia is not alone in recognising the growing importance of vocational education and training when he used excerpts from the 'Finn Report' to point out that there is a significant international emphasis on,

Increasing the status and levels of participation in vocational education and training; the convergence of general and vocational education; the integration of education, training and employment, especially through notions of competency, recognition of prior learning and lifelong learning

Next published was the 'Australian Vocational Certificate Training System' (1992) or 'Carmichael Report' which proposed a new system of entry level training in Australia and showed how the key competencies could form a bridge between general education and vocational education and training as the core component of the proposed Australian Vocational Certificate.

Training within industry is not an end in itself. Training operates within a market environment and serves business plans and objectives. Because of this, any public policy needs to accommodate and build upon the competitive requirements of enterprise. With this in mind the Australian Vocational Training Scheme was outlined in the 'Carmichael Report'. It was the result of extensive, Australia wide consultation with representatives of young people, students, teachers, trainers, education bodies, unions, industry, governments and other groups who are affected by the proposed changes.

The main thrust of the reforms suggested in the 'Carmichael Report' is to replace the current mix of certificates, Traineeships and Apprenticeships with certificated levels which are achieved when an individual demonstrates a specified level of competency rather than has served a specific period of training time. The reforms are aimed at extending training to all those young people who do not at present have the opportunity to participate.

The Carmichael proposal, currently under review by government, industry and employee groups, provides a number of common features for training. These include a set of broad banded job classifications, each of which consists of a broad range of tasks functions and or skills at that level; a linear progression from the lowest level or entry level through to the highest within an industry; and a structured program of training and skills acquisition, both on and off the job, providing the opportunity for all workers to develop those skills necessary for advancement up the proposed career path. One of the industry groups which has taken an active role in reviewing the 'Carmichael Report' is the West Australian Chamber of Mines and Energy. The Chamber agreed with the general principles put forward in the report but insists that the linear progression of training should be '...cost efficient at the enterprise level and responsive to enterprise needs.' (1992, p.3)

According to the Department of Employment, Education and Training (1989) the Australian Standards Framework can provide a reference point from which to determine levels of Australian Vocational Certification to be issued to workers. The Australian Standards Framework consists of eight levels of competency. Each competency level describes the total competency required at that level. Entry level training standards are contained within levels 1-4 of the Framework.

Table 4 presents a simplified generic model of these features. It was formulated by the Department of Employment, Education and Training and used to facilitate discussion at BHP. It is drawn from

proposals currently under discussion in a number of industry sectors. Under models developed to date, training can be separated into two main categories: entry level and advanced level training.

All training to the right hand side of the chart is initiated by the employer for its existing workforce, and is structured to accord with the job classifications and career paths which are the central features of award restructuring. This award restructuring and resulting workplace reform presents a problem for critics of the model. For example, Ford (1986) and Matthews (1989) point out, these new post 'Taylorist'<sup>3</sup> approaches require a flatter structured group work organisation which is clearly at odds with the hierarchical Australian Standards Framework.

Training activity in the bottom half of the chart is post-trade and advanced level training, and outside the scope of entry level training. Some tertiary education could be considered to be entry level training, for example an engineering degree, but it is still based in tertiary institutions, not structured by the industry. While industry may not be directly involved in the delivery of this type of entry level training it could benefit from any changes which occur in the tertiary system to accommodate the competencies. Collins (1993, p.5) questions the design of university courses. She claims that the courses should be designed around competencies if they can be listed,

Rather than a bolt on curriculum in which students must make the connections between specialised academic knowledge in packages of courses, professional education

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<sup>3</sup> Fredrick Winslow Taylor pioneered the theories of Scientific Management during the 1920's. Scientific management theories are characterised by specialisation, supervision and hierarchical control.

programs should be directly aimed at the development of competencies.

The top left quadrant defines the area of training regarded as entry level. Entry level training was defined by the now defunct West Australian State Development and Skills Development Authority (1992, p.4) as the,

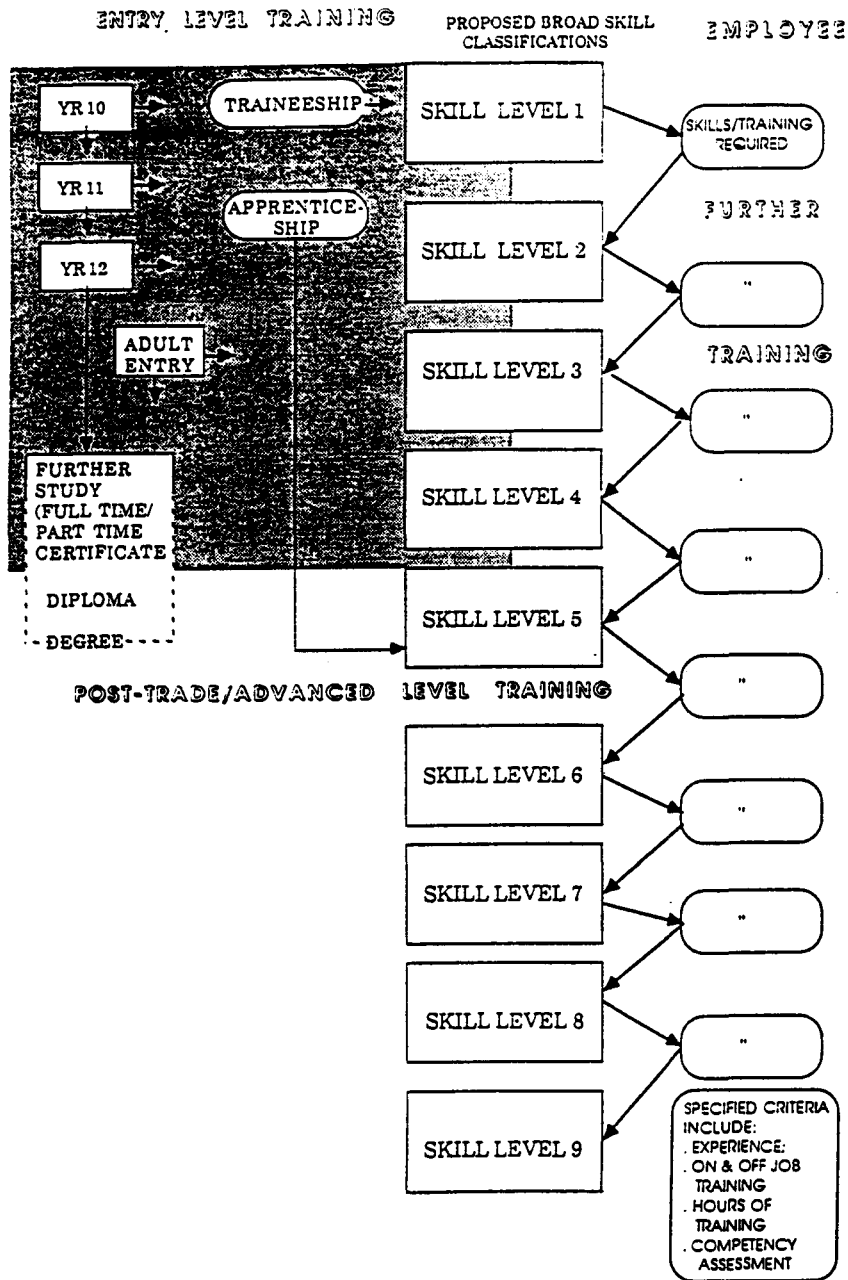
...preparation people receive to enter all occupations up to and including, the level of a tradesperson. It includes training for trade and non-trade occupations.

It includes training activity initiated under government programs, and is focussed on the transition from school to work. Arrangements for adult entry are not precluded.



TABLE 4

SIMPLIFIED GENERIC MODEL OF THE AUSTRALIAN STANDARDS FRAMEWORK



Source: Department of Employment, Education and Training Career Start Discussion Papers.

The philosophies underlying the Carmichael Report suggestions for reform are contained in the eleven principles outlined by the State Employment and Skills Development Authority (1992, p.8),

**Flexible:** The system must be flexible to accommodate the differing needs of individuals, industries and enterprises.

**Nationally Consistent:** Arrangements must ensure nationally consistent outcomes and national recognition for successfully completed training.

**Competency Based:** Targets will be based on actual achievements as well as participation.

**Broad-based:** Training should allow for the attainment of enterprise-specific skills

**Diverse Pathways:** Training must be available through a range of options with clear links between the different options.

**Responsive:** Training must be responsive to industry and enterprise needs and be industry and/or enterprise driven.

**Key Competencies:** Entry-level training should build on foundations of key competencies acquired through general education, usually through the school system. These competencies are important and enable people to go on to employment and further training.

**Cater for Adults:** It is essential that entry-level training arrangements meet the training needs of adults as well as youth.

**Incentives to Participate:** The entry-level training system should provide incentives for young people and employers to participate in it.

**Equity and Access:** The system should be equitable and promote access for all groups including women and disadvantaged persons.

**Consensus:** To be workable the proposals must attract broad support from employers, employees, unions, governments and vocational education and training providers.

While the Commonwealth and State Governments are funding trials of the Carmichael proposals with the intention of full implementation at the end of 1995, there is a significant amount of concern about the approach being adopted. Hartley (1990, p.71) has noted that in recent reports, rationalist Taylorist<sup>4</sup> language predominates. The documents are 'peppered' with terms such as standardisation, rationalisation, accountability, differentiating, quality controls and systematic, to name a few. Hartley believes that after a time, with frequent use of this language, the rationalist approach will be manoeuvred into place without debate on the diversity of training systems already in existence.

The Australian Business Council (1992) has developed a proposal which suggests that enterprises with substantial training expertise, who seek to be part of the new vocational training system, should have the autonomy to set their own standards, mount their own training courses, and issue their own certificates within a general framework to provide public recognition of those certificates and give them credibility in the marketplace. This will undoubtedly prolong the debate about implementation methods and reduce the flexibility for businesses that wish to integrate the Apprenticeship and Traineeship systems within the near future.

Another factor which could impede progress towards the integration of the Apprenticeship and Traineeship schemes is the refusal of the States to participate in a national education curriculum. In a July 2

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<sup>4</sup> Fredrick Winslow Taylor developed the 'Principles of Scientific Management' which rely upon the scientific selection of workers, centralisation of power through the separation of conception from execution and the measurement and close definition of tasks. (Watkins, 1993 p66)

1993 media release from the office of the Minister for Employment Education and Training, the Hon Kim Beazley, outlined how the non-Labour States used their majority vote to block a national approach to the 'Mayer Report'. This can have serious implications for the Australian Vocational Certificate which bases its first level on the assumption that workers have attained Mayer's general levels of competency through secondary schooling or alternative methods of study. Mayer (1992, p.12) says that the levels of achievement within the Key Competencies must align with the Australian Standards Framework,

It is critical that performance levels in the Key Competencies are able to be articulated with industry competency standards that are aligned with the Australian Standards Framework and thus provide a basis for articulation between school and training programs.

The West Australian Chamber of Commerce and Industry (1994, p.1) opposes the introduction of the Australian Standards Framework recommended in the 'Carmichael Report' (1992). Instead, it believes that the need for a skill, where and how it is applied and the degree of proficiency, is the province of the enterprise involved and '....not a national training board, nor a work value skills possessed hierarchy thinly disguised as a qualifications framework.' The Chamber of Commerce sees the 'Carmichael Report' as an attempt at social engineering which, however laudable, cuts across the most authoritative current estimates of likely trends in labour demand and relies heavily on a set of core competencies.

The 'Mayer Report' (1992, p.6) proposed what the compulsory core for competency at all levels of vocational training would actually look like,

The Mayer Committee was set up by the Australian Education Council and the Ministers responsible for Vocational Education, Employment and Training to undertake further work on the employment related Key Competencies concept contained in the 'Review of Young People's Participation in Postcompulsory Education and Training.'

The seven key competencies outlined in the 'Mayer Report' (1992) include: collecting, analysing and organising information, communicating ideas and information, planning and organising activities, working with others and in teams, using mathematical ideas and techniques, solving problems and using technology. The term competency refers to what people can do and focuses attention on outcomes. It is assumed that all young people need these competencies in order to allow and equip them to participate effectively in the workforce.

Carmichael (1992) advocates that these generic competencies should be incorporated into vocational certificate courses. Because of their broad and general applicability across occupations and industries, these key competencies provide an important core of transferable skills which will assist with the portability of Australian Vocational Certificate qualifications. For that reason, the Ministers who reviewed the 'Mayer Report' at the 68th Meeting of the Australian Education Council (1992, p.1) noted that,

Preparing young Australians for employment has always been part of the role of general education and is the

primary purpose of entry-level training. The changes currently occurring in the Australian industry to enable Australia to compete in international markets depends on developing a workforce capable of participating effectively in new forms of work and work organisation. This requires a renewed emphasis on the role of general education in providing the foundation for a multi-skilled, flexible and adaptable workforce and a greater emphasis on broad employment related competencies in vocational education and training. Ministers welcomed the Mayer Committee Report on Key Competencies as a significant contribution to addressing these education and training issues vital to Australia's future.

There was strong support for the competencies to be developed through the existing curriculum in high schools and through existing training modules in industry. However, the Ministers recognised that some specific modules may need to be developed for industry training so that portability can be achieved. There are several issues which schools and training providers need to grapple with before they can maintain that a competency has been achieved. These were identified by the Confederation of Australian Industry (1991, p.4) as,

The generic character of competencies must be preserved. That is the competencies must apply to work generally rather than to a particular industry or occupation.

The competencies must be assessed and student/employees attainment recorded within the existing curriculum or training modules or separate modules.

The Mayer Committee described three levels of performance for each of the key competencies. While these three levels are subject to further validation, this three level framework for performance provides a set of national standards for the key competencies for application in all the sectors which are participating in the Australian Vocational Training System. Adoption of the performance standards in key competencies by all participants will assist with the recognition and

portability of qualifications across enterprises, industries and sectors. In all sectors a balance between technical and general competencies will be required.

Some analysts such as Stanley (1993) and Jackson (1993) believe that the practice of giving priority to a set of generic competencies should be approached with caution. Stanley (1993, p.152) points out that,

There appear to be good grounds from existing cognition research to be sceptical about the likely efficacy of the generic competencies enterprise in the form currently proposed by the Mayer Report.

## **Implications for Entry Level Training**

The enhancement of Australia's economic success depends on a workforce which is multi-skilled, flexible and adaptable, according to the Australian Business Council (1992). Greater value is being placed on factors such as creativity, initiative and being able to think critically. The Mayer competencies were designed to achieve these qualities and to underpin all learning at the secondary schooling level as well as providing a basis for all entry level training under the Australian Vocational Certificate.

Training programs in this country are currently being discussed in a political context where, according to Beevers (1993, p.89), selective

parts of the state, big business and peak union bodies frequently see competency based training as,

A universal truth and cure all for problematic issues such as economic deterioration and workplace restructuring.

While this is hardly the most favourable climate for an objective debate on training programs it does have implications for large corporations such as BHP. Owen (1992, p.177) points out that the current National Training Board model of competency based training is based on positivist notions that,

... tend to treat skill formation and competence as value free things which have a natural meaning like wood or iron - things which can easily be categorised measured and quantified.

The National Metals Curriculum implementation was a case of positivists attempting a top down approach to the introduction of competency standards. Despite the completion of over 400 modules there are still no nationally endorsed standards. Beevers (1993, p 90) argues that while this is not surprising, it is disappointing because,

'The new modules are only old wine, which is now well past the use by date, in new bottles'

Butterworth's (1992, p.22-23) findings support Beever's argument. Butterworth notes that the majority of industry has,

... great difficulty in articulating their own basic training needs let alone the key competencies for their industry.



These arguments present BHP with the task of considering any changes to its current training plan carefully before investing in what could be redundant knowledge and skills in a short space of time.

According to Collins (1993, p.12), much of the competency training agenda is 'openly embedded in an economic vision which seeks to harness education institutions to economic ends'. Loton (1991, p.15) confirms this when he states that there should be a national curriculum framework which,

... should be accompanied by a rigorous system of accountability for performance targets based upon a clear set of educational objectives for the systems themselves and for the nation.'

If this is the case, then it suggests a need to discern how well the competency training will serve its own needs to increase productivity or how far the company is prepared to go in terms of supporting the government view that the introduction of competency based training will strengthen the economy.

## **Summary**

Whether they agree with the content and intentions of the 'Finn, Mayer and Carmichael Reports' or not, companies like BHP may experience difficulty ignoring indefinitely the groundswell of support for the reforms suggested in the report. If so, then BHP at the very least, needs to be conversant with the contents of the reports in order

to understand the training plans of its competitors. Should the company decide to implement the Career Start Traineeship scheme, its trainers will certainly be implementing many of the reforms outlined in the reports.

## **POLICY**

The term 'policy' is used in many different ways and refers to a highly diverse set of activities. For the purpose of this review, Harman's (1978, p.4) definition is used,

Policy can be viewed basically as a course of action or inaction towards the accomplishment of some intended or desired end. It embraces both what is intended and what occurs as a result of the intention. Policy may also be thought of as a guide to taking future actions and for making appropriate choices or decisions towards a particular end, and as the setting of solutions to a problem.

Over the past decades a multitude of theories on policy making drawn from the disciplines of political science, international relations, sociology, business administration and education have been generated. Many of these theories have been based on either the functionalist (consensus) or conflict (radical) models of society.<sup>5</sup> As a corporation which supports capitalist society, in the view of the author, BHP would probably endorse the functionalist model because the corporation sees itself as an agency operating in a well integrated

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<sup>5</sup> For more information about the conflict or functionalist models see Morgan (1980). The functionalist models and conflict models are characterised by polar assumptions about whether the nature of society is better understood in terms of stability or change, integration or conflict, functional co-ordination or disintegration, consensus or coercion.

society. This chapter will not review all of those models and theories. Instead, it will concentrate on those which the author considers BHP is likely to take seriously and which, therefore, could conceivably have a major impact on the policy making process at BHP.

With this consideration in mind three models will be reviewed: The rational model concerned with policy determination, the incremental theory of decision making which takes as its point of departure some of the shortcomings of the rational model and political systems policy making model, which explores the influence of external bodies.

## **The Rational Model of Policy Making**

The rational model is perhaps the best known theory of decision making and 'also perhaps the most widely accepted', according to Prunty (1984, p.2). It involves a process whereby decision makers choose a course of action by investigating the problem, identifying goals, searching out strategies and alternatives, comparing them in the light of their consequences to the goals and bringing expert judgement to bear on a choice of action to solve the problem.

The rational model has been the basis for a great deal of research and according to Cooke and Slack (1991) has proved useful where decisions are made by one person or a group which can be treated as a single decision making unit. In addition, Simon (1976), Kauffman

(1982) and Pugh and Hickson (1986) point out that many corporate decision makers use the model implicitly as a guide to practice.

There are those who would argue, however, that this model has serious limitations; that in reality a great deal of policy making will not fit the model. The model assumes that policy making is the product of 'one mind', which is often not the case. Sheppard's (1983) research shows that managers often collect information from many parties and then make a decision. It assumes that identifying a problem is a one dimensional process. However, detecting the problem is often a difficult task. It may be as important as finding the answer in many cases. Problems are not self evident. They have to be perceived, and this requires making a judgement. Identifying a problem in particular terms often means that limitations are straight away put on the nature of the decisions taken about it. Lindblom (1968, p.37) puts this succinctly when he says,

A policy is sometimes the outcome of a political compromise among policy makers, none of whom had in mind quite the problem to which the agreed policy is a solution. Sometimes policies spring from new opportunities, not from problems at all and sometimes policies are not decided upon but none the less happen.

The rational model also assumes that policy makers have the time and information to consider all options and to accurately predict the consequences. Critics point out though, that to clarify all relevant corporate goals, to take an inventory of all possible alternatives, to track down the endless possible consequences of each possible alternative and then to match the multi-fold consequences with the statement of goals probably runs beyond the time and energy the decision maker can devote to the problem and is probably beyond

information that is available to the decision maker. In practice, says Simon (1986), the limited knowledge of decision makers makes perfect rationality an unlikely event.

The rational model faces other difficulties: For example, the bureaucratic organisational structure in which the policies are to be made can be criticised as being too fragmented to allow a rational decision to be arrived at. As well as this a corporation's prior commitments and financial constraints often preclude the consideration of a full range of policy alternatives. Johnson and Scholes (1988) describe this as a situation where the stakeholders in the bureaucracy may be unable to agree on the goals to be pursued in particular circumstances or at a particular moment in time. This produces the situation where minimum acceptable requirements are met, rather than one which produces maximum pay-off. Simon (1986, p.120) describes this as the '...acceptance of 'good enough' solutions, based on limited information leading to satisficing.'

Dye (1978, p.31) makes a strong objection to the use of the rational model on the grounds that it does not involve the issues of power and values. He writes,

'There are no societal values that are usually agreed upon, but only the values of specific groups and individuals, many of which are conflicting.

The many conflicting values cannot be compared or weighted; for example, it is impossible to weigh the value of individual dignity against a tax increase.

The environment policy makers, particularly the power and influence system, renders it impossible for them to see or accurately weigh many societal values, particularly those values which have no active or powerful proponents.

Policy makers are not motivated to make decisions on the basis of societal goals but instead try to maximise their own rewards - power, status, re-election, money, etc.'

Recognition of these weaknesses has prompted a some researchers to modify the model. To cope with human limitations, March and Simon (1957) suggest a satisfaction model of activity, whereby the decision maker selects the first alternative which satisfies basic expectations, rather than first canvassing all possible alternatives. Peterson (1976) has developed instrumental rationality which does not assume that decision makers have a common hierarchy of values. His model assumes that a rational decision maker selects from the alternatives available the one which is most suited for achieving whatever goals (rational or not) the decision maker has in mind. Dror's (1968) optimal model is concerned with decisions being made on the basis of resources and lost opportunities; he incorporates quantitative and qualitative variables, policy issue considerations and socio political considerations and opportunities for feedback and adjustment into a model made up of four stages and eighteen phases.

The criticisms of the rational model in its purest form, outlined on pages 27-38, give cause to ask whether decision makers at BHP would follow an 'objective' rational model of policy making. When making other industrial relations decisions at BHP such as the modules which are to be included in the training program, individuals 'satisfice' in their decision process. 'Satisficing' requires management to identify problems and opportunities within a limited perceptual framework, usually leading to the acceptance of 'good enough solutions' which meet minimum acceptance criteria. This is the case

because many decisions are made in circumstances where outcomes are uncertain and where the management must make a judgement on the perceived worth of alternatives within a limited time frame.

## **The Incremental Model of Policy Making**

Originating from the theories of the economist Charles Lindblom (1959) the incremental model takes as its departure point many of the criticisms of the rational model. Yeakey (1983, p.265) advocates the use of the incremental model because,

... of the political expediency it affords in reaching consensus among the various priorities with only modifications rather than changes in existing programs.

The essential features of the incremental model as cited by Schoettle (in Yeakey 1983, p.266), can be summarised as follows:

Choices are made in a given political universe, at the margin of the status quo.

A restricted variety of policy alternatives is considered, and these alternatives are incremental or similar changes in the status quo.

A restricted number of consequences are considered for any given policy.

Adjustments are made in the objectives of policy in order to conform to given means of policy, implying a reciprocal relationship between ends and means.

Problems are reconstructed or transformed in the course of exploring relevant data.

Analysis and evaluation occur sequentially, with the result that policy consists of a long chain of amended choices.

Analysis and evaluation are oriented toward remedying a negatively perceived situation, rather than toward reaching a preconceived goal.

Analysis and evaluation are undertaken throughout society, that is the locus of these activities is fragmented or disjointed.

Under the incremental model the task of policy makers is to devise solutions acceptable to the range of conflicting interests. This can be a limitation where creativity and innovation are concerned because only alternatives which differ marginally from existing policies are considered. Incremental model policy makers will be destined to make and re-make policy endlessly, never expecting that a policy will provide a final resolution to a problem.

The main weakness of this model is its inability to account for major changes. As well as this, it does not consider that policy makers often behave in a non-incremental manner. Sometimes they behave as if they are dealing with radically different alternatives. The model also has limitations if new decisions are built on a misdirected base. Therefore, it is only useful when existing policies are reasonably acceptable. In times of crises or rapid change, something more than incrementalism is likely to be warranted.

Thus, while incrementalism does take into account some of the shortcomings of the rational model it too has drawn unfavourable reviews. One of the most scathing is outlined by Etzioni (1968, p.387):

Decisions by consent among partisans without a society wide regulatory centre and guiding institutions should not be viewed as the preferred approach to decision making.



In the first place, decisions so reached would, of necessity, relate to the interests of the most powerful, since partisans invariably differ in their respective power positions; demands of the underprivileged and politically unorganised would be unrepresented.

Secondly, incrementalism would tend to neglect basic societal innovations, as it focuses on the short run and seeks no more than limited variations from past policies. While an accumulation of small steps could lead to a significant change, there is nothing in this approach to guide the accumulation; the steps may be circular - leading back to where they started, or dispersed - leading in many directions at once but leading nowhere.

While incrementalism might appear to be a significant departure from the rational model, it is clearly a variation on the same theme. It differs only to the extent that it recognises some of the limitations. It simply recognises that decisions can be made more easily in smaller, less comprehensive units.

Combining some of the strengths of the incremental and rational model became the basis for Etzioni's (1968) mixed scanning model. In this model he differentiates between fundamental decisions and incremental decisions. Incremental decisions which set operating directions are built upon fundamental decisions which set basic directions. Both require the decision maker to scan alternatives. This does not mean that all possible alternatives are considered. Those which are quickly chosen are considered in detail and in the light of priorities. Etzioni's model assumes that a criterion can be developed which helps to distinguish between fundamental and incremental decisions.

The incremental model has some application for an analysis of policy making at BHP. It acknowledges the impact of bounded reality and does not assume that all decision makers see the problem in the same way, nor that all possible alternatives can be considered.

## **The Political System Model of Policy Making**

Mitchell (1968) traced the political systems model origins back to its beginnings in biology, physical science and engineering. The political systems approach to policy analysis is an application of general systems theory by political scientists. Easton (1965) did much to champion the cause of political systems theory. He proposed that the policy maker must look beyond internal decision making processes and to the interrelationship between different decision making bodies. The decisions made by one body are virtually certain to affect others, and those others, at a minimum, are likely to ensure that the results for themselves are not disadvantageous. Angus (1989, p.587) provides some insight into that view when he says,

Policy making is above all a political activity concerned with reconciling the claims of different interest groups. Decisions about policy are usually made on the basis of intuition, force of argument, and finally, judgement, as much as on any 'rational' consideration of research based facts or theories.

Truman (1951) is one of the major theorists in this area. He emphasises that society is composed of many competing groups and that it is impossible to predict consequences without taking these into account. In this theory, groups make claims according to three main

characteristics; the internal workings of each group, the relative strategic positions in society of each group and the characteristics of government or government procedures.

The political systems model describes how policies are made. Arguably, in principle BHP's interests would be best served by making decisions independently of interest groups. However, in practice it is sometimes confronted by the activities of pressure groups particularly on matters where there is conflict between different interests in society and where the main running is taken by interest groups rather than by administrators or officials. Anderson (1979, p.17) points out that the political systems model recognises that there is a climate in which managers must operate which may either facilitate or impair policy making effectiveness. For example, in the past BHP has been faced with environmental issues such as site rehabilitation at Newman and social welfare issues such as Aboriginal land rights at Yandi.

The limitations of the political systems model are that decision making is seen simply as the result of group conflict and compromise or that administrators and policy makers are seen as no more than mediators between rival groups. In addition, there is a tendency to play down the importance of the role of individuals and of organisational factors and environmental conditions. These considerations led the researcher to reject the model for the current study.

## Summary

For the purpose of structuring the thesis a variation of the rational model of policy making was chosen. This does not mean the author advocates BHP should use the rational model for its decision making process. The rational model was chosen because it enabled the author to look at the factors, which according to the participant's, will determine the success of Traineeships at BHP. In the study the author is not analysing a policy decision that has already been implemented but a policy decision that has yet to be made and therefore, about which consequences can only be predicted. Of all the models of policy making, the rational policy making model is the one which advocates how policy should be formulated. The other are models are instruments for critiquing policies that have already been made.

A variation of the rational model of policy making best fitted the nature of what needed to be done in the thesis. Traineeships are radically different to current training methods so that any changes in policy could not be deemed to be incremental. Thus the incremental model would not be appropriate for this study. The political systems model does not look at options. The political systems model is more suitable for analysing decisions that have already been made, rather than for formulating policy on the basis of which decisions which will be made in the future.

Another reason for selecting the rational model of policy making was to gain the co-operation of the BHP participants to carry out the study.

The author made a judgement that BHP participants were less likely to feel comfortable with any of the other models. The author is not claiming that the rational policy making model is best suited for BHP, but rather that for pragmatic reasons, a model which facilitated the author's entry into the field selected.

As will be pointed out in the next chapter, this thesis largely fits a case study or naturalistic approach to research. In anticipation of what will be said there, it can be noted that the rational model does not preclude a case study methodology. Stake (1988, p256) says that the principal difference between case studies and other research studies is that the 'focus of attention is the uniqueness of the case' and 'The principal difference is not one of method.' He points out that,

To carry out most case studies you set the boundaries, and then you search out certain issues or themes. (1988, p258).

In this thesis, the rational model was used to help set the boundaries.

The study itself is naturalistic rather than positivistic, qualitative rather than quantitative. Some advocates of qualitative naturalistic studies take the view that predetermined frameworks are antithetical to naturalistic, qualitative research. This study does employ a number of predetermined frameworks, namely the rational model of policy making and a tentative typology which makes explicit the author's implicit theory. These frameworks may seem to compromise the pure version of naturalistic, qualitative research. However, the author

would argue that they do not invalidate claims that the research is qualitative for a number of reasons.

The rational model is used to set the boundaries of the study and within each step of the rational model participants' perceptions and meanings of the situation were solicited. The rational model at a structural level was restrictive but it was flexible enough within each stage to allow a naturalistic approach. The participants brought the content to each step. There were no fixed predetermined contents. The author was not trying confirm her own implicit theory.

All research has to have boundaries. The author used the rational policy making model to set the boundaries. Within the boundaries the participants were given a freehand to make comment, or as in the inclusion of the fourth option, to extend the boundaries.

This research is based on the assumption that no one is free from implicit theories and that the honest thing to do is to make them explicit and indicate the basis upon which they were formed. The author's implicit theories were formed from reasoned speculation, logical deduction, literature reviews, pilot interviews, sighting of confidential BHP documentation and observation during industry access with BHP.

The tentative framework was embryonic but it provided a starting point. The intention was never to confine data collection to the contents of this framework or seek confirming evidence for it, but the findings Chapters 4 to 9 document the participants' views on the

options rather than simply present the contents of the tentative typology. It is acknowledged that the options identified before the data gathering remained the same with a further option being added after pilot interview discussions.

# CHAPTER 3

## METHOD OF INVESTIGATION

### INTRODUCTION

The methodology which was used to collect, collate and interpret data for the study during 1993 and 1994 is based on the naturalistic paradigm of inquiry and documentary analysis. Kuhn (1970, p.109) wrote that the selection of any one method must be based on its 'goodness of fit' or appropriateness to the subject of inquiry. A variety of reasons underlie the selection of a qualitative approach using a naturalistic ethnographic data collection method rather than a quantitative method using positivistic<sup>6</sup> data collection. First, it allows for a consultative and participatory process, a feature which received the endorsement and co-operation of employees within BHP. Second, it allows participants complete freedom of response and permits insight into the reasons for those responses. According to Guba and Lincoln (1985, p.235) naturalistic inquiry has a number of characteristics to recommend it for use in research because,

It offers a contextual relevance and richness unmatched by any other paradigm.

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<sup>6</sup> Positivism is a general philosophy which stresses the power of knowledge to solve major practical problems. Its origins can be traced back to the latter half of the 19th century and the term itself is associated with the French philosopher Comte.



The main emphasis of the study was on discovery rather than on the testing of predetermined theory. This is not to say that predetermined theory had no place in the study. As outlined on page 48 the author did have an implicit, albeit embryonic, theory of factors affecting the introduction of Traineeships at BHP. However, Chapters 4 to 8 indicate that the central focus of this thesis is not so much the direct testing of this theory but rather the documenting of participants' perceptions on matters that they consider fall within the framework of the theory.

The relationship between the literature and field data was interactive. Information gained from the on going literature review helped to construct the framework for organising and analysing data collected from participants. It also assisted with the selection of relevant questions, and set a broader context for assessing the significance of the rational policy making model. BHP was selected on the basis of the researcher's participation in a ten week industry placement scheme sponsored by the Education Department. Other factors which contributed to BHP being selected to participate in the research were the identification of a problem by Senior Officers which required independent investigation, as well as the large number of personnel involved in the training sector and the researcher's access to them. With such a large number of trainers to choose from, the likelihood of recruiting participants from a wide range of backgrounds and with a variety of experience was increased. Murphy (1980, p.79) advocated this approach when he advised researchers to 'seek a variety of perspectives on key issues'.

As an industry access participant the researcher had previously made frequent visits to the sites used in the study. This assisted in establishing rapport and open and honest relationships with the participants. It should also be mentioned that prior to commencing the study the researcher formed certain impressions as a result of: speaking with trainers in other sectors of the mining industry who were not involved in the study; being a member of the Secondary Education Curriculum Committee Working Party set up to investigate the match between secondary curriculum and the Mayer Competencies; and reviewing current literature. These impressions helped to construct a preliminary framework for the collection of data. The framework, however, was a starting rather than finishing point and was not used to restrict the collection of data. All information given by participants was fully and faithfully recorded even if it did not fit predetermined frameworks. Woods (1986, p.247) supported this approach when he said,

Concepts emerge from the field and are checked and re-checked against further data, compared with material, strengthened and perhaps reformulated.

Although a tentative framework was used to organise and analyse data initially collected, it was modified to include data which fell outside of it and to allow for a variation of the rational policy making model to be used to give final order to the data and to be used to select the option which participants considered best suited BHP's training needs. In accordance with Goode and Hatt (1952, p.186) a data prompt schedule was produced to allow the interviewer to focus on key issues while phrasing questions in a manner which best enabled each participant to understand the question. To find answers

to the central question, a case strategy was adopted and a policy making model to frame the data was devised.

## **DESIGN OF THE STUDY**

The research design was a bounded case study. The data was not selected to fit a predetermined framework but a predetermined framework was used to collect data and not to limit the collection of data. The predetermined framework set the broad topic area but not the contents within the topic areas. Effort was made to ensure that data was gathered on all four options but not to confirm existing prejudice by the author.

The case involved a national competency based training scheme, the details of which were formulated in the abstract, and a large corporation which investigated the scheme's suitability in the practical sense. Therefore, it was a study of a unique instance which had perimeters defined by a sense of obviousness. The fundamental question was whether or not the data actually satisfied the demands of the problem. An interactionist process of collecting and analysing data was used within the constraints of a framework developed from a rational policy making model. (See Table 6).

The study constituted research on a real problem for BHP. The entry level training dilemma had already been identified by senior Personnel Officers as a policy problem and the researcher was asked

to conduct a preliminary study during a ten week industry access period. Since the case study was instigated by an agency with its own agenda, the case study was 'sought' according to Adelman et al (1976, p.144). This means that,

Decisions about how case studies should be planned, conducted and reported are as much practical decisions as theoretical, governed by the exigencies of the situation as well as by general views of educational research and evaluation.'

As a qualitative study, this approach has the advantage of enabling any reader responding to the case study to use their own experience and knowledge to understand and interpret the data. Adelman et al (1976, p.148) see this as being one of the strengths of the case study method, when they point out that readers can,

...employ the ordinary processes of judgement by which people tacitly understand life and social actions around them.

Stake (1978, p.5) supports Adelman's claim when he comments on case studies as a preferred method of research,

If the readers of our reports are the persons who populate our houses, schools, governments and industries; and if we are to help them understand social problems and social programs, we must perceive and communicate in a way which accommodates their present understandings.

The major research tools used for the study were extensive semi-structured interviews with participants who were knowledgeable about the corporation or current training developments, and relevant document analysis. The semi structured interview had the advantage of providing broad areas for questioning in order to gather data, while

still permitting the researcher to ask probing questions of particular individuals to gain an understanding of the respondent's answers to the questions from the common broad areas.

The focus of the research was to identify the factors which participants believed would contribute to the predicted consequences of adopting different training options at BHP Iron Ore. York (1992, p.13) points out that any company considering a change in policy needs to consider the consequences because any fundamental change will be viewed by employees and the community in the light of personal goals. York sees a danger in 'management proceeding with change unaware of the depth of resistance which exists'. In this study the participants were asked to identify realistic options for change. Individual perceptions of barriers or constraints involved with each of the options were established by asking direct questions and then a form of triangulation described by Jick (1987, p.603) as a 'within-methods' strategy was used to verify their responses. Using the 'within-methods' strategy in this study involved cross checking for internal consistency so that a careful explication of which 'facts' were agreed upon by the participants and which ones were open to diverse interpretation was established. This involved asking someone who interacted with the person or the issue for their viewpoints on the researcher's interpretations.

## **DATA COLLECTION**

All interview data was recorded by the researcher so as not to eliminate any from consideration or narrow any of the richness of the responses. The recorded descriptions were complex, holistic and involved a myriad of sometimes isolated variables, so that in Stake's (1978, p.7) opinion, 'One is left with more to pay attention to.'

A sample group of nine employees who were representative of Senior Management, Middle Management and Apprentices from BHP Iron Ore in Western Australia was selected for interviews. Government agency representatives from the Department of Employment, Education and Training in Perth and Canberra were also interviewed, as well as a policy officer from the Western Australian Trades and Labor Council and a Union representative nominated by the Trades and Labor Council. The Chairperson of the Metals and Engineering Industry Education and Training Council was interviewed to provide background information. The people selected to participate in interviews were volunteers and in the case of government agency personnel, considered to have a sound knowledge and understanding of the Traineeship and Apprenticeship Schemes. In the case of BHP, participants all were identified by their peers as being co-operative and honest. The researcher verified this through informal discussion with co-workers and superordinates prior to the commencement of the study. The interviews were conducted during the last six months of 1993 and the first three months of 1994. This gave the participants time to consider their opinions and develop their views. It also provided a sound basis for the collection of data.

The types and number of people interviewed included:

- 2 BHP Apprentices
- 2 BHP Senior Training Officers
- 3 BHP Training Officers
- 1 BHP Senior Personnel Officer
- 1 Senior Industrial Relations Officer
- Chairperson Metals and Engineering Industry Education Training Council
- 3 Senior Traineeship Policy Officers Department of Employment, Education and Training.
- 1 Senior Policy Officer Trades and Labor Council of Western Australia
- 1 representative nominated by the Trades and Labor Council of Western Australia

In the lead up to the major interview, time was spent developing a collegial, non threatening relationship with each BHP participant, a situation made possible by virtue of the researcher spending a ten week industry access period with BHP Iron Ore. During this period the researcher spent several weeks in total living in Pt Hedland and Newman as well as meeting with the participants during their visits to Perth. Because this type of socialising was not possible with Apprentices who had to maintain a strict schedule, a group interview was arranged for them. Primarily, this was to make them feel more comfortable but according to Anderson and Ford (1994, p.64) it had the potential to achieve other benefits,

Experience suggests that a group provides information that is qualitatively different from that obtained by summing up the results of individual interviews and that it yields a wider range of information, ideas and insights than could be obtained from any of the individuals alone. Reasons for this are likely to include:

- the synergistic effect
- the greater candour participants are willing to display with peers
- the creative stimulus provided by discussion
- the security and anonymity of group discussion.

The interview format involved collecting baseline descriptive data and gave people being interviewed an opportunity to make comments which were outside the structure of the interview. The structured part of the interview consisted of a set of broad common areas for investigation. These areas were explored in the first instance through open ended questions. When necessary, more specific questions were asked based upon a tentative typology of conceivable consequences and factors determining the outcomes of introducing the Career Start Traineeships to BHP. This typology constituted an implicit theory, held by the researcher, of the effect of introducing Traineeships into the corporation. It served as a preliminary conceptual framework from which questions were formulated when participants did not volunteer information during the course of the interview in response to the more open ended questions.

The three option component provided the broad structure of the whole thesis. The options remained the same with the addition of a fourth option at the suggestion of some of the participants. The perceived consequences and factors determining these consequences were central to the study. The details of these consequences and factors were filled in by the participants. The perspectives of the participants were consistent with, but went beyond the tentative typology. The author's implicit theory seemed to be shared by the participants. There was no rank order in presenting the options and the framework was not used to exclude information.

This tentative typology is outlined in Table 5. It consists of three options. For each option a list of consequences is provided. Against



each consequence are listed factors or grounds for claiming that the consequences could be expected to occur. Another option, that of rejecting the Traineeship, and further consequences and factors were considered as a result of interviews with participants.

The broad components of thesis tentative framework - the options, consequences and factors, as topic areas - provided an overall structure for the thesis. However, the tentative framework did not determine the fine detail included within each of the broad topic areas.

The elements of the tentative typology were worked out partly on the basis of what seemed to be a logical process of reasoned speculation, pilot interviews and the author's observations during her industry access placement with BHP.

## TABLE 5

### TENTATIVE TYPOLOGY FOR INITIAL INTERVIEW USE

OPTION	CONSEQUENCE	FACTORS
Integrate two systems	Extra employees taken on for one year	Government subsidies for BHP Greater pool from which to select employees for BHP
	Disgruntled employees	Current employees want their off-spring to be employed, regardless of aptitude
	Certification which is nationally recognised	The AVC system of accreditation adopted
Two systems side by side	Extra employees taken on	Government subsidies for BHP Social justice principles ignored
	Disgruntled employees	Those not continuing employment feel cheated
	Certification differentiation	Some employees given competence based certs
Traineeship as only entry level intake	Entry level training reduced	Inadequate to meet future needs
	Disgruntled employees	Skill shortage on site
	Certification	Inadequate for employees

It became clear as the interviews proceeded, that a range of considerations had to be discussed. 'Prompts' based partly on literature and partly on pilot interviews were formulated and used to ensure that consideration was given to political, social, motivational, organisational, public relations and industrial relations matters during the interviews. These prompts were not necessary in all interviews and were introduced when required in others.

In addition to interviews, data was collected from other sources such as relevant documents including TAFE modules, informal discussions in the 'mess', correspondence and information offered by any other stakeholder.

Interviews were conducted on site and recorded by the researcher in shorthand. After the first round of interviews a draft copy of the findings was given to personnel officers at BHP, the Department of Employment, Education and Training and the Trades and Labor Council of Western Australia for their comment. These comments were incorporated into subsequent drafts of the thesis, sometimes in the text of the report and sometimes as footnotes.

## **ANALYSIS OF DATA**

A preliminary analysis was conducted while the researcher was still gathering data. Further data collection took direction from the

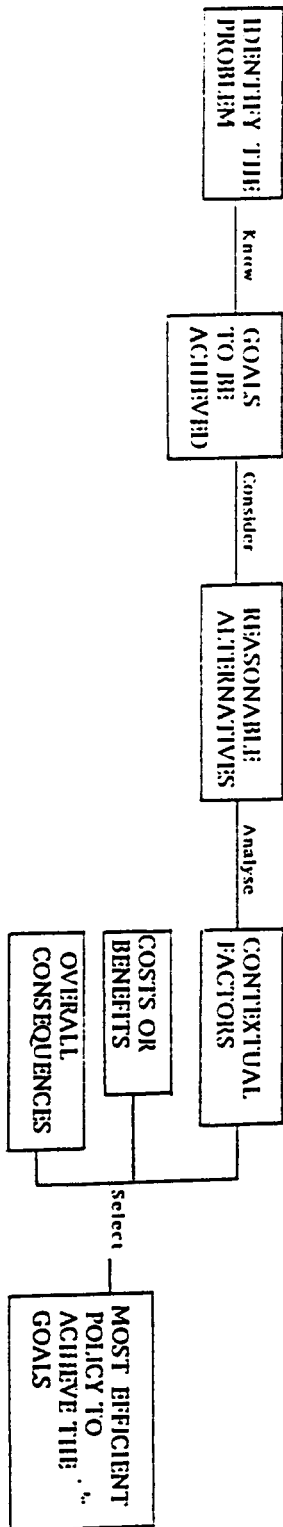
provisional analysis and the amount and kind of provisional analysis carried out was constrained by the limits put on the data gathering process by BHP. For example industrially sensitive issues such as union participation and the time made available for employees to participate in the study were fieldwork exigencies which restricted further data collection in many instances.

All interview data collected was subject to what Woods identifies as 'speculative analysis' (1986, p.120). This involved recording reflective comments beside the transcription of discussions with participants. These comments were categorised according to patterns that emerged from the data itself. The categorisation/patterns were then compared with the tentative typology area for interviewing purposes. Some patterns fell inside the tentative typology, some outside, and some aspects of the typology were additional to the patterns that emerged from the data. A second typology was formed using the same framework as the first to incorporate four options and further consequences and factors that emerged as a result of participants' views. These factors represented the grounds cited by participants to support their claims about predicted consequences. Some of the factors were internal to BHP's organisation, company objectives, company culture and resources allocation. Other factors extended beyond BHP; for example, legislation, union ideology, company perspectives, expectations of the broader corporate world, the Confederation of Industry, TAFE and the government. Thus the second typology which included a 4th option, was formed on the basis of the data collection from BHP employees, literature review, general impressions gained by the researcher as an industry access

participant, interviews with the Department of Employment, Education and Training, interviews with a Trades and Labour Officer and speculative analysis using the principles outlined by Woods, (1986, p.120).

Using a variation of the rational policy making model, devised by Prunty (1984), which is outlined in Table 6, the findings were then organised to make recommendations to BHP. The selection of this model was based on a desire to pursue a naturalistic, qualitative approach within an overarching policy framework. In order to keep the study within manageable proportions every possible option was not investigated as would have been the case if the rational policy making model was used in its purest form. Furthermore, unlike the pure version of the rational model, no attempt was made to identify all consequences of each option; instead, the list was limited to consequences perceived by the participants in the study. Thus the variation on the rational model came from a need to limit the scope of the research and from the decision to employ a qualitative approach that focussed on subjective realities.

TABLE 6



A VARIATION OF THE RATIONAL POLICY MAKING MODEL.  
FOR USE AT BHP IRON ORE IN WESTERN AUSTRALIA

Source: Prunty, J.J. (1984). A critical reformulation of educational policy analysis. Victoria: Deakin University Publication.

The researcher was wary of trying to impose neat classifications and categories on all data having been alerted by a warning from Geetz (1975, p.20),

To set forth symmetrical crystals of significance, purified of the material complexity in which they were located, and then attribute their existence to autogenous principles of order, universal properties of the human mind, is to pretend a science that does not exist and imagine a reality that cannot be found.

Although the steps comprising the model in Table 6 may be similar to some scientific models, the processes of data collection and analysis adopted in this study for each step are qualitative rather than quantitative. Thus the study takes heed of Geetz's warning against the use of positivistic scientific models. Kaplan (1964, p.26) supports Geetz's view and suggests that researchers who impose such order may draw conclusions which are 'too good to be true'. According to Pepper, Fearing and Whorf (cited in Von Bertalanffy, 1973) the researcher's interpretations are coloured by prior knowledge and experience. The researcher is both the instrument for data collection and interpretation, and as such must make explicit his or her own conceptualisation of the research so that the reader can judge whether or not a fair and balanced view is presented (Duignan, 1981). Morgan and Smircich (1980) have a similar view because they advocate researchers being explicit about the beliefs they bring to their study in order to better serve the development of organisational theory. The author has attempted to make her beliefs explicit by documenting an implicit theory, even though it was developed only at a rudimentary level. At this stage it may be worth mentioning that as a result of a ten week teacher-in-industry placement program the

author did gain some prior knowledge of and experience with BHP before collecting and analysing a lot of the data.

A contrasting view is presented by Wilson (1977) who believes that the success of the research depends on the ability of the researcher to make himself/herself a sensitive instrument by transcending his/her own perspective and becoming acquainted with the perspective of those he/she is studying.

For the purpose of this study the researcher used the participants' perceptions of reality. Since the research was instigated by BHP and the researcher did not have any involvement with the competency based training scheme prior to the commencement of the study, related literature and documentation relevant to the focus of the inquiry were used wherever possible to substantiate analysis. Becoming acquainted with the perspectives' of the participants became the prime concern and the researcher endeavoured to remain 'neutral', in keeping with Wilson's (1977) theories on successful research. The research conclusions in this study depended not only on the researcher's interpretations of interview responses, but also on confidential documentation from BHP's records and government publications and position papers.

## **VALIDITY OF DATA**

Goetz and LeCompte (1982, p.58) point out that, 'Attaining absolute validity and reliability is an impossible goal for any research model'.



Nevertheless, they believe that investigators may approach these objectives by conscientiously balancing the various factors which enhance credibility within the context of their particular research problems and goals.

Although naturalistic inquiry avoids the threats to validity that are introduced through artificial devices, such as experimental intervention or prestructured data collecting instruments, it does not avoid all forms of artificiality. While the tentative typology was used in the initial interviews, it was considered to be a starting point and the comments of the participants shaped the framework and contents of the final report. The tentative framework was quite brief and as such gave participants scope to add or delete options, consequences and factors. Kennedy (1984, p.367) claims that all artificiality cannot be avoided when she discusses the role of the interviewer in heightening the participants' self-consciousness about their own activities and the motivation of the participants to alter their testimony for a number of reasons. Sechrest (1979) argues that this introduces an element of 'social desirability' bias which becomes stronger as participants gauge what they think is expected of them in terms of giving the right answers. As a result they modify their responses to produce answers which they believe to be correct. Naturalistic studies need to be sensitive to this possibility and attempt to uncover what lies below the surface of 'socially desirable' responses.

Another threat to validity can be the researcher's inability to observe the complex social patterns which produce a participant's response. For example the researcher may hear about a training decision which

has been made but is not party to the hallway conversations, mess discussion and directives which preceded the decision. Consequently, the quality of the data is dependent on the participants' versions which may be shaped not only by social desirability but also his or her insight.

Having recognised these biases the researcher, in this study, took action to minimise them. The researcher endeavoured to structure questions so that participants did not feel the need to imply or state a positive point of view which they perceived to be expected. For example, participants were asked to discuss training issues that they were concerned about and how they were trying to resolve them rather than to discuss the nuts and bolts content of the training program. To avoid a false negative point of view which participants may have felt to be socially desirable, participants were asked how they know something to be fact or why they predicted one outcome rather than another.

A variety of checks were made to ensure that participants' perceptions were recorded and presented accurately and were not subject to interviewer misconception. Rapport was established to elicit open honest responses, interviews were recorded in shorthand, transcriptions of interviews were returned and discussed with participants to give them an opportunity for verification, and two drafts of the report were presented to participants for comments. In responding to the drafts of the report, the interviewees were verifying not only an analysis of field data but also the researcher's analysis of documentary material. The responses to the final draft were

incorporated in the thesis in the following ways: Inaccuracies were corrected in the text and supplementary comments were footnoted. Overall, the participants largely endorsed the conclusions drawn by the researcher during this validation process.

In the case of the Apprentices, the group interaction, according to Anderson and Ford (1994, p.65) was another check for validity,

An inbuilt system of checks and balances is provided by the willingness of participants to challenge and probe (the responses of others).

Interviews were conducted on a fly in and fly out basis with those participants situated at the Hedland and Newman sites during 1993 and by telephone in 1994. Prior to flying in the researcher contacted the BHP participants by telephone to help foster an open relationship. Since the researcher was in constant contact with all of the BHP employees, except the apprentices, on matters not related to the study, she was in a better position to conduct the scheduled study interviews in a collegial atmosphere. The interviews with Perth based personnel were conducted at the Office. Interviews with the Department of Employment, Education and Training participants were conducted in person at the Perth Office and by telephone at the Canberra Office. The interview with the Chairperson of the Industry Education Training Council was conducted in his office and the interviews with the Trades and Labor Council participant and representative were conducted at Edith Cowan University and by telephone. A collegial relationship had already been developed with the Trades and Labor Council participant through a three year involvement with a post graduate unit which the researcher co-

ordinates at Edith Cowan University. The length of the interviews varied from 30 minutes to one hour depending on the time available to the participants.

TABLE 7

SCHEDULE OF ACTIVITIES FOR THE STUDY

Schedule Used for Interviewing, Transcribing, Analysing and Drafting of Data.

ACTIVITIES	DATES													
	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Graduate Seminar	█													
Research Proposal	█													
Pilot Interviews		█												
Participant Selection		█												
BIIP/DEET Interview 1			█											
Participant Feedback				█										
IETC Interview				█										
BHP/DEET Interview 2					█									
Participant Feedback						█								
TLC/Reps Interview								█						
Participant Feedback									█					
BIIP/DEET Interview 3										█				
Participant Feedback											█			
Data Analysis	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Report Preparation	█	█	█	█	█	█	█	█	█	█	█	█	█	█
1st Report Draft to BIIP Participants							█							
2nd Report Draft to BIIP/DEET/TLC												█	█	█
Submit Final Draft														█

## **LIMITATIONS OF THE STUDY**

The study was limited to one company and to the perspectives of a small sample of stakeholders involved with that company. Due to industrial sensitivities, the study did not involve the Union. The boundaries of the case were set by the constraints imposed by BHP and therefore, the Union could not be considered. The omission of Union perspective was requested by BHP because management and unions had recently entered into workplace agreements on the Newman and Hedland sites and BHP did not wish the study to be seen as a move by management to undermine the terms of the agreements. This was a significant limitation given the nature of the workforce at BHP. There are two groups: management and union members. The study did not involve a direct investigation of the views of one group of workers. This situation needs to be taken into account whenever claims are made in this study about BHP's 'views' on the subject of competency based training because such views are those held by a small group of managers. The researcher tried to redress this imbalance by seeking responses from the Trades and Labor Council of Western Australia and a representative nominated by its Policy Officer. However, the Trades and Labour Council and its representative are not directly involved at any of the BHP sites.

It is worth noting that there were varying levels of understanding about the new Career Start Traineeship Scheme within the BHP workforce. Since the Traineeship Scheme has never operated in West Australia some interviews provided data reflecting this lack of

knowledge and as such did not make a substantial contribution to the research question.

Another factor was the lack of anonymity able to be given to the participants inside the corporation. The sample group was small because of the size of the operation itself. In some cases it was impossible to disguise the identity of the participants within the corporation. An attempt was made to overcome any detrimental effect of this by allowing informants to respond to the researcher's accounts of their view. They were given drafts of the study containing direct quotes and asked to expand upon, support or delete any of their own statements. Consequently some of the comments of the participants were removed because the author had given an undertaking to allow participants to withdraw data, in keeping with the Edith Cowan Code of Research Ethics. The material removed tended to be the type which some participants deemed controversial such as comments about co-workers and industrially sensitive subject matter; its removal can be seen as increasing the possibility of a bias. Its removal may have added to the social desirability bias.

It was necessary in this study to eliminate the coding of participants responses in order to maintain anonymity. The nature of responses indicated the site and in some instances the position of the BHP participants. The participants did not wish these comments to be linked to some of the other comments. Because this type of study was new to most of the participants they were initially apprehensive about participating unless anonymity about individual comments was guaranteed.

A final limitation of the study was the variation of the rational policy making model itself. The limitation would have been greater had not the rational model been used only to provide a framework within which a naturalistic method of data collection and analysis was applied. Also, the researcher attempted to keep the ideology of the rational model at a distance. This was done by encouraging participants to 'speak their minds' rather than present 'socially desirable' answers or what they thought BHP would hope to hear. It was also done by reporting what the participants said rather than selecting only those comments which supported functionalist ideology. On the other hand, there were limits to the success of these measures. In order for the study to proceed it was essential to work within a model acceptable to BHP. Management at BHP indicated that an acceptable model would be unobtrusive and have the capacity to produce results quickly.



# **SECTION THREE**

## **FINDINGS**

# **CHAPTER 4**

## **DISCUSSION OF FINDINGS**

### **INTRODUCTION**

As mentioned earlier, the author believed that if BHP was to make BHP's a real policy decision based on the findings of the research then a rational model for policy development would be needed to suit the requirements of the organisation. For that reason, a variation of the rational policy making model, discussed in Chapter 3, was used to order the participants' responses and to provide a structure which can be used by the corporation to select an appropriate entry level training policy for 1995. In order to structure data collection and analysis according to the policy making framework, goals were identified, the problem was identified, reasonable alternatives were considered, the benefits and consequences of each alternative were considered and the most efficient policy was selected.

### **THE GOALS AND IMPLICATIONS FOR TRAINEESHIPS**

BHP Iron Ore is a division of BHP Minerals, one of the three core businesses of the Broken Hill Proprietary Company Limited. It is one of Australia's largest producers of iron ore with major mines at

Newman, Yandi, Yarrie and shipping facilities at Pt Hedland, all located in the Pilbara region. It employs approximately 2 700 people in Western Australia in broad and varied employment classifications.

'To be regarded by our Owners and Customers as the best Australian Iron Ore Company', is the objective of BHP's Business Plan. The owners are the Australian and overseas shareholders; and being the 'best' relates to high profitability and productivity. Clearly, achieving this objective will depend largely upon the company's ability to produce well trained workers who are able to realise their potential at all levels of the organisation.

One way to allow employees to realise their full potential is to introduce training which provides job enlargement or job rotation for workers. Scott (1991, p.88) sees this as the means to 'increasing the commitment and satisfaction of workers'. In his view, increasing the motivation of workers through comprehensive and relevant training will in turn empower workers to become more involved in decision making. This has the potential to spawn individuals who have considerable discretion and command over the tasks they perform and who as a result are not only able to reach their own potential but are also able to contribute significantly to increases in productivity. For example, at the Newman site it means providing training which gives the entry level employees a model to follow, specific goals to achieve, an opportunity to perfect skills, feedback on how well the trainees are progressing and praise for transferring the acquired skills to the job. This is in keeping with the company's objectives to provide satisfying work and meaningful careers for all its employees as well

as carrying out all aspects of its operations in a responsible manner in the countries and communities in which it operates.

## **IDENTIFYING THE PROBLEM**

The Superintendent of Training at BHP indicated that the problem for BHP is how to make its Metals and Engineering entry-level training more cost effective and to increase its flexibility and responsiveness to future requirements. Related to this problem is a need to establish courses which are nationally portable<sup>7</sup> to provide employees with the skills they require for a career within the company, to promote an image of civic responsibility and to reduce any negative industrial implications. The new Career Start Traineeship which will<sup>8</sup> be introduced by the Department of Employment, Education and Training may be able to address the problem. However, the extent to which the Traineeship is able to meet all the company's requirements needs to be examined before an entry level training policy can be decided upon.

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<sup>7</sup> During the validation process two BHP participants pointed out that nationally portable qualifications were a union need and definitely not a company need.

<sup>8</sup> The word 'will' was questioned by one BHP participant who believed that the words 'may be' seemed more appropriate, however, a DEET representative expressed a desire to ensure that readers knew Traineeships had already been put in place in a number of other industry areas.

## **REASONABLE ALTERNATIVES**

It is assumed that the participants in any of the Career Start Traineeship programs will be adults and young people who have reached at least Year 10 secondary schooling and who have no immediate expectation of proceeding to higher education. According to the Australian Standards Framework (Table 4) these workers have the opportunity to enter the training scheme at levels 1 to 3. School leavers would begin their training at level one and adults would begin their training at levels 1,2 or 3 depending on their recognised prior learning.

If BHP wishes to participate in these developments, it needs to make provision for its qualified Tradespersons who wish to transfer to the Metals and Engineering trades by doing a Traineeship or who are already qualified within the Metals and Engineering sector and who wish to transfer to another stream within the sector.

It cannot be assumed that the same model of assessment and certification is appropriate to all. In particular, a distinction needs to be made between, on the one hand, early school leavers who are seeking a transferable skill to give them mobility in the workforce and, on the other hand, the needs of adults in the workplace who are seeking recognition by their employer, of skills acquired over time and who seek to build upon these to broaden their skills base. For BHP, these considerations mean selecting appropriate modules from those available and in some cases negotiate with the Department of Employment, Education and Training to ensure that some of the core

modules <sup>9</sup> can be replaced by elective modules in the case of qualified Tradespersons undertaking a Traineeship.<sup>10</sup>

The Career Start Traineeship program in Metals and Engineering is currently being written by representatives from the National Metals and Engineering Training Board. It is envisaged by the Western Australian Department of Education, Training and Employment representatives that the program will not differ greatly from the current Metals and Engineering Traineeship (see Appendix 2). As is the current situation, Trainees will still be expected to be able to demonstrate their skills in 4-6 of the broad based national modules and 4-6 elective modules, making a total of 10 modules altogether. The difference will be that the Mayer (1992) generic competencies will be an inherent part of the modules and that assessment will be based on the achievement of competency rather than time served.

The new Traineeships will be open to anyone from the age of 15 to 64 and as such, recognition will be given for prior learning where the employee can demonstrate competency in any of the modules. Generally speaking, a person who has completed Year 10 will take two years to acquire the required level of competence, a person who has completed Year 11 will take eighteen months, a person who has completed Year 12 will take one year and there is provision for a person who has significant experience within Metals and Engineering Trade to reduce the one year completion time frame by applying for recognition of prior learning. The Traineeship has an 'on the job'

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<sup>9</sup> Core modules are those modules which are deemed to be essential for all Trainees in the Metals and Engineering Trades

<sup>10</sup> During the validation process a DEET representative pointed out that a qualified Tradesperson undertaking a Traineeship to gain qualifications in another area would receive full registration of prior learning.

training component which lasts approximately nine months and an 'off the job' training component which lasts approximately three months, depending on prior learning and the attainment of competency. The Federal Government also provides a number of financial incentives for employers who participate in the Traineeship scheme (see Appendix 3).

From reasoned speculation and an analysis of pilot interview material and a reading of literature on the topic, the researcher identified four approaches BHP Iron Ore can take with regard to the Traineeship until the end of 1995. It can run the Traineeship side by side with the current Apprenticeship system, adopt the Traineeship as the only form of entry level training, integrate the Traineeship with the current Apprenticeship system or reject the Traineeship altogether.

Depending upon which option BHP adopts, the company may need to re-assess its training system at the end of 1995, if the proposed Australian Vocational Certificates <sup>11</sup> become the national method of accreditation. The consequences of adopting each of the approaches can only be predicted at the level of reasoned speculation at this stage. This involves considering each of the options in terms of a variation on the rational policy making model, the participants' views and available literature.

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<sup>11</sup> During the validation process a DEET representative emphasised that the Traineeships are supposed to be a bridge to the Australian Vocational Certificates Scheme.

The next four chapters will investigate each of the options. The chapters are structured so that comments supporting the selection of each option are presented first. Therefore, the order in which the statements from BHP participants, Department of Employment, Education and Training and the Trades and Labor Council of Western Australia are presented differs in each of the chapters.



# CHAPTER 5

## OPTION ONE: RUNNING THE TRAINEESHIP SYSTEM SIDE BY SIDE WITH THE APPRENTICESHIP SYSTEM

### CONTEXTUAL FACTORS

The first option, running the Traineeship side by side with the Apprenticeship system, would involve the continuation of current training programs along with a program of training which would terminate after one or two years depending on how quickly the participants were able to attain the required competencies. There would be two distinct groups: those who were classified as Apprentices and those who were classified as Trainees. There would be no guarantee of continued employment for the Trainees once they had completed their training

The Department of Employment, Education and Training is enthusiastic and prepared to assist employers with the setting up of programs to facilitate options which allow the Traineeship to be put into effect. BHP has the training facilities at both the Hedland and Newman site to provide the necessary learning environments and the Trades and Labor Council is marginally<sup>12</sup> supportive of the concept if

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<sup>12</sup> During the validation process a DEET representative indicated a belief that the TLC support was strong rather than marginal

it allows more youth to become involved in the training process. A representative from the Department of Employment, Education and Training qualified the Department's support for this option with the following comments,

We do not have a major problem with this approach but it would be silly to do the ten core modules which are required in the Traineeship and the Apprenticeship and then terminate the Trainees while the Apprentices continued to progress down a career path. It would be disappointing for the Trainees and would seem to be a waste of resources for the employer. Granted that it is giving some skills to a group of workers, it is not really a good solution, in my opinion. It will not give the workers all the skills they need to function at levels 2 and 3 of the Australian Standards Framework and will not be in keeping with the Traineeship ethos of promoting career paths.

In both the media and government documents there is a strong expression that the traditional system of vocational education and training no longer adequately served the industry/business world. Whether or not this failure has led to an over reliance on imported goods and the resulting massive trade deficit is not the issue. However, the need to increase Australian competitiveness has given a high profile to industry when it comes to developing training programs. Within this strategy there is also a clear reliance upon leading edge firms to give new forms of vocational training the esteem desired by the Federal Government.

As one of Australia's largest corporations, BHP is considered by the Department of Employment, Education and Training to be a prime candidate for developing new training programs. As one Department of Employment , Education and Training representative put it,

We would appreciate the opportunity to collaborate with BHP here in WA. The number of apprentices may be small but BHP has a reputation for high standards. We would welcome their involvement in an enterprise training scheme and are prepared to offer financial incentives to assist them with the development of curriculum.

While there is evidence to suggest that representatives from the Department of Employment, Education and Training are keen to encourage BHP to become a Career Start Training provider, there seems to be a reluctance on the part of BHP to become involved in implementing the scheme until a long term federal training policy has been determined. As one BHP participant put it,

We will wait until the Department of Employment, Education and Training have sorted out exactly what it is they require from us. There is not a desire on our part to be at the cutting edge of training reform. We are a conservative division and we would prefer to have all the facts before us when we make a decision. We are invited to information giving meetings and conferences here (WA) and interstate. The appropriate representatives attend but it seems as if the Government (Federal) is still shifting its ground. There is too much confusion involved in the implementation phase at this stage.

On the national front the BHP Steel division has already established co-operative training arrangements with TAFE. At Wollongong a course has been developed leading to a 'Total Quality Control Production Engineering Qualification'. The company provides input to the course through attendance by company experts to a class made up entirely of company employees. Other companies have sought to influence curriculum development and course structures by representation on college councils, through the provision of equipment and skilled staff or by placing teaching staff within their enterprise. BHP has taken a direct approach in this instance. It remains to be seen whether or not the experts, who are not

necessarily trainers, are able to increase the skills of the students in the courses. One BHP participant thought that the prospect of running the two systems side by side could have social merit because BHP Steel Division had already had some success with TAFE courses. However, the participant did not believe it was a serious prospect,

It would be interesting to see what we could come up with from scratch for the kids. They have had some successful dealings with the TAFE over east but it is still too early to say what the outcome of the co-operation will be. Of course that is at a different level. But it would only be a service we would offer like the WHIZ kids program.<sup>13</sup> There wouldn't be anything in it for the company in any other way.

We already have our programs set up so in reality there would not be any benefit for the company to set up another one.'

Other BHP participants had this to say,

It would be fine if they were not expecting to be paid. We could train more than enough though I am not so sure that we would end up with the type of employee that we would want in the future anyway.

We couldn't do it as much as we would like to, not just for the sake of giving kids a chance.

BHP participants view the new Traineeship system as commendable in terms of its social redeemability or attempt to encourage employers to train more youth, but are less than convinced at this stage that running the scheme side by side with an already effective Apprenticeship scheme would provide them with the workforce they require in the twenty first century.

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<sup>13</sup> A six month training program offered to disadvantaged youth in the Hedland district. BHP pays an award salary to the youth and sends them to the TAFE college for 'off the job' training. The youth are given a certificate of participation and offered assistance in job search techniques at the conclusion of the program. BHP does not guarantee employment for the youth. All work clothes, boots, safety equipment and tools required for the period of employment are supplied by BHP

Social responsibility is, however, a pressure that BHP takes very seriously. This was indicated through the interviews by all BHP participants. According to them, the company prides itself on its provision and maintenance of high living standards and social benefits such as club houses, subsidisation of public libraries, sporting grounds and parks for its employees, some of whom have been with the company since the 60's. BHP is the major employer at the Hedland and Newman sites and has historically provided work placement for the offspring of its long serving employees. With workplace restructuring and the operation of several outlying sites on a fly in/ fly out basis, the company is reducing its entry level intake rather than increasing it. Nonetheless there is a perceived need, by some of the employees, for the company to reward loyalty with the offers of work placement for youth in the townships. Evidently, this creates an external pressure which BHP finds difficult to ignore.

Apprentices, who were not totally clear about how the Traineeship might differ from their own training program were reserved in their judgements, though they did feel that it might assist one group of young people. As one Apprentice commented,

Maybe more girls might apply for jobs because some of them could see that it would finish in a year. Quite a few girls want to have babies by that time and they would still end up with a qualification that they could use later if they wanted to go back to work.<sup>14</sup>

The Apprentices' lack of understanding about the Career Start Traineeship system produced the view that somehow the Traineeship

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<sup>14</sup> During the validation process a DEET representative commented that this was an 'interesting' point of view.

would have less rigour and be a temporary form of employment. If it were run side by side with the Apprenticeship system it would be a 'lesser' training program and as such was seen to be suitable for girls. While one of the aims of the Career Start Traineeship system is to encourage more girls to take up non-traditional occupations, it is arguable that the Apprentices' views are in keeping with the Department of Employment, Education and Training's philosophies. The Apprentices also continued to link the learning program with a time served approach, believing that all the modules would be completed within a year no matter what the personal progress of the Trainee. Other BHP representatives did not express the view that the Traineeship would be seen as more enticing because as they all said, 'We are an equal opportunity employer.'

The Department of Employment, Education and Training promotes the inclusion of the Mayer Key competencies as one of the assets of the Traineeship scheme. Providing a strong foundation in the key competencies is the responsibility of secondary schools and TAFE, according to one of the BHP participants. Although there were concerns about schools' willingness to accept this responsibility, one participant felt that introducing the Traineeship scheme as a separate program along side the Apprenticeship scheme might be an interesting experiment,

If schools are supposed to make sure that the kids leave with the basic competencies it would be interesting to see some of their (students') results. If you could rely on them it would be interesting to see how they coped without some of the remedial work we do with them. We could have one group going through under the Traineeship system which we could presume had a certain level of skills and the other

going through under the Apprenticeship system where we gave them extra maths and English skills.

A belief that numeracy and literacy skills are inadequate in school leavers was shared by several other BHP representatives. Throughout the interviews all the BHP participants except the Apprentices emphasised the necessity of sound literacy and numeracy skills for Apprentices or Trainees. According to the BHP participants, basic subtraction, addition, division and multiplication in trade mathematics as well as spelling in and comprehension of trade related material are the skills considered to be most important for Apprentices or Trainees. In their view these skills were not given due consideration in the schools and, therefore, it was up to BHP to provide the means by which their employees could reach the required standard.

If Traineeships are able to provide modules such as 'Communications and Industrial Relations NBBO1' which give employees the skills within a workplace context then a number of the BHP representatives were prepared to consider a group of Trainees being given the opportunity to improve their numeracy and literacy skills because in the long term this would be important to BHP<sup>15</sup>. Several representatives did not believe that BHP's training facilities should be used for purposes other than specific site related training. One BHP participant believed that these numeracy and literacy skills could best be taught in isolation in the high schools,

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<sup>15</sup> At the time of interviewing these participants, neither the Department of Employment Education and Training nor the Metals and Engineering Industry Education Council could be definitive about the module content of the Traineeship.

During the validation period a DEET representative pointed out that the views of the CEO were not at great variance with the views of the BHP participant because they both wanted the same thing.

There used to be a fantastic maths teacher at the high school. He had a trade maths class where he taught them useful skills. We had a good relationship with him and used to give them examples of the kind of maths we need here. Of course, he eventually moved on and it all fell into a hole. Now they are back to teaching the kids all sorts of other things which are not relevant to us (BHP).'

This view is in direct contrast to that of the Chief Executive of the Chamber of Commerce and Industry who was quoted in the *West Australian* on Saturday 9 April 1994 as saying,

Industry needs people who can read, write and think for themselves - not factory fodder. Industry has never asked for specific occupational skills to be taught at school level.

These differences of opinion draw attention to a number of issues. Generally, it has been argued that education has many roles in society. Moving down a path that has a clear intent to incorporate vocational education into post compulsory education creates a possibility that the other roles of education will receive less attention. The packaging may need to be examined. If there is undue emphasis on industry driven, work-related aspects of education, BHP may find that educational matters such as ethical behaviour, creativity, environmental responsibility, personal enrichment and scholarly learning and research become ignored. If so, BHP will face the question of whether those qualities are required in its workforce. The answer to that question will determine whether or not BHP believes schools should return to the streaming of the 1960's and whether or not basic trade maths and English skills should be relegated to the high school system. In relation to those matters it can be noted that at the other end of the BHP training scale employees need to exhibit all ethical behaviour, creativity, environmental responsibility and a



preparedness to engage in knowledge development in order to complete the supervisory and management level training offered by the company

The views of some BHP employees precludes any consideration of the social implications that a trade related secondary education may impinge on the development of potential within individuals. In this instance, the implementation of competence based education would seem to prevent people from achieving beyond pre determined guidelines. For example, schools are not yet required to make the 'Mayer'<sup>16</sup> competencies, which incorporate aspects of problem solving and analysis, an inherent part of their offerings. Therefore, schools could narrow the scope for competence to trade related teaching and learning. Significantly, Magnusson and Osborne (1990, p.8) define competence as,

A form of educational technology that emphasises the acquisition of specific, pre-defined skills.

An implication, of these considerations, for BHP is that in examining its plans for future employees' career paths one of the issues to be resolved is what it actually requires of its workforce, and whether or not Mayer competencies play an important part in this scheme. Beyond the most specific manual skills, it is very difficult to define competencies narrowly in areas which might help BHP Iron Ore to

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<sup>16</sup> The 'Mayer' competencies include: collecting, analysing and organising ideas and information; expressing ideas and information; planning and organising, activities; working with others and in teams; using mathematical ideas and techniques; solving problems and using technology.

During the validation process a DEET representative argued that schools think they already provide the competencies

achieve its economic requirements. Two of the BHP participants touched upon this area when they commented,

Even if the Trainees were the brightest bunch of kids we had ever seen, unless they were going to continue working for us, there would be no point in training them in the first place. It costs \$100,000 per year to train an Apprentice and Trainees would be no different. Even if they could do really well in terms of trade maths and English, if they could demonstrate all the Mayer competencies and work related performance criteria, if we put them off at the end of 12 months, 18 months or two years they will be no good to us.

It would be fantastic if the Traineeship was able to provide a high calibre of worker but if we are terminating them at the end of the year because we have contracted 25 other Apprentices and have an obligation to them, then the company will be missing out. We would not want to become involved in training for the sake of it. Trainees would be like Apprentices and spend most of the first year in the training centre. They are not terribly productive for us at that stage. What would be involved in the Traineeship that would make them more productive at the end of one or two years than an Apprentice?

According to the Trades and Labor Council representative the Trades and Labor Council does not see the option of running the Apprenticeship and Traineeship schemes side by side as being optimal because of the potential for unemployment at the end of the one or two year period for the Trainees. The Trades and Labor Council representative questioned the wisdom of implementing this alternative,

I do not see why any firm would consider this to be an option. It means having two systems set up. How will they differ? Training is an expensive exercise. Why would a corporation spend the money and then at the end of the year keep some employees and put some off? Who is to say that some of the best employees are not in the Traineeship group? Is the company going to select only those considered to be disadvantaged to be a Trainee in the first place? No, if they attain the competencies they have a right to continue their training like any other Apprentice.'

Despite being unfavourably disposed towards the 'Training Wage'<sup>17</sup> and the potential for Trainees to be relegated to menial work under this alternative, the Trades and Labor Council does acknowledge that Trainees would gain some benefit. They would be better off financially, training wise and in relation to marketability for future employment or training.

## **COSTS AND BENEFITS**

In examining the option of running the Apprenticeship and Traineeship schemes side by side some of the strengths and weaknesses become immediately evident from the comments made by the three major stakeholders; BHP, the Department of Employment, Education and Training and the Trades and Labor Council. <sup>18</sup>

From the BHP participants' point of view, the opportunity to train one set of employees under a new scheme which reflects the proposed Australian Standards Framework System method of training and assessment could help the company to refine its program of training. It would assist management to trial its training program before it is required to launch into a full scale implementation of the system. It would allow trainers to be eased into the new system and to make

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<sup>17</sup> During the validation process a DEET representative pointed out that the Federal ACTU supports the Training Wage even if the state does not.

<sup>18</sup> During the validation process participants from the three groups supported the summaries of costs and benefits except where footnoted.

comparisons with the Apprenticeship scheme which can be discussed with the Department of Employment, Education and Training representatives and fed back to the Skills Standards Accreditation Board in this state (Western Australia).

Taking on a whole group of employees who were seen from the outset as being trained as a social responsibility rather than for an economic gain could be seen by the community as benevolent. It could enhance BHP's standing in the community at a time when restructuring is resulting in redundancy for a significant proportion of BHP's workforce. On the other hand, it could also be perceived by those without an understanding of the performance level of the Trainees as exploitation of cheap labour. In the light of the redundancy issue it could be mistaken for an effort to replace more expensive qualified or adult labour with government subsidised youth labour.

Arguably, on a practical level a major drawback for BHP is the need to rationalise entry level employee intake in the light of future tradesperson requirements. When BHP employs an Apprentice it contracts to provide that employee with work and training for at least four and a half years: four years as an apprentice and six months as a tradesperson. With the closing of the Shay Gap and Goldsworthy mines, entry level intake is reduced. The mine was once a functioning site with Apprentice and Tradesperson requirements. However, since its closure in 1993 BHP no longer requires a quota of Apprentices to work at the site. Taking on a group of Trainees who would be released from employment after one or two years would be

expensive and BHP would not reap any productivity benefit from this exercise.<sup>19</sup>

Gains for the Department of Employment, Education and Training would be minimal under this option. The opportunity to have a pilot scheme running in one of the state's largest Iron Ore producing companies could lend the scheme legitimacy. It would give the Department access to a conservative area of industry but at the same time the Department would need to sacrifice some of the integrity of the philosophy behind the Traineeship Scheme. The Department would need to condone<sup>20</sup> the termination of further training and employment for a group of workers. It would have to rely upon other firms needing the skills of these workers and having the capacity to employ them and continue their training at the end of their BHP Traineeship. The option of running the two training systems side by side will not increase the stability of the industry's workforce and reduce employee turnover in this instance.

Employee turnover and a failure to provide for articulation to post Traineeship programs are seen by representatives nominated by the Trades and Labor Council as being negative aspects of running a Career Start Traineeship alongside an Apprenticeship at BHP. The extended target group intended to benefit from Traineeships can be seen as a positive aspect of the option. Despite the termination of the training and employment for the Trainee group of employees, the

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<sup>19</sup> During the validation process a DEET representative explained that, 'Trainees need not be put off'. They can go on to an Apprenticeship with modules credited and thus reduce their term.'

<sup>20</sup> The same DEET representative commented that it would not be up to DEET to condone anything because DEET would not be involved. It would be an employer decision.

guidelines for the Trainee Target Group provide a broader base for the initial selection of Trainees because they include equal access for males and females and those who have suffered disadvantage<sup>21</sup> in the workforce. If BHP uses the guidelines to select its Trainee intake it would give a disadvantaged group the opportunity to gain self confidence in their ability to cope with the demands of employment.

## **OVERALL CONSEQUENCES**

In theory running a Career Start Traineeship alongside the already established Apprenticeship scheme is an alternative to current arrangements. In practice it is not a viable option because the costs far outweigh the benefits according to BHP, the Department of Employment, Education and Training and the representative nominated by the Trades and Labor Council of Western Australia. Despite the fact that these three major stakeholders represent different interest groups they all agree that this is not an option to be seriously considered. If the option were implemented it would mean a considerable financial expense for BHP with little or no productivity gain in the long run because the Trainees would be given the benefit of broad based, structured entry level training with no prospect of furthering that training to become skilled Tradespersons. The company would not be able to offer placements to the Trainees who sought to establish a career in the Metals and Engineering industry

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<sup>21</sup> Those considered to be disadvantaged include Aboriginals, those with a criminal record, women, the long term unemployed and the disabled.

because of the commitment to its pool of Apprentices. This would not improve the image of the industry or BHP in the community.<sup>22</sup>

As an alternative it would not assist the Department of Employment, Education and Training to fulfil the objectives of the Career Start Traineeship as outlined in their promotional documents. In particular, it would not fulfil the aims outlined in their *Career Start Guidelines* document (1993, p.1) which states that the purpose of the Career Start Traineeships are to,

Offer a flexible framework for vocational education and training pathways based on the trainee's competence and/or year left school and the vocational training needs of industry; and

Serve as a bridge between current training arrangements and the emerging Australian Vocational Certificate Training System.

This lack of continuity in training is not a palatable outcome for the Trades and Labor Council either.<sup>23</sup> The lack of career development for employees would not serve the aims of the Trades and Labor Council of Western Australia.

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<sup>22</sup> During the validation process a DEET representative disagreed with this consequence and thought that the Trainees should be employed by the company.

<sup>23</sup> During the validation process a DEET representative remarked that, 'there does not need to be a lack of continuity or employment.'

# CHAPTER 6

## OPTION TWO: ADOPTING THE TRAINEESHIP AS THE ONLY ENTRY-LEVEL OF TRAINING

### CONTEXTUAL FACTORS

A second option involves discontinuing the current Apprenticeship intake and replacing it with a Traineeship. This would require some other form of training to be continued at the conclusion of the Traineeship because the level of competence attained under the training system is not sufficient for employees to be certified as tradespersons.

A spokesperson nominated by the Trades and Labor Council representative believes that this is the only approach for the company to take in the light of economic benefits outlined in the recently released 'White Paper' (1994) and the national skills shortage in the Metals and Engineering area,

'The company should adopt the Traineeship as their only entry level of training. If they have read the 'White Paper' they would be crazy not to. They can employ a Trainee for as little as ten dollars per week.<sup>24</sup> According to the document there will only be one level of entry which will apply to trade and production skills by the end of 1995. The Career Start Traineeship will provide that level of entry.

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<sup>24</sup> During the validation process two BHP representatives questioned the ten dollar figure with comments such as 'Joking?!' and 'Really?'



There is a shortage in the metals and engineering industry and a major shortage in the welding and boiler maker sector.'

The Trades and Labor Council representative is not, however, advocating a training program which terminates at the end of the Traineeship. In order to meet the national requirements and to provide the employees with a clear and delineated career path the representative proposes a system of training that,

Guarantees training to at least level 3 of the Australian Standards Framework. They need to provide contracts that will produce trade skills. I was shown a contract by a State Government Official which had been produced by the Federal Government so they do exist and there has been dialogue between the two levels of government.

If you only had training to level 1 which is where a Traineeship would finish or after 10 modules, then the company would be lacking in the areas of quality control, maintenance and certain levels of production skills which are vital to operations. Training people to level 1 is not what is required by the industry as a whole. We want training programs which will allow employees to progress and deliver level 3 outcomes.

The Department of Employment Education and Training is eager for the Career Start Traineeship to be considered but does not believe that it should be considered as the only form of entry level, given the uncertainty surrounding the introduction of the Australian Vocational Certificates, and the ensuing lack of continuity of training which could result. A Department of Employment, Education and Training representative made the point that,

This option would not pose a great problem if the Australian Vocational Certificate is accepted by 1995. That is what they (Canberra) tell us will happen here. I am not sure that

it will definitely happen by 1995<sup>25</sup> as is proposed at this stage. I am sure that it will happen. In this case the Trainees would receive their competence based certificates and then the company would have to decide what sort of career path structure it would implement after that. That is how the employees would be able to gain certification at the higher levels. I do not think it would be advantageous for anyone concerned to finish the training at that point though.

For BHP this approach could be used if a skills audit indicated that the level of employment of Tradespersons within the Iron Ore division was sufficient to support productivity gains without a pool of Apprentices moving up through the ranks. The Apprentices, historically have spent much of their first year within the Training Centre, progressively spending more time on site in positions of responsibility as they gain more knowledge about the trade. Interestingly, Rae (1994, p.19) advocates this method of training as being cost effective when she says,

Once ignored or taken for granted by many in the training field, 'on the job' training is now a highly effective, flexible, relatively low cost approach. Of course, it is not a substitute for 'off the job' group training but it can still occupy a place in company employee training strategy.

An Apprentice sees the 'on the job' training as a positive aspect of the training program.

When we come from school we can't go straight out on site. How could we? We would mess up. Until we spend the time here (the on site training centre) we don't know anything about what we have to do or who is supposed to do what. Maybe somebody who has done a preapp might have a bit of an idea but we know so much more from being in here, especially about the safety. They are really strict on the safety. It is really important and it becomes a habit before they cut us loose on the site.

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<sup>25</sup> During the validation process one BHP participant said, 'I understood that the intention is that the AVC will be phased in commencing 1997.'

BHP has already developed a substantial in house training capacity. Traditional informal 'on the job' training has been in many cases replaced with more planned and structured 'on the job' training. Given its geographical isolation BHP has developed training facilities which rival those of TAFE colleges.<sup>26</sup> Adopting the Traineeship as the only entry level of training would be a waste of resources according to one BHP participant,

'The internal training target at our site is for employees to spend at least 10% of their time in training of some description. Career progression is dependent upon passing competency based tests and a selection of modules based on relevant skills. Why would we want to jeopardise this?

Training outside the on site Training Centre in 'off the job ' locations can be seen to be leading to inefficiencies whereby inappropriate training is given. It can be seen as diverting resources from other learning experiences which would be taking place on site. It is interesting to compare BHP staff perceptions with the methods cited by Rae (1994) who advocates a return to the medieval craft-guild approach, giving Apprentices the opportunity to learn by doing 'on the job' training under the eye of a master. Rae (1994, p.19) suggests that the system is efficient because,

It still requires money and time but can cost companies less  
- and still produce results that are just as good.

One BHP participant questioned the need to spend more time in 'off the job' training in these terms,

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<sup>26</sup> During the validation process a DEET representative pointed out that BHP could become the 'off the job' training provider.

With what I have seen of this new system, portability seems to be more important than use for our industry when modules are designed. We want people with skills that are the right skills for us. We would rather that the whole course was structured around our equipment - not some foreign equipment that bears no resemblance to ours.

This BHP representative is expounding the view that some of the trainers on the sites would be able to teach the required skills as well as if not better than some of the Hedland College<sup>27</sup> lecturers. He does not see the value for the company in sending employees away from the site to learn skills which will assist them to gain employment with another firm but will not necessarily be able to be transferred to one of BHP's workplaces. Work at both the Hedland and Newman sites is highly specialised so some of the content of the 'off the job' training may be useful in other work settings but not at BHP.

Another BHP representative does not believe that extra modules 'off the job' would be beneficial, for other reasons. The representative does not want to lose control of precious time which can be devoted to teaching the Trainees about the company and what is expected of them as BHP employees,

We like to spend time with the Apprentices motivating them and presenting them with information about BHP its products, hierarchy, standards of conduct and environmental stance. Sometimes employees from different parts of the organisation make presentations instead of trainers. We have the Pathways to Excellence course, equal opportunity and occupational health and safety matters to deal with. If the Trainees have to

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<sup>27</sup> Hedland College is an independent educational institution which caters for adult learners and offers courses in much the same way as TAFE. It receives Commonwealth and State funding on the basis of its student enrolments and courses offered. Lecturers at the college do not necessarily hold teaching qualifications.

During the validation process a DEET representative accepted this point and encouraged BHP to become their own 'off the job' trainers.

complete another two modules it will mean that some of the things that we normally do in the first year will have to go. A pity because they are a good orientation to the company.

This concern is founded in the Apprenticeship 'off the job' training but has the potential to be aggravated in the Traineeship system where employees will be required to do ten national broad based modules rather than the eight currently prescribed for Apprentices. The extra two units could contain competencies which are not called for on BHP sites or the employees may gain competencies on machinery which is not state of the art and which makes transferring skills a difficult matter. In some cases it may mean unlearning skills which is a frustrating process for trainer and trainee alike. According to one BHP participant,

Yes. They do a great job at the (Hedland) College and I know we have an input but they have another agenda to pursue. Funding is always an issue for them. They have to include learning that we do not want in their courses. We know that, but they do things differently because they have different equipment. Sometimes we look at what an apprentice is doing on the machine and have to say, no we do it this way.

If the Apprentices were replaced with Trainees a system would need to be devised whereby Trainees and Tradespersons could undertake the duties performed by 2nd, 3rd and 4th year Apprentices. These apprentices have a productivity function on the site and each group is given incremental increases in responsibility until at the 4th Year level the Apprentices are doing work which is expected of a tradesperson under supervised circumstances. Trainers on both sites agreed that there would need to be a training plan which resembled the current system and that there needed to be more details about what would

happen to the Trainees when they had achieved the competencies contained within the Traineeship modules. There was general agreement among the BHP participants that training was needed to fulfil the company's objectives and that it should not be used to perform a social welfare function. One BHP participant put it this way,

You cannot give people half an education and then expect them to perform duties that require a full education. If these are the modules we can select from (the Metals and Engineering National Modules) they serve as a reasonable starting point but there is no way they can be considered adequate to allow anyone to work unsupervised. We would need to continue training to make sure these people were at a point where they were useful to us. We are not in the business of training people because it keeps them off the dole. We need these people to work at tasks that require a certain amount of skill and we do whatever we can to ensure that they attain those skills. If we only had Traineeships we would have to implement a further training program anyway.

There has already been significant reform in workplace practice at the Hedland and Newman site. One of the major changes is the introduction of multi-skilling so that tradespersons can move from one task to another without entering into demarcation disputes. BHP has undertaken to provide the necessary training for employees to allow this movement to occur. Further changes to the training program could be viewed as another unnecessary upheaval. As one BHP participant commented,

Will this really improve productivity? Will it encourage the trainees to take more responsibility for their work? Because of fear of change this will not be an easy task. We have already had eighteen months of talks between the company and the five major unions to thrash out a deal to provide training of qualified employees to perform a wider range of jobs. I'd be wondering why this was not brought

up during those negotiations if I were a Union representative.

Establishing a system for the training of Trainees after they had achieved the competencies required in the Career Start scheme could prove difficult if the Apprenticeship system were not in place. The role of the Trainee upon certification is ambiguous because there is a gap in the level of competency between the Trainees and the Tradespeople and a career path is not evident. This gap, without any Apprenticeship training would mean that the company would need to take on board the Australian Vocational Certification or provide some on the job training.

If the latter were selected provision must be made for Tradespersons to undertake the tasks which require competencies beyond those attained by the Trainees yet beneath those required of a Tradesperson. In doing so the Tradespersons would have to provide the ex Trainees with incidental training which apart from being a waste of skilled resources on the site would have repercussions<sup>28</sup> in terms of safety, production quality and equity issues. Time constraints would make it difficult for Tradespersons participating in further training beyond the entry level, such as the supervisory training, to perform these duties. Rae (1994, p.20) maintains that a successful use of this approach requires the following of the Tradesperson:

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<sup>28</sup> During the validation process one BHP participant indicated that a 'training allowance' would undoubtedly result for the Tradesperson and ex Trainees. On the other hand a DEET representative does not believe that there would be any repercussions at all.

- must be efficient and effective at the task
- must have been taught how to instruct
- must be given the necessary resources to perform the instruction
- must be given sufficient time to prepare and perform the training
- must not be expected to maintain personal output.

This kind of training is expensive in terms of lost productivity on the part of the Tradesperson and also in terms of under use of the official Trainers who, in this instance, would only be required to monitor the training process.

Also, should BHP Iron Ore wish to increase the number of Tradespersons at any time it would have to draw upon a workforce trained outside the company in the future.<sup>29</sup> This may be advantageous in terms of new ideas and work practices as well as cost savings on training programs. It could also mean a significant amount of time will need to be spent on induction programs so that all employees are familiar with and committed to company goals and practices. It may also mean that, given the shortage of skilled Tradespersons in some of the areas of the metals industry BHP could have difficulty in securing the right employee for the job in the future. In relation to this point Warn (1994, p.29) wrote that,

Although high unemployment makes available a ready pool of replacement labour, it does not endow the unemployed with the skills or experience required by employers. Mismatches between labour availability and the requirements of employers can occur even during a period

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<sup>29</sup> During the validation process one BHP participant identified this as a problem because, 'other companies might take on the Traineeship system and only half train the Tradespersons.'



of high unemployment, especially if restructuring is occurring and new skills are in demand.

One BHP representative believed that employing Tradespersons outside the company could seriously affect the company's good standing in the community,

On the one hand you have the kids of loyal and long serving employees who cannot find work and on the other you are bringing in outsiders to do work. The first thing they will say is "Why didn't you train my kid. My kid could have done it if you had trained him.

This view is partially supported by the comments of an Apprentice who said,

Lots of the others (students at the local high school) mucked about at school and did not take much notice because they expected to get an apprenticeship here. They sort of thought that they could just get a job here because their dad works here. The teachers used to tell us that it wasn't going to be that easy but they didn't listen. My parents said I had to work really hard because my school marks would be what would be important. I missed out on getting into Uni but I am really happy to have a job here. I am glad that I tried hard at school and didn't just expect to get a job here.'

BHP, the Trades and Labor Council and the Department of Employment, Education and Training all agree that, Traineeships would not be sufficient to enable a person to perform at the Trade level unless it were part of a multi-skilling training scheme.<sup>30</sup> The Department of Employment, Education and Training sees accelerated or self paced learning as one of the advantages of the Traineeship scheme. In theory this appears to be a 'bonus' for the employer and

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<sup>30</sup> During the validation process a DEET representative made it clear that DEET was not advocating the end of Apprenticeships.

employees. However, in practice it is largely dependent on the quality of the entrants. While the introduction of the Mayer competencies into the high school curriculum may improve the skills of the entrants this has yet to be proven. Historically, the company has endeavoured to find its successful applicants for Apprenticeships from within the district.<sup>31</sup> The socio economic and educational levels of the pool of applicants has remained the same for some years. Only one of the participants from BHP had experience with accelerated progression through the apprenticeship scheme. It was pointed out by a BHP participant that,

There was a fellow who was really good and he skipped a year but he was really special. And it is unlikely that any Trainees would be able to jump from being a Trainee to being a Tradesperson, unless they were already qualified in one of the other streams and we used the Traineeship to give them extra qualifications.

Other BHP participants in the study commented,

Pushing kids through at a faster rate doesn't seem to be a big gain for BHP. They need to get a good grasp of the basics.<sup>32</sup>

We have a set way of teaching new skills here. We do not approach training in an ad hoc way you know. We have trainers who have researched the best way to train our people. For instance training on any of the machinery is done in a series of steps. They are these:

- Let the apprentice know what is expected and why
- Let the apprentice know all safety regulations pertaining to the job
- Let the apprentices know how well the job must be done
- Show the apprentice how to do the job

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<sup>31</sup> During the validation process two BHP participants indicated that this is changing and that this year (1993-1994) two applicants from Perth were selected.

<sup>32</sup> A DEET representative explained that the real aim was to ensure that 'good' Trainees were not held back by the time served principle.

- Let the apprentice operate the equipment under supervision
- Give the apprentice a job to do under light supervision
- Evaluate the skills learned
- Give the apprentice more practice if necessary

This all takes time and you cannot skip any of the steps. Guaranteed that some kids may need a bit more supervised operation than others. Mostly progress is made at the same rate.

Apprentices shared this view when they said,

I don't know how you could go any faster. We have a great course but there is so much to learn. Sometimes I wish there was more time to finish my projects.

Even though I am one of the top people in my group I don't reckon that I could go on site and do a tradesman's job. I don't reckon anyone in my group could.

If a Tradesperson who was already qualified in another stream wished to gain certification in the Metals and Engineering sector it would be possible to achieve a Trade level of competency through a Traineeship. By recognising prior learning and selecting appropriate National Training Board Modules the Tradesperson could gain the necessary knowledge and demonstrate required competencies which would enable tradespersons to contribute at the Trade level after completion of the appropriate modules rather than being obliged to complete another Apprenticeship which could take up to four years. The Trades and Labor Council does not favour this approach and would prefer unskilled workers to be given Traineeships.<sup>33</sup> The objection is raised because of the award variation which allows

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<sup>33</sup> During the validation process a DEET representative commented 'so do we on balance' regarding giving Traineeships to unskilled workers.

Trainees to be paid at a lower rate than Apprentices in some instances. Since BHP currently pays qualified Tradespeople at Trade rates for retraining this should not pose a problem, (see Appendix 2). In contrast to the Trades and Labour point of view, one BHP participant believes that providing this sort of training for qualified employees would be of benefit to the company. In this person's view,

It is good to see a breaking down of the barriers which have traditionally been the Achilles Heel of the mining industry. Abolition of demarcation means that a truck driver can now operate other equipment such as loaders or excavators. This gives the employee more interest in the job as well as increased mobility throughout the industry. If we can train people to perform in a variety of areas it has got to be better for us and for them.

## **COSTS AND BENEFITS**

It is difficult to encapsulate the diverse range of responses from the range of people interviewed about adopting the Career Start Traineeship as the only entry level training program. However, two general impressions about the potential costs and benefits of this option can be formed. First, those participants who, through extensive reading of current literature on the Australian Standards Framework and competency based training, are familiar with the contents of the training scheme are more likely to see its benefits. Secondly, vested interests govern the responses of all the participants. BHP representatives have spent considerable time in developing a training program for their Apprentices, and while

changing to a Traineeship scheme could prove to be a cosmetic name change it could also present a significant reform of 'on the job' training. The Department of Employment, Education and Training would like to see the Traineeships introduced as an interim measure to assist not only BHP make the transition to the Australian Standards Framework Scheme but also as an example for other companies. The Department of Employment, Education and Training representatives, in consultation with industry, have also devoted much effort to preparing a program of modules and accompanying curriculum resource material which they would like to see put to into practice. The Trades and Labor Council of Western Australia wants to ensure that the employees are given the skills to allow them to participate in an area of the workforce where there are skill shortages.

These general impressions must be considered when analysing the comments of the participants on the costs and benefits of this option.

Worthwhile training is can have positive consequences for BHP. If the Traineeship can provide a level of skilling which is more in tune with the requirements of the company it will increase the productivity of its Tradespersons in the long term. Conversely, the addition of two extra modules from the National Modules could bring the extra pressure to bear on Trainers who are already dissatisfied with some of the content of the modules. The Training wage which applies to all employees who are participating in the Career Start Traineeship is an economic benefit for BHP but in order to gain the maximum payment the Trainees must be considered to be from a disadvantaged background. That is, they must be either long term unemployed,

Aboriginal of Torres Straight Islanders, females or criminal offenders. These groups may not offer the best candidates for selection as Trainees and thus BHP would not necessarily reap the maximum government subsidy for each of its Trainees.

The Traineeship does allow for the removal of early streaming into areas of the Metal Trades such as fitter and turner which would give Trainers more time to observe the employees in action before making a decision on the appropriate area for them to work in. If the Trainees completed ten general modules it could also be viewed as a waste of resources because some of the employees would be better off concentrating on the modules which are specific to a trade area.

There is also the question of what to do with the employees at the end of the Traineeship if this is the only method of entry level training. The company may need to have a training program in place to build the skills of the employee to that of a Tradesperson. It would seem useful for the company to have some sort of continuation training to develop replacement personnel for its Tradesperson. If this were not the case BHP would be faced with the loss of skills and experience through premature turnover since the company trains and promote personnel almost exclusively from within the organisation. If the current 2nd, 3rd and 4th Year Apprenticeship program is deemed to be suitable this would not cause undue disruption but more time from the Trainers' already tight schedules would need to be spent with Department of Employment, Education and Training representatives to establish this.

The Department of Employment, Education and Training would benefit from the introduction of the Career Start Traineeship as the only form of entry level training at BHP because it would give the Traineeship legitimacy. The Department would be under pressure in this instance to deliver a firm commitment to the introduction of the Australian Vocational Certificates by the end of 1995 otherwise the group of Trainees could be left stranded in terms of recognised qualifications.

Fulfilling the need to train more employees for work in the Metals Trades would be seen as a definite benefit by the Trades and Labor Council of Western Australia. Once again, the certification of these employees hinges upon the introduction of the Australian Vocational Certificates Scheme in 1995. While a Traineeship does provide employees with limited progress towards level 3 skills, unless the requirement for level 3 attainment is made clear by the end of 1995 the employees could be disadvantaged.

## **OVERALL CONSEQUENCES**

The likelihood of BHP adopting Traineeship as the only entry level form of training appears to be remote given the difficulty of its implementation and its disadvantages. Since the training of any entry level employee is an expensive exercise, replacing the four year Apprenticeship scheme with the one year Traineeship scheme would be a cost cutting measure but may not necessarily serve to increase

productivity in the long term.<sup>34</sup> It would require the setting up of a dual certification training system until the Department of Employment, Education and Training released its requirements for certification to level 3 of the Australian Standards Framework. It could also mean unnecessary duplication of work and a dismantling of an already effective system of training which is in place at BHP.

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<sup>34</sup> During the validation process a BHP participant made the comment that, 'It could be that the Traineeship becomes a pre ap course and the chosen few win the Apprenticeship option. The others have benefited from additional skills'.



# CHAPTER 7

## OPTION THREE: INTEGRATING THE TRAINEESHIP AND APPRENTICESHIP SCHEMES

### CONTEXTUAL FACTORS

A third option BHP might consider is integrating the Traineeship and Apprenticeship Schemes. This approach presumes that the Australian Vocational Certificate will be fully operational by 1995. It would mean that the Apprenticeship system as it currently operates would cease to exist and that all training would be classified under levels one, two, three and four of the Australian Vocational Certificates.

Confident that the Australian Vocational Certificates will be implemented in 1995, a Department of Employment, Education and Training representative sees the integration of the Traineeship and Apprenticeship Systems as being optimal,

This is the perfect solution. It will provide the stepping stone to the Australian Standards Framework Scheme. It will provide competency based training and then further training articulation. It has benefits for the employees because they are getting nationally recognised qualifications and for the employer because they are getting 'off the job' training for the employees paid for by the government. It will only cost the employer 75% of the wage for the trainee based on age training awards.

The Department of Employment, Education and Training representative -also expects that competency based training will be an important feature of the scheme. Anderson and Ford (1994, p.61) see this as a significant departure from past practice when they say,

The definition of competency upon which Australia's National Competency Standards are based and which forms the basis for all analysis and subsequent training and assessment represents a major shift from traditional task based notions of effective performance.

By incorporating attributes not directly observable or measurable the model is British in its analysis of workplace competence at a number of levels and its rejection of task based orientation. The British approach recognises that competency is essentially an enabling characteristic which leads to successful performance and that it has a number of general components shared by others who are competent in the same area. It also emphasises the contextual nature of workplace competence.

There appears to be a reluctance on the part of BHP management to take up a training scheme which is still emerging. One BHP participant stated that,

I listened to Ross Free talk about the Australian Vocational Training Scheme when I was in Sydney ( March 1994). It appears that the government has changed its initial position on the implementation date from the end of 1995 to a progressive introduction through to 1997.

While the merging of the two schemes could provide BHP Iron Ore with a flexible range of training pathways, the West Australian division of the company prefers to adopt a wait and see approach to the

implementation of the training involved in the Vocational Certificates Scheme. It was explained by one BHP participant in these terms,

BHP at Wollongong will be ready to implement it (the Australian Vocational Certificate Training System) in January 1995. Other companies will follow as it becomes the thing to do. BHP here can consider the Australian Vocational Certificates in more detail and can watch the other companies as they make the transition.

The BHP participant who made this comment went on to explain that what ever policy the company decided upon, it would alter the training schedule for at least a year and thereby affect what it might do in the future with regard to its training facility upgrades. In making the comments the participant recognised that the cost to BHP is not only confined to Training Programs and wages for Trainees but also to the use of physical resources.

If the integrated option were to be adopted, training would begin with a one year Traineeship which would equate to the current first year of an Apprenticeship and provide the employee with a range of competencies which fall within levels 1 and 2 of the Australian Vocational Certificate. The employee could then attain the competencies required for levels 3 and 4 of the Australian Vocational Certificate through the Apprenticeship scheme. This approach would allow employees to spend one year studying core modules before being streamed into areas of specialisation. Those involved in the training and those being trained had mixed reactions to the issue of streaming. The following comments were made by BHP management:

This would give me more flexibility, I wouldn't need to stream the kids until after the first year. It would also give

the kids a better chance to decide on their preferred area of specialisation.

Apprenticeships have always been trade linked and that has made for streaming. Maybe we do it too early at the moment but then again maybe we should use the BP model. If you completed year ten you are a boiler maker, if you completed year eleven you are a fitter or plant mechanic and if you completed year twelve you are an electrician. You come in knowing what you are going to do.

There are problems associated with not streaming early. If the kids are not streamed what Union do they join? That could create a problem with the unions.'<sup>35</sup>

The following comments were made by BHP Apprentices:

When you try out for a trade at the end of three months or you get put in one, you say to yourself that is what I will be. You might not want to be one but you are happy to have a job so you do it.

I'm doing what I want to do so I think that streaming is OK. I like working with motors so I like the stuff we do here on site. I'm glad we do it on site as well as off site because if we only did it off site I probably wouldn't like it as much.

The Department of Employment, Education and Training recognises that giving employers the option to move outside streams might be an asset when tailoring the training program to fit the needs of particular employers. It maintains that outside the core modules the Traineeship can basically be designed to suit the requirements of the industry concerned. There is no evidence at present to support this as a strategy. This is acknowledged in the comments of a Department of Employment, Education and Training representative,

There are not a lot of employers who have taken up the opportunity to employ Trainees in the Metals industry at

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<sup>35</sup> During the validation process a DEET representative questioned the need for anyone to join a union at all.

this stage, despite the modular structure which we published in late November 1993.

At the moment we are working with an employer in the heavy equipment services area who took on 17 or 18 Trainees in 1994 and will then stream them into the diesel fitter and electrical areas.

Once Trade Certification was gained in the streamed area<sup>36</sup> there would be a clear articulation with the Trade, Supervisory and Management Certification programs being devised by BHP Iron Ore. This integrated system could produce some confusion within an already functioning system. One of the BHP sites had produced a log book for its employees to record the competencies achieved and subject manuals which are designed by trainers and involve practical examples for supervisors. In Western Australia 'on the job' training for apprentices is assessed by employers according to a training schedule. Employers receive an annual apprenticeship assessment form which lists work skills. The employer indicates whether or not the apprentices have been trained in the skill, whether they have reached a sufficient level or if remedial training is required. One BHP participant commented as he leafed through the manuals,

We have all worked hard on these manuals. We have a terrific system for training our people at the moment. I would prefer to concentrate on developing this further rather than becoming involved in another scheme.

The notion that the system is "terrific" does not, as the participant's comments suggest, centre around the prepared programs of work,

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<sup>36</sup> Streaming requires the Apprentice or Trainee to be placed in one of the three trade areas of the Metals and Engineering sector. The three trade areas in the Metals and Engineering sector at BHP are Fitting and Turning, Boilermaking and Electrical.

but rather it focuses on the outcomes which are produced as a result of the programs as was indicated by a follow up statement,

The system has been fine tuned and we think that when we send the Apprentices out on site they do a better job as a result.

The follow up comment also indicates that the participant believes BHP is already achieving a certain level of competence within its Apprenticeship Training Scheme. Gonczi et al (1990, p.9) support this view when they say that competence may be defined as,

The attributes necessary for job performance at the appropriate level.'

The BHP representative's comment also embodies the philosophy of the National Training Board (1991, p.18) which says that competency is,

The ability to transfer and apply skills and knowledge to new situations and environments

The provision of financial assistance by the Department of Education Employment and Training could be considered as an incentive to take on extra Trainees who would not be offered places in further training once they had attained the competencies required at level 1 and 2. However, the cost of training one employee is far in excess of the remuneration offered and the negative reaction to employees not being given the opportunity to progress through further formal training with the company are considerations to be taken into account.<sup>37</sup>

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<sup>37</sup> During the validation process a DEET representative indicated that this may be a misconception on the part of employers.

Since the cost of training an employee at BHP over a four year period amounts to over \$100 000, even if the maximum Government subsidy for a Trainee was received it would not compensate for the other training costs. If BHP Iron Ore did decide to take on extra Trainees the decision would be based on a need to have a larger pool from which to select employees for further training rather than on the prospect of financial advantage. In that case Senior Training Officers would be able to monitor the progress of Trainees over a one year period and offer places in further training to the most suitable Trainees. This would give the Senior Training Officers more time to observe the Trainees to ensure that any evaluations which are made are valid and reliable.

The concept of offering training places to more employees than necessary may be seen as providing experience for those who may otherwise be unemployed. It can also be perceived as an attempt by the company to exploit young workers. Pressure from the Unions to find alternative employment or training for those who are not selected to complete their entry level training at BHP is foreseeable and the company could find itself in a situation where it has to continue the provision of training for this group of employees. A variety of comments by BHP participants illustrate some of the implications embodied in the situation,

Problems linked to the kids who are not given an apprenticeship at the end of the twelve month period could be enormous. The door would always have to be open to kids and parents of kids who didn't make it

Well! It would be difficult. I have already had one parent threaten me with physical violence because I did not accept his son as an apprentice. It may have been twice

as bad if I had employed him for a year and then put him off.

We would have to make it totally clear at the outset that the Trainees were put on for a twelve month period. Twelve months because we really only want kids who have completed Year 12 these days. At the end of that there would have to be an obligation free option to employ them as Apprentices. The Unions might agree up front to make sure that we took on more employees but at the end of the twelve months you can bet your life they will have found some reason to make sure we re-employ them all in some capacity. We have had strikes over much less than that in the past.

I think it would be OK because at least you would have had a job for a while and you can tell other people that you have learned a few things.' (When you apply for other jobs)

We all know now that if we do not work hard we won't keep our job but I do not know what it would be like to lose my job even if I worked hard and did everything right. It would be difficult to understand. I'm not sure how I would feel. I know it is pretty stressful around here when we are all on probation for three months. I wouldn't like it to be like that for a whole year - wondering will I get a job at the end or not?

A spokesperson nominated by the Trades and Labor Council representative considers integrating the Traineeship and the Apprenticeship schemes to be an interim option because,

'There will be an Australian Vocational Certificates Scheme after next year (1995). You can call what the employees are doing a Traineeship or an Apprenticeship or what ever you like but they will be required to complete certain modules to get their certificates. The certificates will be the important thing, not the label you stuck on the training.'

As indicated in Table 3, assessment of Trainees is to be indicated in a log book which records all of the competencies attained by the



employee. In June 1994 this Training Record Book for Trainees<sup>38</sup> has still not been finalised because all national competencies are not available. As one of the first stages of the Australian Vocational certificates Scheme it is not promising if the Training Record Book has not been produced twelve months after the introduction of the Career Start Traineeship scheme in the Metals and Engineering sector. At this rate there are no guarantees that the Training Record Books will be ready for the level 2 and 3 competencies by the time the Trainees have completed their first book.

## **COSTS AND BENEFITS**

The comments made by people interviewed contain reservations about disposing of the Apprenticeship system at this stage. These sentiments are primarily caused by the confusion and lack of certainty surrounding the Australian Standards Framework and the plethora of agencies which are involved in promoting slightly different viewpoints on the system.

Integrating the Traineeship and Apprenticeship would allow BHP to make a gradual change to the Australian Vocational Certificates Scheme of assessment and training. It would allow trainers to change their system in a step by step way rather than require a massive change in direction for Training programs. It could allow Trainers to

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<sup>38</sup> The Training Record Book is produced by the Department of Employment Education and Training . It is supposed to be supplied to each Trainee and contains the competencies which must be attained in order to successfully complete a Traineeship.

make decisions about which modules would be undertaken by the Trainees on an individual basis; however, this would require a shift to self directed learning and could create headaches in terms of timetabling for 'on the job' training.

The prospect of taking on more Trainees than could be offered places as Apprentices would give the company a larger pool from which to select its 2nd year Apprentices; however, it could also involve the company in a form of what Mayo (1945) describes as the 'Hawthorne Effect', whereby all of those who are in the Traineeship group would increase their efforts to a level which is not normal because they know they are being singled out as special. This extra effort on the part of the Trainees could be habit forming but it could also lead Trainers to draw false conclusions about the sustainable performance levels of some of the Trainees when making decisions about who will be offered Apprenticeship placement. Pressure from union groups may be brought to bear on the company to take on the employees who were not offered Apprenticeships in another capacity on the site, a course of action which is unlikely to be adopted given BHP's current restructuring policy.

The Department of Employment, Education and Training could assist the company to develop its individual Career Start Training scheme without the added pressure of having to give a commitment that the Australian Standards Framework Scheme is going to be in place by the end of 1995. The Trades and Labor Council of Western Australia would see BHP as being prepared to offer workers nationally recognised qualifications as well as a training career path if the

Australian Vocational Certificates were not in place by the proposed date.

## **OVERALL CONSEQUENCES**

Integrating the Career Start Traineeship and the Apprenticeship schemes is an alternative which can be considered as an interim measure and would provide BHP with a back up for the certification of its training workforce if the Australian Vocational Certificate Scheme were not put in place by the proposed date.

This approach represents a confidence in the Employment and Skills Formation Council's ability to reconcile the Australian Standards Framework with the requirements of the Australian Business Council regarding the assessment of competencies. It is a middle ground approach which retains some of the attributes of the Traineeship system and the Apprenticeship system while participating in a national certification scheme.

# CHAPTER 8

## OPTION FOUR: REJECTING THE TRAINEESHIP

### CONTEXTUAL FACTORS

Rejecting the Traineeship Scheme altogether is a fourth option that can be considered by BHP. For the time being this option does not involve any change to the current BHP training system. If the Australian Standards Framework is introduced BHP may need to review its training at a later date to determine the extent to which the company's existing training course falls within the framework.

The Department of Employment, Education and Training has its national position to consider and does not advocate that BHP ignore the Traineeship as a form of entry level training. One Department of Employment, Education and Training representative explained the position as follows:

This (rejecting the Traineeship) is probably not a good idea because it disadvantages the employees. Apprenticeships will be phased out. They may be still called Apprentices because that is the tradition but they will need to be certified under the Australian Vocational Certificate system. That is they will have the competency they have attained in each of the modules listed. They will be assessed by their TAFE teacher and the Industrial Officer assigned to them according to the Training Record Book (see appendix 3). Under the current Apprenticeship system there are still a number of Apprentices who slip through on a time served

basis and not because they have achieved all the necessary competencies.

Employee certification is an important issue for the Department of Employment, Education and Training. It is supportive of the Australian Vocational Certificate Scheme. For example, according to a Department representative,

If BHP rejects the Traineeship employees will miss out on the opportunity to have their competencies certified and credited in a more fair manner. Under the current system you either pass a module or you do not. Under the Traineeship system which will use the Australian Vocational Certificates, you may not achieve all the competencies but you will have the ones you did listed. These will be credited to the certificate. There is no guarantee that this will happen if the old Apprenticeship system stays in place.

This means that employers can see at a glance what an employee can and cannot do and where there needs to be further training. At the moment that is a bit of trial and error.<sup>39</sup>

According to one company representative, BHP takes a sceptical view of this reasoning because,

We don't need a piece of paper to tell us at a glance whether an Apprentice can strip a motor down and put it back together in working order. The only thing the certificates are good for is showing other employers what the people we have paid to train can do. We like to hold on to our people once we have trained them and we do everything within our means to make sure they want to stay with us. Giving them a piece of paper which will make the transition from us to another employer is not one of our objectives yet!<sup>40</sup>

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<sup>39</sup> During the validation process one BHP participant said, 'I think the Trainers would argue this point.'

<sup>40</sup> A representative from DEET commented that 'Apprentices already receive this so the comment is not valid'

It is important to recognise that these comments reflect a concern on the part of the Department of Employment, Education and Training to ensure that the lifting of the heavy drag of inertia which has surrounded the need to extend vocational training. In comparison with the German nation which enjoys one of the highest living standards in the OECD, partly due to their level of worker training, Australia is relatively weak in the skill intensive area. A comparison of the training systems to be found in the two countries would indicate that Germany, according to Prais (1981, p.264),

...has for a long time had a very serious commitment to endowing its workforce with skills of a high order. ...Thus improvements in production methods are more readily introduced.

The Department of Employment, Education and Training has a responsibility to intervene to alleviate any problems which may prevent Australia increasing the training of its workforce, a condition necessary to compete successfully in international markets against world leaders such as Germany.

A spokesperson nominated by the Trades and Labor Council participant, used Germany as an example to illustrate a point about the need for training to lead to jobs,

Rejecting the Traineeship is not an issue - the employees will be certified under the Australian Vocational Certificates Scheme. The issue is whether or not the skills are sufficient to enable them to do the jobs that need to be done and whether or not those jobs will be there. We need to look at other things such as overtime to ensure that we can afford to train enough youngsters to fill future needs. For example in Germany large firms have cut back overtime for employees and employed more people instead. We have the situation here where we have the government throwing money at employers to take on trainees but for what? We

have workers who complain that their sons or daughters cannot find a job and then do twenty hours overtime each week. We should look at the Germans.

BHP can elect to continue with the Apprenticeship system as it exists, at least until 1995. This would mean that employees would complete twenty four national modules over a four year period. Under this system there is no need to introduce a Traineeship. The portability of the training and recognition of the qualification may be questioned after 1995. If the Australian Vocational Certificate becomes the nationally agreed form of certification those Apprentices who begin their 'indenture' in 1995 will not be eligible to enter into a 'time served' Apprenticeship Agreement and will have to be a part of a Training scheme such as the Australian Vocational Certificate.<sup>41</sup>

Since Traineeships have been seen as lower in status than Apprenticeships in the past, maintaining the Apprenticeship scheme could give employees a qualification which is viewed by other employers as being rigorous and relevant for the time being. It would serve the needs of BHP Iron Ore as well as it currently does but will need to change if the Australian Vocational Certificate becomes the nationally accepted form of certification. The 'on the job' training will need to reflect the Mayer competencies, recognise prior learning and assess the individual's ability to perform tasks rather than knowledge.

According to one BHP participant the lack of clear direction and the plethora of agencies who have an interest in the issue of the

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<sup>41</sup> During the validation period a BHP participant questioned what would happen to Apprentices who started in 1993 or 1994, 'Would they have to change systems?'

Australian Vocational Certificate Training seem to be a deterrent to implementing any new scheme,

There is still so much confusion about the issue. It appears that the Federal Government is trying to impose its 'will' on the States. The whole bureaucracy associated with the change must change. It needs to become simpler. The Industry Education Training Councils have not recognised some of the aspects, the State Training Board has taken over from State Education and Skills Development Authority, Norman Moore has a new scheme to change the sphere of influence and bring the independent colleges more in line with the TAFE colleges. I suppose the Department of Employment, Education and Training will write us a letter and tell us what exactly is happening?<sup>42</sup>

This perspective is shared by Ramsey, Managing Director of NSW TAFE (1993, p.19) who comments that upon his return from an overseas trip he discovered,

....more uncertainty rather than less. There were significant inter-bureaucratic developments which seemed to be hampering rather than helping the changes occurring.

New departments and groups set up to facilitate training, education and employment systems seem to be making them more complex. The representative from the Trades and Labor Council commented that,

It is hard to keep track of the governing bodies. According to the Fitzgerald Report documents there will be a recommendation that the National Training Board will be disbanded. We do not know that for certain until the recommendations are published but it creates uncertainty. Who is in charge of what these days? Who is making the decisions? We are not happy about the training wage element but the Australian Council of Trade Unions has

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<sup>42</sup> During the validation process a DEET representative made these comments, 'We cannot tell anyone what the State Government is doing. Traineeships are industry owned as far as curriculum goes.'



agreed in principle so some Unions will just have to wear the decision. The ground is shifting all the time. It is hard to make an educated analysis about the system and maintain a position when so many agencies have a finger in the pie and often have conflicting views.

According to the Metals and Engineering Workers Union the Industry, Education and Training Councils at the state and Federal levels have played a major role in developing the new modules in consultation with TAFE. Since industry is represented on this body it should mean that the modules contain industry required competencies. A representative from the Metals and Engineering Workers' Union believes that although TAFE is having other problems at the moment, it is certainly co-operating in this aspect of training. While the Department of Employment, Education and Training maintains that the training modules will fit the needs of industry, one participant from BHP disagrees,

We need a scheme of training which fits our needs. For example we are currently lobbying the Minister through the Chamber of Mines and Energy and the Chamber of Commerce and Industry to change our electrical licensing. The Electrical Licensing Board requires our current apprentices to do a module to become licensed. We say that it should be an outcomes focus and that if our apprentices can pass the exams then how we teach them should not matter. We do not want to teach them domestic wiring, it is no use to us. Why should we do that? All very well giving them skills but when they are pay linked, why should we pay for skills they may have but we do not need and they do not use?

The Chief Economist for the Chamber of Commerce and Industry, concurred with this view point at a lecture given to Edith Cowan University students in April 1994 when she said,

It makes little economic sense to expect that firms will pay for the acquisition of transferable skills, especially if training wages are too high. If general training levels are too low, either individuals or the wages structure are to blame and there is no conclusive evidence to suggest that non transferable skill training is inadequate.

This argument is strongly countered by the representative nominated by the Trades and Labor Council who said,

There has always been a nexus between skills and wages. If you have more skills you get more pay. That is our policy. We have to make sure that a worker in one situation who has the same skills is paid the same as another in a different situation.

The agenda inherited by TAFE colleges arose from the Kangan Report (1974), now twenty years old. The agenda was well served but now TAFEs need to focus on a new direction which integrates industry, social and individual dimensions in new ways. Given the State Ministers' comments to a meeting of Chamber of Commerce and Industry Representatives in April 1994 there is now uncertainty surrounding the educational offerings which may be foisted upon Hedland College, the primary off the job training centre for prospective BHP Trainees. The Minister outlined his desire to bring independent colleges under the TAFE umbrella. The College currently functions independently of the TAFE system and has sought the input of BHP in its planning of module content in the metals trades in the past. As the major employer of the college graduates BHP has held a favoured position in terms of having its training needs met through courses. In relation to the content of the modules to be offered one BHP participant said,

We had an influence during the initial set up of the training modules. Our involvement may be different if the College (Hedland) has to move towards an across the board set of modules like the TAFEs. It may not be that important though because they mainly teach theory at the college.

According to BHP representatives, the prospect of designing industry specific modules to facilitate off the job training is not a major factor to be considered in this instance. They indicated that unless BHP were to become so dissatisfied with the content of the changed college modules and applied to be its own 'off the job' training provider, the company would not wish to become more involved in the setting of curriculum than it has done in the past. This is illustrated by the following comments from BHP participants,

We sometimes wonder why we are sending the Apprentices off to the college, especially when it costs us extra money in accommodation and travel. We have terrific facilities and trainers here; we could easily be an 'off the job' training provider but we also have to think of the livelihood of the college.<sup>43</sup>

We are on a few committees and we help out where we can. We don't get too involved with the curriculum. We could teach all the modules here probably better than at the college but it is a service they provide and it means that we can have opportunities like this (part of the training centre is unused) and we can check the equipment and see to things like this. (some tools left near a lathe).

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<sup>43</sup> During the validation process a DEET representative supported this comment and stated that the comment was not only true but that, 'DEET should support private providers in this way. Not that BHP should be a private provider but it could be and should consider it.'

## **COSTS AND BENEFITS**

Since all three stakeholders<sup>44</sup>, BHP, the Department of Employment, Education and Training and the Trades and Labor Council seem united in their opinion that there will be an Australian Standards Framework Scheme with accompanying Vocational Certification, it is a matter of deciding when the schemes will be introduced. Evidently then, BHP can choose to reject the Traineeship indefinitely but cannot ignore the Australian Vocational Certificates Scheme.

In rejecting the Traineeship, BHP could be depriving its employees of a nationally portable qualification. However, that may be seen as a benefit for the company which likes to keep the workforce it has trained and not see them opting for employment with other companies. It could also be depriving the employees of certification which does not have a failure component; that is, any competencies which are contained in a module but are not passed by the Trainee are simply not listed on the certificate. This listing of competencies achieved could be a benefit the company will miss out on if they choose to reject the Traineeship. The lobbying process that BHP would need to use, which consumes the effort and time of its senior management, could be circumvented by using Traineeship modules and negotiations with the Department of Employment, Education and

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<sup>44</sup> BHP is a stakeholder in the Traineeship scheme because it is interested in any program which can improve productivity and meet the needs of its workers, DEET is a stakeholder because it has developed the program and wishes to see it implemented and the TLC is a stakeholder because it wants to introduce a program which will increase the number of employees trained in the Metals and Engineering sector

Training in order to have competencies which were not relevant to the company left out of the modules and perhaps substituted by others. This would be possible under the Traineeship. It could be seen as a cost by the Trades and Labor Council of Western Australia insofar as it inhibits the employees' ability to show themselves in a good light to other prospective employers who may value the skills that BHP has deleted.

Since the Apprenticeship indenture is a time honoured institution, continuing to run it may promote a conservative image for BHP. This might be considered to be a benefit from the company's point of view when attracting investors and shareholders. It may also be seen by the Department of Education Employment and Training as clinging to the traditional way of doing things in workplaces which will inhibit flexibility and efficiency.

## **OVERALL CONSEQUENCES**

BHP can choose to ignore the Traineeship altogether and when the Australian Vocational Certificates have been given the green light by the Federal Government it could issue certification at Levels 1, 2 and 3 of the Australian Standards Framework. This would save the company the cost of investigating and printing interim documents which accompany the Traineeship, the time involved in establishing a new training program which will inevitably be replaced and any confusion which might occur as a result of workers not understanding

their qualifications in relation to others who had Apprenticeship qualifications and those who had qualifications which were labelled according to the Vocational Certificates.

Rejecting the Traineeship means that BHP would not have to deal directly with any of the agencies which are involved in setting up the scheme and can opt out of the debate concerning the establishment of the Australian Vocational Certificates Scheme until a policy has been adopted and announced by the Government. Of course, when this policy is announced, if BHP is unhappy with the contents it may find its comments dismissed on the grounds of lack of participation in the scheme.

# CHAPTER 9

## CONCLUSIONS

### INTRODUCTION

Miles and Huberman (1984, p.20) claim that there are few agreed canons for the analysis of qualitative data. For example, Sieber (cited in Miles and Huberman 1984, p.22) examined seven well respected text books on field methods and found that less than five to ten percent of their pages were devoted to analysis. The researcher of this study acknowledges that the difficulty with analysis of qualitative data is not so much that of replicability but that of multiple conclusions being possible from the same data set.

With this in mind the researcher's task in preparing these concluding remarks is largely one of summary and synthesis. It is an attempt to provide a verification device which summarises the procedures used to arrive at the findings. It is also an attempt to weave together the diverse strands of discussion that have emerged from the research and to provide an indication of the best policy option for BHP Iron Ore.

The study set out to investigate the factors affecting the introduction of a new competency based training scheme in a large corporation. In order to do this the researcher used what Carrol and Johnston (1990, p.39) called 'intuitive case analysis' to draw conclusions from

the data. This meant utilising interviews with key stakeholders, library research, examination of documentation and correspondence as sources of information. The main strength of this approach was its flexibility and its capacity to be used within the framework of the variation on the rational policy making model. From the beginning of the data collection, the researcher began to draw conclusions, to decide what things meant and to note irregularities or patterns. The researcher held these conclusions lightly by maintaining openness and scepticism. As the study progressed the conclusions became more explicit and 'grounded', to use the term coined by Glaser and Strauss (1967).

The conclusions were verified as the researcher proceeded through excursions back to the field, conversations with colleagues and gaining feedback from participants, as suggested by Bronfenbrenner (1976), Becker, Geer, Hughes and Strauss (1961), Guba (1981) and Stake (1976).

The library research and document analysis involved the systematic identification, location and analysis of documents such as broadsheets containing information relating to the research problem. Confidential memoranda and correspondence held in BHP files were viewed to gain an insight into the company perspective on the problem but were unable to be quoted from by instruction from BHP management. The literature review was used to draw conclusions about the problem in several ways. It provided understandings and insights necessary to develop a logical framework in which to fit the problem. It provided research strategies and specific procedures.



And it facilitated interpretation of the data. The findings were then structured in terms of a framework developed as a variation of the rational policy making model with a view to determining the most efficient policy decision (See pages 46-49).

Interviews were the dominant method of data collection used in conjunction with the literature search and document analysis. The interviews were what Bogdan and Biklen (1982, p.135) described as 'purposeful conversation'. Justification for using interviews as well as documentation came from Guba (1982) who support the notion of 'triangulation' which involves collecting data from a variety of perspectives to allow deeper dimensions to emerge and to uncover deviant dimensions. For example, Guba (1982, p.86) maintained that,

'Where similar results are found using different methods, the case for stability is strengthened.'

From a methodological viewpoint, the interview component of the study served several functions. The earlier interviews gave information and insight into the process of training, predispositions towards change and motives. Subsequent interviews helped validate the findings.

The variation of the rational policy making model was used to order the data collected from the various sources. The model encouraged a consideration of what the policy had the potential to achieve, to what it had the potential to sacrifice, and in doing so provided an indicator of the most efficient entry level policy choice for BHP. The variation of the rational policy making model was characterised by

systematic steps which were developed to investigate the limited number of options which could be conceivably used by BHP Iron Ore in Western Australia<sup>45</sup>. The goals of the company and in particular, the personnel department were already in place when the study began. The options were selected as part of the process of constructing a tentative typology that represented the author's a priori views on the subject. The benefits or costs of each option and the consequences of adopting each option were arrived at through interviews and subsequent verification, document analysis and consideration based on reviews of the literature.

Several constraints upon the study place limitations upon the findings presented in this report. One is the absence of an on site union perspective, due to industrial sensitivities. Another is the use of predetermined frameworks in the form of a rational model of policy making and a tentative typology that involves the author's implicit theory on matters under investigation. A third limitation arises from allowing participants to withdraw any data they provided, in keeping with the Edith Cowan Code of Research Ethics. In the event, some of the data removed was of a 'controversial' nature and its absence in this report can be seen as promoting 'social desirability' bias in the findings.

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<sup>45</sup> The options were identified as part of the process of making the author's implicit theory into an explicit framework. They were confirmed during discussion with BHP participants.

## THE MOST EFFICIENT POLICY OPTION

'To be regarded by our Owners and Customers as the Best Australian Iron Ore Company' is the objective of BHP's Business Plan. Executives of the corporation propose actions or strategies in the expectation of achieving this goal, which for the owners means maximising profit in order to pay dividends, and for the customers means maximising value for money. It means making policy decisions designed to gain an advantage over rivals and forestalling rival's efforts to gain at the expense of BHP. To a large extent, achieving the goal will depend upon BHP's ability to produce well trained workers who are able to contribute to their potential at all levels of the organisation.

Producing well trained workers requires a training program which has a strong entry level base. With the recent changes in training methodology and competency based certification at entry level, BHP policy makers were faced with the prospect of introducing a new competency based training scheme. Four alternatives or options were identified by those responsible for making entry level training policy. Those options were: *Option One* ; Running the Traineeship side by side with the Apprenticeship scheme, *Option Two* ; Adopting the Traineeship as the only entry level of training, *Option Three* ; Integrating the Traineeship and the Apprenticeship and *Option Four* ; Rejecting the Traineeship. Each of the options was analysed in terms of contextual factors, cost and benefits and the overall consequences.

In addition to literature searches and examination of relevant documentation; the three perspectives of BHP Iron Ore participants, representatives from the Department of Employment, Education and Training and the Trades and Labor Council of Western Australia were useful in illuminating the different costs and benefits of each of the four options. In the case of option one, (running the Traineeship side by side with the Apprenticeship), the costs of adopting this scheme of training far outweigh the benefits according to the comments made by the majority of the participants. Each of the three major stakeholders agrees that this is not an optimum option to pursue, albeit for different reasons.

According to participants, from BHP's point of view option one would involve considerable financial expense because one group would be trained to a level which makes it unable to contribute to productivity in the long term. This would do little to promote the corporate goal which requires investment to be directed at ensuring that BHP is considered the best. Expenses for a training scheme for a group of employees to a level less than Tradesperson would not be considered a sound financial investment. Training investment could not be written off against revenues received as a result of skilled production. Running the Apprenticeship side by side with the Traineeship could only be considered a social benefit exercise for those involved in the Traineeships. This would not contribute to increasing profits or customer service.

Running the Traineeship side by side with the Apprenticeship would not suit either the Department of Employment, Education and Training

or the Trades and Labor Council of Western Australia because of the lack of career paths for those who are involved in the Traineeship group. The Trainees would complete their period of employment when they had achieved the set competencies. This is not in keeping with the aims of the Traineeship as set out by the Department of Employment, Education and Training or the philosophy of the Trades and Labor Council.

In the case of option two (adopting the Traineeship as the only entry level training), the three major stakeholders have mixed views about whether or not the cost of adopting this system outweighs the benefits. These views depend largely on the stakeholder's confidence in the Federal Government's ability to introduce the Australian Vocational Certificates.

In BHP's case adopting the Traineeship as the only entry level of training would not contribute to the company goal because there would be a significant gap between the skill acquired by the employees at the end of their training period and the skills required of a Tradesperson. These employees would be less than productive on a site and it would place an extra burden on qualified Tradesperson who in turn would be less productive. This would reduce profitability and detract from the goal of making BHP the 'best' according to customers and owners.

The Department of Employment, Education and Training would benefit from the introduction of the Traineeship as the only form of entry level training at BHP because it would give the scheme

legitimacy. There is currently only one small relatively unknown firm in Western Australia which has adopted the Traineeship as the only entry level of training. If BHP were to do the same it could lend its reputation for thorough research and high standards to the scheme. The Department is confident that the Australian Vocational Certificates will be introduced in the very near future.

The Trades and Labor Council of Western Australia shares the Department of Employment, Education and Training's optimism about the introduction of the Australian Vocational Certificates. Training more employees for jobs in the Metals and Engineering trades is of primary importance to the Trades and Labor Council. With the expectation that the certification mechanisms will be in place by 1995, the Council is happy to see employees begin training in the area as soon as possible and to work out the details of continued training at a later date.

In the case of option three, (integrating the Traineeship with the Apprenticeship scheme), the stakeholders see the costs and benefits as being more evenly matched. Except for the Trades and Labor Council of Western Australia, the other stakeholders do not advocate the termination of the Apprenticeship system.

Integrating the Traineeship and the Apprenticeship schemes can be considered by BHP as a viable option because it could contribute to the company goal. It allows continuity of training which in turn would produce qualified Tradesperson who can contribute to productivity. It

also would provide a 'backstop' if the Australian Vocational Certificates are not in place by 1995.

The Department of Employment, Education and Training sees the integration of the Traineeship and the Apprenticeship schemes as a middle ground approach to training. It retains some of the best attributes of the Apprenticeship scheme while allowing employees to progress towards a competency based certification. The Trades and Labor Council of Western Australia on the other hand believes that there is little of merit to be salvaged from the Apprenticeship scheme and therefore, that companies should look to the 'future rather than the past' <sup>46</sup> for their training requirements.

Rejecting the Traineeship constitutes option four. Company representatives indicated that at the present time the benefits of this option outweigh the costs for BHP because it already has a training scheme which fulfils its needs and can be adjusted to the future thus providing continued increases in productivity and therefore profitability. In other words, BHP can continue to improve its current Apprenticeship system which has direct articulation to its supervisory and management training programs.

The Department of Employment, Education and Training and The Trades and Labor Council of Western Australia perceive the cost of option four to be far greater than any benefit which could be accrued. According to both bodies, when the Australian Vocational Certificates

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<sup>46</sup> During the validation process this was the only substantive comment made by a nominated Trades and Labor representative during a telephone conversation with the researcher

are introduced, rejecting the Traineeship altogether would deprive employees of access to an improved competency based training scheme and the ability to gain a nationally recognised qualification.

Several major findings about the factors influencing BHP's policy decision were generated by the data. Among these, two stand out in particular: the uncertainty surrounding the introduction of the Australian Vocational Certificates Scheme and the influence which can be exerted by the Trades and Labor Council of Western Australia and the Department of Employment, Education and Training.

After identifying the factors which affect the introduction of a competency based training scheme the researcher concluded that the changes occurring nationally within the occasional training sector, justify a 'wait and see' attitude towards changing a training scheme which currently seems to suit BHP Iron Ore's needs. This is not to recommend that BHP should remain static for an extended period in its approach to skilling its future workforce. Indeed, arguably It cannot do so if it wishes to achieve its corporate goal.

During the month of November 1993 the Department of Employment, Education and Training in Western Australia launched the Career Start Traineeship in Metals and Engineering. It was anticipated by the Senior Policy Officer involved that, 'there will be a clear picture of what the scheme involves by that stage'. In June of 1994 that picture was still being developed. Since recruitment for 1995 entry level training began in July of 1994 the Traineeship scheme was rejected for the next year. However, once details about the scheme are



released Senior Training Officers can begin to plan for the introduction of an integrated Traineeship and Apprenticeship Scheme which fulfils the requirements of the Australian Vocational Certificate, the Mayer Competencies and the Australian Standards Framework. After discussion and planning, a scheme which matches BHP's needs and contexts in 'on and off the job' training could be set in place to operate in 1995.

Rejecting the Traineeship scheme for 1995 would not necessarily force BHP to take a passive approach to the adoption of new methods of training and certification. If the pace of change over the past five years continues, BHP is likely to face at least a decade of phenomenal growth and change within the training system. Such growth would benefit from careful research which can inform and help policy making in the training area.

**SECTION FOUR**

**ADDITIONS**

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C A R E E R S T A R T T R A I N E E S H I P S

## Financial Support for Employers

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A minimum  
incentive of \$3000  
is available for  
trainees  
commencing before  
1 July 94.

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As an employer of a trainee undertaking a Career Start Traineeship, you will receive the following financial support from the Commonwealth Government:

- \$1000 in on-the-job fees (with up to \$2000 available for CSTs longer than 1 year);
- an additional \$1000 if the trainee is classified as disadvantaged by the CES;
- \$2000 in counter cyclical payments (available for all CST trainees who commence before 1 July 1994);
- an additional counter cyclical payment of \$1000 if the trainee is classified as disadvantaged (available for all disadvantaged trainees who commence before 1 July 1994).

Note: Payments will be made in two instalments: one at commencement and one at completion. Final payment is made on completion regardless of when this is. If, for example, your trainee successfully completes a two-year traineeship in 18 months, due to quick progress or by gaining credits through assessment of existing skills, the full final payment is made. It is not adjusted downwards as if it were an 18-month CST.

# APPENDIX 2

TRAINING PLAN  
ENGINEERING/PRODUCTION  
HEAVY EQUIPMENT TRAINEESHIP

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## CONTENTS

### AREA OF TRAINING

COMMON CORE MODULES	PAGE
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Communication and Industrial Relations .....	
Occupational Health and Safety .....	
Hand and Power Tools .....	

### CORE MODULES

Computing in Engineering .....	
Machining .....	

### ELECTIVE MODULES

Electrical Fundamentals .....	
Welding & Thermal Cutting .....	
Mechanical .....	
Engineering Planning Interpretation .....	
Engineering Science .....	
Fluid Power .....	
Fitting Techniques 1 .....	

C A R E E R S T A R T T R A I N E E S H I P S

## Benefits to employers

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The opportunity  
to employ a  
wider range of  
people.

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Career Start Traineeships provide you with a range of benefits:

- financial support to encourage the employment of trainees;
- direct involvement in the actual training and assessment of your trainee in your workplace;
- off-the-job training that is 'competency based' (that is, training which requires the trainee to achieve specified levels of performance in defined areas of skill and knowledge);
- the opportunity to employ a wider range of people in trainee positions to suit the nature of your enterprise and your workforce skill requirements, including young school leavers, mature aged people, women returning to work etc.;
- trainee wages based on your trainees' time at work only;
- the security of a registered training agreement;
- minimum credit of \$2260 per trainee towards your Company's Training Guarantee expenditure;
- in some States, concessions for Workers' Compensation and Payroll Tax; and
- your trainee receives around 65 days off-the-job training valued at \$2100 at no cost to you (DEET pays the off-the-job training provider).

## Why have Career Start Traineeships been developed?

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CST provides you with employee training that is affordable and relevant.

Training systems throughout Australia are currently undergoing major reform to ensure that training is more relevant to the needs of industry and provides individuals with flexibility and choice in the pursuit of their careers. The reforms will help develop:

- a workforce which is highly skilled and adaptable to technological and workplace change; and
- enterprises which are more creative, efficient and productive.

Career Start Traineeships (CSTs) are part of this broad training reform program.

### **What are Career Start Traineeships?**

CSTs are part of a vocational training program which combines employment and training on-the-job with off-the-job training at a TAFE college or other registered training provider. Career Start Traineeships provide you with employee training which is affordable and relevant to the needs of your enterprise. For your trainees it provides high quality vocational education and training which will equip them for satisfying careers.

Career Start Traineeships build on and enhance the existing Australian Traineeship System (ATS). CSTs provide you with the following advantages:

- greater flexibility in the duration of the training period;
- the capacity to employ trainees from a wide (15 to 64 years) age group; and
- the capacity to negotiate a training plan which suits both your enterprise and the trainees' needs.

## Benefits to Trainees

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Trainees receive  
flexible training  
to meet their  
needs.

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### Young Trainees

For young people seeking employment, the CST provides a range of benefits which will assist them in gaining rewarding and permanent careers. These benefits include:

- training that prepares them for real jobs in particular enterprises;
- for those who left school early, the opportunity to get the skills they missed such as reading, writing and mathematics;
- flexibility in the proportion of time spent in off-the-job training according to each trainees' level of competence;
- full-time employment for trainees but with payment only for time worked; and
- a head start for more competent trainees in gaining higher qualifications such as an Associate Diploma in Business Studies.

### Mature Aged Trainees

For mature aged people seeking employment, Career Start Traineeships provide all the opportunities outlined above for young people. In addition, they provide:

- training and retraining opportunities previously only available to 16 to 19-year olds; and
- a system of training which recognises that they have a range of skills which have been gained through experience or informal training, and gives them credits or exemptions for these skills.

Employers of trainees in the clerical workforce will need to be more flexible than most in providing on-the-job training. Mature aged women returning to the workforce will have different skills than young school leavers. Previous experience may have provided mature aged trainees with well developed skills in information handling, communication and office organisation. On the other hand, they may require more on-the-job assistance in developing skills in the operation of modern office technology, such as computers.

### Eligibility to participate

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Traineeships are open to people between the ages of 15 and 64 years.

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#### **Trainee Eligibility**

Career Start Traineeships are open to people between the ages of 15 and 64 years.

#### **Employer Eligibility**

You are eligible to receive fees and subsidies when you:

- employ a person in a Career Start Traineeship which is covered by an award or industrial arrangement which contains Career Start Traineeship wage and conditions of employment;
- have suitably skilled and/or experienced staff who can provide on-the-job supervision and training; and
- provide training in a broad range of office/clerical procedures such as:
  - keyboarding skills
  - telephone skills
  - working with a computer or another substantial transferable skill.

### Duration of Training

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The duration of  
training is flexible.

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The duration of the CST is flexible and will vary according to each trainee's level of competence and the year he or she left school. As a general guide the following can be used to determine maximum periods of training for each trainee:

- up to two years for trainees with Year 10 or less of general school education;
- up to 18 months for trainees who have completed Year 11 studies; and
- one year for trainees who have completed Year 12 studies.

The proportion of time your trainee spends away from the workplace in off-the-job training also varies depending on the year in which he or she left school. Trainees will spend the following proportion of their time in structured off-the-job training at a registered training provider.

For trainees with Year 10 or less:

- up to 50 per cent of ordinary working hours each week, during the first year of training; and
- up to 35 per cent of ordinary working hours each week, beyond the first year (where applicable).

For trainees who have completed Year 11 studies:

- up to 35 per cent of ordinary working hours each week, beyond the first year; and
- up to 25 per cent of ordinary working hours each week, beyond the first year (where applicable).

For trainees who have completed Year 12 studies:

- up to 25 per cent of ordinary working hours each week, for the one year training period.

The process of competency-based assessment provides for further modifications in training time. This is particularly so for mature aged trainees who will often have well developed but formally unrecognised skills. The competency-based assessment process will provide the opportunity for these trainees to gain exemptions in the CST program and utilise the time in higher

## Wages

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Wage rates are based on the time your trainee spends on-the-job.

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Wage rates will be based on the existing junior or adult rate specified in the relevant award and will be paid only for the time your trainee spends at work. You are not required to pay trainees for the proportion of time spent each week at their off-the-job training provider.

You can calculate the appropriate training wage by multiplying the appropriate hourly wage rate by the number of weekly ordinary hours, less the average weekly time spent off-the-job as specified in the registered training agreement.

### Example

Bianca is a 17-year-old clerical worker trainee who has completed Year 11. She will undergo 18 months of training involving 35 per cent of her working week off-the-job for the first year and 25 per cent for the remaining 6 months.

The ordinary number of working hours is 38. Bianca's hourly rates are \$6.60 for the first year and \$8.20 for the second. On this basis, her salary would be calculated as follows:

#### First Year

$$\$6.60 \times (65\% \text{ of } 38 \text{ hours}) =$$

$$\$6.60 \times 24.7 \text{ hours} = \$163.02 \text{ per week}$$

#### Second Year

$$\$8.20 \times (75\% \text{ of } 38 \text{ hours}) =$$

$$\$8.20 \times 28.5 \text{ hours} = \$233.70 \text{ per week}$$

(The figures quoted above are not actual figures and are used for example only.)

**Note:** The Commonwealth Government guarantees a minimum gross weekly training wage of \$125 for all CST trainees under 18 years of age, and a minimum of \$150 for trainees 18 years and over. If your trainee's wage is less than the minimum, refer to the Training Wage Supplement leaflet.