A curriculum development model for Tafe NSW: linking the planned and experienced curriculum

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A CURRICULUM DEVELOPMENT MODEL FOR TAFE NSW: linking the planned and experienced curriculum

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by

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ABSTRACT

Vocational education and training (VET) in Australia has been the focus of unparalleled attention for the past decade with the emergence of a new national vocational education and training system. Technical and Further Education in New South Wales (TAFE NSW), the major VET provider in New South Wales and the largest TAFE in Australia, has a crucial role in meeting industry and community needs across the state through relevant and current curriculum in this changing and dynamic VET environment. But at present there is no widely accepted model of TAFE NSW curriculum development which provides a sufficient framework for an understanding of the curriculum development process and its interrelationships in TAFE NSW and which can be used as a basis to improve the curriculum system.

The thesis addresses this problem by constructing a comprehensive curriculum development model for TAFE NSW – which is likely to have relevance to other VET providers – portrayed in five integrated core diagrams constructed on a conceptual framework of six critical curriculum factors derived from an extensive review of literature and supported by research in TAFE NSW classrooms. The model, inter alia, illuminates the actual workings of TAFE NSW curriculum, provides greater transparency of its curriculum process and portrays the complexities of curriculum development, its diversity and interactions. TAFE NSW’s curriculum development is characterised as an iterative and holistic process in which the TAFE NSW classroom is represented as a site of curriculum development, not just implementation, as much theory suggests. Teachers and students interact as the curriculum is experienced in the classroom setting in train a spiralling and looping process of continuous quality improvement at a number of levels over time, linking the planned and experienced curriculum.
DECLARATION

I declare that this thesis contains no material which has been accepted for the award of any other degree or diploma in any University or other institution. The thesis contains no material previously published or written by another person, except when reference is made in the text of the thesis and duly acknowledged.

Antony Noel Ball
Chapter One

Background, Purpose and Organisation
INTRODUCTION

The last decade has been one of significant change for the vocational education and training sector (VET) in Australia. Attention unparalleled in the history of Australian vocational education has been focussed on VET through a plethora of reports and inquiries leading to a whole range of educational initiatives as part of a National Training Reform Agenda (NTRA).

Firstly, the national economic and social context of this change is briefly overviewed in this Chapter and the crucial role of Technical and Further Education (TAFE) in a new and emerging national vocational education and training system is identified. Reference is made to TAFE New South Wales (TAFE NSW), the VET provider at the centre of this study. TAFE, the largest post-compulsory education provider in Australia, has over one million students and is responsible for the delivery of a vast range of VET courses at more than two hundred colleges – with over forty per cent of the national TAFE effort provided by TAFE NSW. Curriculum development, the central focus of this study, is an essential and vital part of the VET system.

In this Chapter, following a discussion of the context of the thesis, the major purpose of the study is outlined. The Chapter concludes with an overview of the organisation of the study and a brief summary of each of the following Chapters.
1.1 BACKGROUND

1.1.1 The Current Economic Imperative and TAFE's Central Role

In 1989 the Organisation for Economic Co-operation and Development (OECD), addressing future educational issues facing OECD countries, raised the following challenges for education and training across the world:

If education is not only to reflect current and future social and economic trends, characterised by the way societies are changing, but to contribute positively to them, then it will need to develop the very qualities that have been discussed in this report. It will need to be enterprising. (OECD/CERI, 1989:48)

The growing recognition of the need for enterprising change and for a positive contribution by vocational education and training to the economic challenges facing Australia was already evident via two influential documents in 1987, *Australia Reconstructed* (ACTU/TDC, 1987) and *Skills for Australia* (Dawkins and Holding, 1987). Commenting firstly that the Government was determined for Australia's education and training system to play an active role in responding to the major economic challenge then, and now facing Australia, in *Skills for Australia* (Dawkins and Holding, 1987:iii), the Australian Government went on to recommend the beginnings of a practical program for change through education and training:

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 have
supported their skills development policies accordingly. Now we must do likewise. (Dawkins and Holding, 1987:iii)

The same Report also emphasised the issues of *quality* and *flexibility* and training systems in Australia:

> Action is required ... to improve the quality and flexibility of our education and training systems, and hence the quality, breadth and adaptability of skills required. (Dawkins and Holding, 1987:18)

In reviewing program directions and priorities, the Report emphasised that TAFE in particular is a critically important part of the national vocational education and training system (NVETS) in Australia and central to improving workforce quality and flexibility:

> TAFE then, is a key element of Australia’s vocational education and training system, and will be central to the Government’s concerns to upgrade the quality of our labour force skills. More than this TAFE is a recognised system in its own right, with a charter which extends well beyond the provision of narrowly-based skills training for industry. (Dawkins and Holding, 1987:31)

The Australian government further reinforced the importance of TAFE’s VET role in a major policy statement released in 1988:

> TAFE is a vital element of Australia’s post-school education and training system. It is a major service of vocational education and training opportunities for young people ... (and also) ... plays a crucial role in reviewing the vocational skills of the adult workforce. (Dawkins, 1988:18)
Thus, by the late 1980’s, driven by an economic imperative to be more internationally competitive through skill formation, workplace competitiveness and vocational training, Australia had clearly recognised the need to enhance and improve the provision of VET, put major policies in place to effect change and had identified TAFE as central to that effort. The importance of TAFE’s role continues to be acknowledged and reinforced. A national discussion paper circulated by the Employment and Skills Formation Council (ESFC) of the National Board of Employment, Education and Training (NBEET) in 1991, TAFE In The 1990’s: Developing Australia’s Skills, concludes, for example, that:

TAFE must help develop that (VET) system, and put into place a vision of how the growing competence of our community will transform the workplace culture, attitudes and practices needed for our economic survival. (ESFC/NBEET, 1991:7)

According to the Director, South Western Sydney Institute of TAFE, “TAFE is at the core of a reform and reorientation of vocational education and training” (Sobski, 1993:20) and the role of TAFE in supporting and enhancing vocational education and training by being more enterprising (adaptive, flexible, creative, innovative) and thus improving the quality of education and training in Australia is extremely important. The significance of TAFE’s VET role is captured by the National Board of Employment, Education and Training (NBEET) as follows:

It (TAFE) is the only source of systematic and structured further education and training for many young people and for most of the adult
population. The future of TAFE is therefore important to the lives of many millions of Australians. (ESFC/NBEET, 1991:9)

Furthermore, the same report also concludes that:

By the turn of the century Australia must have a vocational education and training system that meets the needs of people and of industry better than the system that we have to-day. TAFE must be an essential part of that system. (ESFC/NBEET, 1991:42)

More recently a report by the National Board of Employment, Education and Training (NBEET) powerfully signifies the crucial role of TAFE in two comments. The first comment draws on a study commissioned by them (Burke, 1995) noting that “TAFE colleges and Institutes, as the most important components of Australian vocational education and training, provide a range of opportunities to achieve vocational qualifications at a number of levels” (ESC/NBEET, 1996:7). Secondly, they point to “the growing relative importance of TAFE as a preferred tertiary education and training option, a factor which must be taken into account with careers advice in schools” (ESC/NBEET, 1996:8).

With respect to TAFE’s own perceptions of its VET role, TAFE NSW for example, the largest TAFE provider in Australia sees itself as having a most significant VET role in skilling the workforce, meeting education and training needs and providing a wide range of opportunities. The TAFE NSW 1993-1995 Corporate Plan states, for example, that:
The Commission has a crucial and major role in providing the educational and training infrastructure required to underpin economic growth, improve Australia's international competitiveness, and ensure that workers have the right skills to take up jobs in new and expanding areas of industry. (TAFE NSW, 1992:8)

The 1995-1996 TAFE NSW Annual Report is even more emphatic in its commitment to workforce education and training:

The vision for TAFE NSW is to play a leading role in achieving for New South Wales a creative, skilled and flexible workforce by providing technical and further education opportunities and outcomes equal to the best in the world. (TAFE NSW, 1996 (a):15)

1.1.2 The Importance of Curriculum Development: VET and TAFE

The economic and social context of VET in Australia has experienced considerable change and increasing constraints in the past few years as a result of new technology, multiskilling and restructuring and TAFE has effected significant organisational and policy changes in attempting to build a more effective VET system to meet the needs of industry and the community.

An integral part of TAFE's response to this environmental change is through its *curriculum development*. The ESFC/NBEET report, *TAFE In The 1990's*, is emphatic on the importance of curriculum development to TAFE:
The existing task of TAFE curriculum and the expertise of teachers in curriculum development is one of TAFE's greatest resources. (ESFC/NBEET, 1991:33)

The Australian National Training Authority (ANTA) which has been given the task of ensuring that Australia's vocational education and training system reaches high levels of relevance, efficiency and effectiveness. (ANTA, 1994: 7)

places a high priority on all aspects of curriculum. To support curriculum ANTA set up a national curriculum agency, Australian Committee for Training Curriculum (ACTRAC), which was integrated with the National Training Board (NTB) in 1995 to form the Standards and Curriculum Council (SCC) (now undertaking a further name and role change at the end of 1996) "to coordinate more effectively standards and curriculum development ..." (ANTA, 1994 (a):13).

The Chief Executive Officer of ANTA has included Curriculum Delivery and Assessment as one of eight major components of the National Training Reform Agenda (ANTA, February 1994:2).

The NSW Board of Vocational Education and Training (BVET) identifies eight NSW priorities to form the framework for initiatives and outcomes for VET in NSW in 1996 (State Training Profile) which reflect the national priorities endorsed by ANTA and in doing so, refers to the overriding importance of course development:
NSW state priorities for vocational education and training for 1996-1997 aim to improve access, quality, relevance and choice in the development and delivery of vocational, education and training programs. (BVET, 1995:39)

Within TAFE NSW curriculum is seen as a fundamental part of its overall corporate strategy. Indeed the whole focus for TAFE NSW’s Corporate Plan 1993-1995 relates specifically to curriculum:

TAFE NSW aims to meet the needs of students, industry and the community through the provision of a range of quality programs and services that are supported by relevant curriculums, comprehensive teacher skills, modern facilities and skilled management.

TAFE NSW will support the national vocational education and training system and promotes effective participation of industry and the community in educational planning. (TAFE NSW, 1992:5)

This curriculum focus is further acknowledged in the most recent TAFE NSW Management Plan which states that the core business of TAFE NSW “is the delivery through Institutes of high quality education and training programs and services” (TAFE NSW - Corporate, 1996:2).

A central feature of Australia’s national training system is the move for curriculum to be linked to industry competency standards and documented in competency-based educational training (CBET) format. TAFE NSW is formally committed to these principles:
Our core responsibility is to design, develop and deliver quality curricula based on industry competency standards ... All new courses and course revisions in TAFE are being developed in competency-based format. (TAFE NSW, 1994(a):21)

While TAFE NSW has experienced considerable change itself over the past several years as it "supports and guides the establishment and implementation of the national vocational education and training system" (TAFE NSW, 1992:11. Objective 2) it remains committed to meeting the needs of students, industry and the community through quality educational programs via relevant and effective curriculum. TAFE NSW's Corporate Plan (1993-1995) states this in two of its five major corporate objectives:

Develop curriculums, teacher skills and facilities that reflect and respond to State priorities.

Deliver program and services that meet the needs of students and industry. (TAFE NSW, 1992:11. Objectives 3 and 4)

Clearly TAFE has a major and vital role to play in Australia's national vocational education and training system and curriculum development is a central feature of this role. Curriculum development is fundamental to TAFE's response to environmental change through skilling the workforce, delivering relevant courses and focusing on education and training outcomes consistent with the national agenda for training reform.
1.2 PURPOSE OF THIS STUDY

The major purpose of this study is to construct a curriculum development model for TAFE NSW which takes into account TAFE NSW features, characteristics (with particular emphasis on the nature of TAFE NSW classrooms) and the economic and social context, including the emergent national vocational education and training system, within which it functions. It is intended that the model help improve curriculum development in TAFE NSW.

There is no widely accepted curriculum development model at present which provides a framework for an understanding of the curriculum development process and its interrelationships in TAFE NSW. The thesis model offers a comprehensive guide for this understanding and a basis for analysing the curriculum process via a conceptual framework and a set of underlying curriculum principles supporting the model. The framework itself includes reference to the wider economic and social forces which impact on the curriculum with particular reference to the national training reform agenda and competency-based education and training.

A related and important contention of the study is that the classroom is a significant site of curriculum development in TAFE NSW with the teacher and students playing a vital role in the curriculum development process at the classroom interface.

The thesis model proposes to address a central problem identified in the study that TAFE NSW curriculum development processes require special understanding and should be distinguished from processes of
the school system and other post-compulsory educational institutions. Most models and theories in mainstream curriculum literature are referenced to the school system.

This is a most significant, indeed critical period in the history of TAFE NSW with its expanded role which is central to government economic and education policy at both state and national levels of government. The model offers a framework and methodology to closely examine the core business of TAFE NSW, the design and delivery of courses, in a time of keen focus and strong emphasis on quality, customer service and accountability.

1.3 ORGANISATION OF STUDY

The study is presented in seven chapters. Chapter Two traces the early foundations of Technical and Further Education in New South Wales through to the present day and highlights characteristics and special features of TAFE NSW which have prevailed through its history for well over a hundred years. To assist in identifying these characteristics and as a lead in to a case-study in Chapter Four, there is a particular focus on one of the oldest and largest Industry Training Divisions in TAFE NSW, Business Services. The research problem of constructing a curriculum development model for TAFE NSW is outlined and there is discussion on the relevance and importance of the problem and the specific purposes of the study. Comment is made on the likely relevance of this model to the wider TAFE system and indeed the VET sector. Comment is also made on the use of curriculum terms.
Chapter Three moves on to an extensive review of curriculum literature across the general curriculum field, TAFE NSW related areas, adult education, the national training reform agenda (including competency-based education and training) and the classroom arena. The central aim of this review is to determine how useful this literature is in understanding TAFE NSW curriculum processes.

Chapter Four focuses further on the role of the classroom, moves beyond the literature review, and examines TAFE NSW curriculum in action, as it is experienced and grounded in the classroom. This is undertaken via a case-study, classroom observations and a study of teacher curriculum delivery perceptions.

Chapter Five constructs a conceptual framework to be used as a basis for the thesis model. The framework, accompanied by a set of underlying principles, incorporates the classroom site, economic and social factors, curriculum literature, attributes, axioms, values and TAFE NSW characteristics.

Chapter Six builds on this conceptual framework and constructs a comprehensive and detailed curriculum development model for TAFE NSW. The model can be used to understand TAFE NSW's curriculum development processes, make an assessment of how these processes work and how they should work, for TAFE NSW to remain relevant and accountable in an emerging and complex vocational educational and training environment.
Chapter Seven draws the thesis together, provides a general summary and synopsis of the study and considers the contribution of the model to curriculum development in TAFE NSW and its possible relevance to other VET providers. It concludes with recommendations for improving curriculum development in TAFE NSW at State and Institute levels and offers suggestions for further research.

1.4 TAFE AND TAFE NSW

"TAFE" has been referred to several times already in this thesis and indeed will be central to the whole thesis.

The Technical and Further Education system referred to as TAFE (known as technical education until the early 1970s) is the principal provider of post-compulsory technical and vocational education in Australia as well as a major provider of general education and literacy programs. TAFE operates across eight different State and Territory authorities each with its own distinctive administrative structure. Since 1992 TAFE has been guided and co-ordinated by the Australian National Training Authority (ANTA) (Chapter Three, Section 3.5).

TAFE in New South Wales is referred to as the NSW Technical and Further Education Commission (known as TAFE NSW) – a statutory body corporate established in 1991. TAFE NSW is comprised of eleven Institutes which offer a range of nationally recognised programs at more than 120 college locations across the state (Chapter Two, Section 2.1). There is also a large distance and open learning education facility - Open Training and Education Network (OTEN).
The acronyms TAFE and TAFE NSW are used in the thesis to have the following meaning:

TAFE refers to Technical and Further Education throughout Australia i.e. all States and Territories.

TAFE NSW refers to Technical and Further Education in New South Wales.

A number of other acronyms relating in particular to the National Training Reform Agenda (NTRA) are used throughout and are listed in Appendix 1.
Chapter Two

Curriculum Development in TAFE NSW: The Context and Problem
INTRODUCTION

Chapter One discussed the economic imperative which laid the foundations for recent major changes to the national VET system (NVETS) and TAFE's crucial role. Curriculum development is central to TAFE's educational function but there is no one curriculum model which provides a guide to understanding this very complex process. This Chapter is primarily concerned with identifying the central problem - the construction of a curriculum development model for TAFE NSW which incorporates the specific features and characteristics of the TAFE NSW system and its interrelationships with the economic and social context of the national vocational education and training system.

To do this the chapter firstly examines the history of TAFE NSW and identifies some common threads which have persisted from TAFE's foundations in New South Wales to the present day as well as more recently emerging characteristics.

The curriculum delivery context of TAFE NSW is then examined with a focus on the nature of TAFE NSW, its teachers and students. There are several features which distinguish TAFE NSW from the school system and other post-compulsory educational institutions. Those discussed relate particularly to the vocational nature of TAFE NSW, the background of teachers, age and maturity of students and type of courses offered. There is a particular focus here on the Industry Training Division of Business Services, one of the oldest and largest educational sections in TAFE NSW, to help identify these features and differences and provide background for a case study in Chapter Four.
The chapter then outlines the research problem, refers to specific purposes of the study and discusses the importance and relevance of the problem and concludes with a discussion of some curriculum terms.

The present national and state governments' focus on TAFE as a major vocational educational provider with plans to implement competency-based education and training within national standards and to achieve greater efficiency and effectiveness, call for greater understanding and transparency of TAFE's curriculum processes. A first step towards achieving this for TAFE NSW is to identify the main distinguishing features and characteristics associated with TAFE NSW's curriculum development.

2.1 TAFE NSW BACKGROUND, TRADITIONS AND HISTORICAL SETTING

The Department of Technical and Further Education in NSW became a statutory authority in February 1991 and has since been known as the New South Wales Technical and Further Education Commission (TAFE NSW). What is now TAFE NSW has experienced considerable growth and change since its formal beginnings in 1883. The Management Review (Scott Report) September 1989 described TAFE NSW as "by far the largest and most complex post-school educational institution in Australia" (Scott Report, 1989:8). In 1995 TAFE NSW offered around 1,500 courses or programs and 10,000 subjects in a multitude of fields of study across more than 120 colleges, enrolled 415,868 students (123,210 equivalent full-time) employed over 20,000
staff (over 17,000 equivalent full-time) and incurred a total expenditure of $1,275 million for the 1995-1996 financial year (TAFE NSW, 1996 (a)). The majority of students attend part-time. In 1995 part-time students represented 83% of the total, the remainder was made up of 10% studying full-time and 7% studying externally. TAFE NSW is strongly identified as an adult education provider with approximately 54% of students aged 25 years and over and 33% in the age group 20-29 years; of the total overall enrolments 53.5% were male and 46.5% female (TAFE NSW, 1996(b)).

There is a long tradition of TAFE NSW responding to the needs of industry, commerce and the community generally. Meeting community needs includes the provision of education to disadvantaged people (five equity groups are identified – women, aboriginal, multicultural, disability, outreach), providing Adult Basic Education (english language, adult literacy and numeracy) programs for the unemployed and other courses with a local community emphasis such as Community Welfare, Child Care, Community Services Work, Working with Older People and Youth Work. What is taught is determined by government policies and directions and the training and occupational requirements of industry and community-based needs. A dominant focus of the Department’s educational policy over the years has been that its students

have the opportunity to develop practical skills, understanding and knowledge related to occupations at many skill levels, and in a wide range of fields. (TAFE NSW, 1988:11)
The TAFE NSW Annual Report, 1990 stated that the primary challenge for TAFE NSW is:

achieving a cost effective mix of education and training programs which can constantly be adjusted to meet the needs of students, industry and the community. (TAFE NSW, 1990 (a):14)

More recently, in commenting on the new organisational structure of VET in New South Wales and TAFE’s vital role, the 1996 TAFE NSW Annual Report reinforced this industry and community driven approach:

TAFE NSW is proud of its contribution to the economic development of NSW through the creation of a better skilled, trained and educational workforce ... Our programs were developed and delivered in a range of ways, to meet the training needs of key industries, enterprises, community organisations and individuals. (TAFE NSW, 1996(a):3)

Along with this traditional “needs based” approach there has been an emphasis on access for the customer. The previous Managing Director of TAFE NSW commented that:

The TAFE system in NSW has developed a remarkable level of access based on the premise that there should be a TAFE College or a TAFE delivery point within relatively easy reach of any potential client, whether an individual student, employer or industry. (Ramsey, 1992 (a):11)

For the most part curriculum development has taken place in a teaching and learning environment characterised by occupational relevance – requiring practical, applied knowledge and skills and the
need to be responsive to industry and the community. Classes have been accessible to all, available for both city and country students and offered day and night – with students supported by an educational environment with facilities such as student counselling and library services.

These long established characteristics of part-time students, applied knowledge and needs driven approach have provided a particular cultural and organisational context or milieu for curriculum development to take place in TAFE NSW. This context has been fundamentally important to curriculum design and development generally and in the radical review of policy based on changes to Australia’s industry base and the economic imperative of raising the skills base of our workforce leading to restructuring of TAFE NSW in 1989 this continued to be the case. The Scott Report on TAFE Restructuring reached the conclusion that:

The New South Wales Government should continue to support in principle the broad educational range of TAFE activities, while insisting on appropriate measures of its relevance, both for industry needs and for the continuing education requirements of individuals. (Scott Report, 1989:10)

The Managing Director of TAFE NSW at that time made the following comment on new directions in TAFE:

What TAFE can offer will be of great relevance to the needs of the State and indeed Australia, both socially and economically, in the next century. Its unique relationship to industry and the advantages this confers in terms of technological and
vocational expertise give it a much needed edge in to-day’s education and training market. (Ramsey, 1992 (a):10)

In the new national VET system, while there are different points of focus and emphasis for TAFE (Chapter 3, Section 3.5), there remains a strong commitment to the already established community and industry context. For example, the Chief Executive Officer of ANTA in discussing TAFE’s VET role comments that:

TAFE exists to provide a direct educational response to the needs of industry and the community. Industry and community are engaged to establish what those needs are and, in turn, TAFE should craft an educational response. (Moran, 1993:13)

These long established characteristics relate to a broad political, socio-economic and ideological context in NSW and have their origins in the foundations of the TAFE NSW system dating back to 1833.

2.1.1 Laying the Foundations 1833-1890’s

One hundred and fifty years ago the new colony of New South Wales was struggling to establish the beginnings of an industrial economy. From the first settlement of the colony skilled workers were imported from England; clearly there was a need to train people in the colony itself.
Technical colleges in New South Wales and throughout TAFE "have their roots in the nineteenth century, as mechanics' institutes, technical and working men's colleges, and schools of mines developed in the capital cities and provincial centres" (ESFC/NBEET, 1991:10). Mechanics' Institutes and School of Arts essentially consisted of reading rooms, library facilities and lecture programs. For NSW the formal foundations of adult technical education commenced with the Sydney Mechanics' School of Arts formed in 1833 (Murray-Smith 1987; Barcan 1965; Information Services TAFE NSW, 1983:11). The central aim of this institution at the suggestion and under the patronage of Governor Bourke was stated by Rev. Henry Carmichael (an important educational figure of the time) at the Opening of the Sydney Mechanics' School of Arts in April 1833 (and written into the Institute's rules) as being for "the diffusion of scientific and other useful knowledge as extensively as possible throughout NSW" (Carmichael, 1833:69).

Gradually a pattern was established in New South Wales based on the Mechanics' Institute movement established in Great Britain. These institutes in the Australian colony were "generally founded by the middle-class liberal for the working man" Murray-Smith (1965:174). A report on the achievements of Sydney Mechanics' School of Arts in 1881 noted that:

The early committees of management of the school of Arts were ever mindful of its special mission as a Mechanics School of Arts, and as far as means would permit endeavoured to afford evening instruction to any artisans and apprentices desirous of improving their minds. (Technical College Committee Report, 1881:5)
Along with the education and training emphasis, then, was a concern for the broader educational issues of opportunity and access and, furthermore, a desire to "develop" the individual and encourage initiative "to learn"; this reflects a supportive role for the Institutes to prepare people beyond the vocational and to enhance their well being in society. At the Board of Technical Education of New South Wales President's Annual Address in 1887 Selfe, the Acting President of the Board, commented on both the vocational importance and personal benefits of technical education to the individual as follows:

You also fully realise the importance of a proper system of technical training being available to the masses of the people who have to earn their daily bread by work of their hands. ... (and) Knowledge which not only enlarges the mental powers and increases the manual skill but makes ... more useful members of society, better procedures in their respective callings ... (Selfe, 1887:10)

The educational role of the Mechanics' Institute in supporting adult vocational education for men (and women to some extent, see below) was an important agency in the formation of the separate Working Men's College in 1878 (to be referred to later as Sydney Technical College). The principal reason given for establishing this new institution by the committee of the Sydney Mechanics' School of Arts was that:

... under present arrangements it has been found that owing to neglected education and long hours of labour the artisans and apprentices are placed at great disadvantage in keeping up with those ... (who are in a better position to study). (NSW LA, 1876-7:3)
It is of interest to note that a submission to the government of the day by a Committee of the Sydney Mechanics' School of Arts in 1874, to extend the size of the technical education system and build a Working Men's College, specifically acknowledged that female students had recently been included in the Institutes' programs:

... for the past forty years the Sydney Mechanics' School of Arts has been the principal means of instruction to the youths and adults of the city, and that within the past three years the classes have been extended so as to include female students, with successful results. (NSW LA, 1876-7:3)

Although there were female students in an earlier year (1837) they were "wives of three socially prominent committee members ... and ... music classes were introduced in 1837" (Kyle, 1986:183).

In her study of the education of women in New South Wales, Kyle comments that the aims of Mechanics' Institutes and School of Arts in New South Wales:

... did not exclude women altogether but it is doubtful of the original concept of self-improvement through mechanics' institutes and school of arts institutions was actually intended for them. (Kyle, loc. cit.)

A Board of Technical Education set up in 1883 formally laid the foundations of Technical Education as a State government department (taking over the Working Men's College) and within six years it had sponsored classes in 49 centres with its courses becoming increasingly technical and practical with certificates of competence being issued for successful completion of courses (e.g. boilermaking, carpentry and
joinery, cabinet making, carriage-building) (Information Services TAFE NSW, 1983:21) and moving away from the "improving of minds" approach of the Mechanics' School of Arts.

The practical approach was supported by workshops and facilities at the various Colleges and work site visits. In 1883 the Board resolved that the aim of technical education in the colony would be to follow the principle laid down by the City of London Guilds and emphasise the theoretical foundations of work as well as actual skills:

... to improve the industrial knowledge of workmen by teaching the sciences and principles underlying their handicrafts, and that such training should be illustrated by the best apparatus and machines that can be obtained, and by visits to workshops, manufactories, etc. (Board of Technical Education, 1883. Cited in Griffiths, 1957:204)

A Royal Commission on Technical Institutions in Great Britain (1881-1884), attended by representatives from Australia, provided further guidance for understanding the intended role and place of technical education in Australia at that time. Evidence put before the commission made it clear that technical education was regarded as of great economic and social value to new and developing countries such as colonies in Australia. Pearson, the Minister for Public Instruction in Victoria, in his own report comments:

A new country is, however, an exceptional condition. It has to create its own industries, and even if we assume private enterprise to find the capital needed for any new branch of production, the workman and machinery would have to be imported before a start can be made. (Pearson, 1888:4)
After commenting that Australia would be out of date unless it could keep in touch with European and American centres of industry, evidence before the Commission led Pearson to emphasise:

the value of technical colleges equipped with laboratories, museums and a scientific staff ... and that their real teachers ... must not be professional or scientific men, but practical men with a knowledge of science; that is their real training must be in the workshop; but the foreman or manager will be better able to instruct them if he knows the reason for what he is doing, and they will be better able to understand him if they have given some part of their time to technical studies. (Pearson, 1888:4)

In these early formative years of technical education there is often reference to the teaching of science and principles. Although there were mixed views on what constituted technical education in the colonies, technical education came to refer to instruction in those sciences which had a direct bearing on manufacturing industries and in the principles underlying industrial processes (Ritchie, 1969:245). In reviewing the history of curriculum at Sydney Technical College in this foundation period Neill (1991) comments that the emphasis was on knowledge, skills and underlying principles – a mixture of practice and theory not just manual skills – for "basic competence in trades" (Neill, 1991:11). Thus by 1888 a technical education policy had emerged in New South Wales with an emphasis on the practical, applied and scientific.

This combining of a practical, applied approach with the teaching of science and underlying principles was supported by the introduction of workshops in the Colleges, recruitment of teachers from the "shop
floor" and site visits after 1883. In advertising its courses to the public in 1884 Sydney Technical College emphasised this approach of linking theory, practice and site visits as directed by the Board of Technical Education. Indeed the Prospectus used the Board’s words (refer Board’s quote 1883 above) emphasising the mixture of theory and practice:

Following out the principle laid down by the City of London Guilds for their own guidance, the Board of Technical Education has announced that the object of technical instruction in New South Wales will be to improve the industrial knowledge of workmen by teaching the sciences and principles underlying their handicrafts. Such teaching will be illustrated by the best apparatus and machines that can be obtained, and by visits to workshops, manufactories etc. (Prospectus for Sydney Technical College, 1884)

Some explanation for this approach can be found in a report of the Department of Public Instruction in 1887 for the Colony of New South Wales:

the term “Technical Education” in its fullest meaning denotes the special education and training requisite to enable a person to rightly and thoroughly learn the theory and practice of any art, science or profession ... so that it may quickly be of the most advantage to the great majority of the working population ... (Minister of Public Instruction NSW, 1887:33)

Although technical education was incorporated under the Department of Public Instruction in 1889, as the Technical Education Branch, it maintained a separate identity and was now under Ministerial control. It was to remain so for the next sixty years until 1949 when it became a
separate government Department of Technical Education with a Director directly responsible to the Minister of Education. Technical Education in NSW had become formally acknowledged as a separate educational institution with its own identity and traditions and has remained that way. The attached diagram (Appendix 2) shows the educational pathways in New South Wales in 1923 and the separate identity of Technical Education. This separation from the school system with clear links and pathways across sectors is remarkably similar to what we are doing to-day. This is clearly evidenced by the Joint Secondary Schools TAFE courses (JSSTAFE) program for Year 11 and 12 students who can include subjects from TAFE NSW courses as part of their Higher School Certificate (HSC) study program and the TAFE HSC Pathway which enables students to study vocational subjects as part of their HSC (e.g. Child Studies, Horticulture) and qualify for a full TAFE certificate at the same time as completing their HSC.

Thus, as Ritchie notes:

From 1880 to 1900, the progress of technical education had coalesced into clear, broad lines of policy and the state had assumed the direction not only of general education but also of vocational training. (Ritchie, 1969:253)

2.1.2 1890's - 1996

The development of technical education in New South Wales during the 20th Century built upon the formative years of policy and ideology of vocational education established by 1900. The technical education
concept and underlying rationale have undergone review with a number of Commissions and Reports in the last one hundred years. The policies emanating from these reviews and the perceptions concerning the type of education delivered by vocational education in TAFE NSW has in general, consolidated those of the formative years described in Section 2.1.1 above. Although there have been a number of significant organisational and structural changes within TAFE NSW this century, the "useful knowledge", "relevant occupational skills training" and "culture of technical education" has steadfastly continued, combining the practical with principles of understanding.

Turney (1975) notes that the early 20th century public inquiries such as the Knibbs-Turner Report of 1905 and Nangle-McCoy investigations (in Tasmania) of 1916, made it clear that technical education was part of a world-wide movement to secure "the foundations of their prosperity by training skilled workmen and professionals in the techniques and management of the industrial and commercial expansion they were experiencing" (Turney, 1975:375). Ritchie states that the philosophy of technical education in New South Wales was highly eclectic, that the emphasis was on pragmatic as against absolute values while the main aim was to produce more useful members of society and that "on the whole the content of technical education seems to have been appropriate to its purposes." (Ritchie, 1969:257)

The period 1916 to the early 1970's was not an eventful one in the overall picture for technical education. Goozee comments that in this period TAFE was a sector of education which "although fulfilling a crucial role in providing post-compulsory education and training for large numbers of people, was consistently under-valued and under-
resourced" (Goozee, 1995:5). It was a period of continued growth and development nonetheless, and a time in which technical education sought further recognition and to clarify its character. A difficulty was that for funding purposes technical education was a sub-section of departments of education and it was not until the 1970's when the Commonwealth Government started to provide additional grants to TAFE systems that technical education could be properly resourced and its role more clearly identified. Prior to the 1970's TAFE was the “third sector” alongside schools and universities but lacked a clear recognition of role and technical education “to some extent ... had to be self-defining” (Goozee, 1995:9). There was discussion and debate during these years as to the level and type of education offered by technical education (compared to the university sector) and a view was expressed by the Murray Report that technical education, compared with universities, took an applied approach aimed at the craftsman and technician non-professional level. The Report comments:

... a technical college or other institution of similar type, which is performing excellently its proper function of producing technicians and craftsmen for whom there is an urgent national need, may be led by a false sense of values to try its hand at producing another type, the professional engineer or technologist ... (Murray Report, 1957:78).

The Report further comments that:

... the ideal to be aimed at ... is that professional training should be the function of universities and all forms of non-professional training should be the function of the technical colleges. (loc. cit.).
The on-going consolidation of TAFE NSW policy in the 1970's was expressed in a publication by the NSW Department of Technical Education, *Preparing for Tomorrow*, where the following major aims of technical education were cited "as of long standing but no less valid for not being new":

1. To provide a wide range of educational programs and activities offering individual citizens opportunities to pursue interests, develop talents, establish vocational competencies, advance careers and progress towards the achievement of aspirations.

2. To be perceptive and responsible to community needs for such programs and activities, energetic and imaginative in meeting the challenge of changes: to exercise educational leadership.

3. Taking cognizance of the contribution of other educational institutions and the training arrangements of employers and industrial bodies, to provide facilities for the preparation of adequate numbers of people to enter the wide and increasing range of occupations which demand further education and training beyond secondary schooling.

4. To extend and improve the educational opportunities it offers to all citizens of the State, wherever they live; seeking constantly to find and develop more effective means to this end. (Department of Technical Education NSW, 1974:7)

At the same time this publication predicted that the understanding of and approach to these purposes was subject to change and it was the dramatic and continuing expansion of the department's further education role which led to a change in name in 1974 to the NSW Department of Technical and Further Education (TAFE NSW). The
impetus for this change was the Kangan Report (1974) which was the most comprehensive report on technical education in Australia up to that time. In significantly broadening the purposes of technical education (from the traditional trade-based areas) it proposed that the aims of TAFE should encompass the wider further education aspects of vocational education by providing a broad range of vocational, general and further education courses – these ranged, for example, from adult literacy and welfare education to advanced studies in business and technology.

This Report had a significant impact on technical education across all states and gave a national identity to TAFE. Goozee (1995) observes that:

... technical education under its new name TAFE, was recognised nationally as a distinct identity within the education spectrum. It meant that both the quality and quantity of TAFE provision could be raised. (Goozee, 1995:11)

Enduring themes of the Kangan Report and its implementation are identified by Johnston (1994) across several areas – the importance of VET to the national identity, the need for a balanced perspective on the role of education and training sectors, the need for recurrent education, flexible delivery to involve formal education and off-the-job instruction, balance of general and vocational education and the importance of research and data collection (Johnston, 1994:128-130).

The Williams Report (1979) saw TAFE as more flexible in its approach to education and training than the other post-compulsory education sectors and recognised TAFE’s ability to adapt quickly to changing
needs and interests in the community. The Report also highlighted the interrelated nature of TAFE courses with industry and the community. Compared with other tertiary areas TAFE characteristics were observed as having "less formality", being "for employment purposes" and were widely "available" (i.e. for both city and country students) (Williams Report, 1979, Chapter 7).

Policy within TAFE NSW has continued to pursue these goals to the present time. The first Corporate Plan for TAFE NSW, published in 1983, defined TAFE as a post-compulsory educational activity:

... involving a study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to professional, para-professional, trade, operative and equivalent occupations in various sectors in economic and social life. (TAFE NSW, 1983:3)

Later, in 1990, the Corporate Plan for TAFE NSW put forward under changed government leadership and within the context of organisational restructure defined the corporate educational purpose as more specifically industry driven to improve the skills of the workforce and entry-level training (for 15 - 19 year olds). The aim was stated as:

the provision of high quality vocational, preparatory and community education programs and services that enhance the productivity and develop the potential of its people, and up-grade the skills of its workforce. (TAFE NSW, 1990:10)
In its lengthy history there have been numerous Inquiries and associated Reports into TAFE's role as an educational and training institution for the people of NSW. The latest major changes being the Scott Report (1989) "TAFE Restructuring" and Ramsey's (1992) (a) "TAFE NSW: Directions for the Future" and the very recent organisational change in 1995 of TAFE NSW being managed by the Department of Training and Education Co-ordination (DTEC). Further structural and organisational changes are presently underway with the recent DTEC/TAFE NSW (1996) document entitled "Draft Structures for DTEC and TAFE Co-ordination". In February 1992 the Commonwealth Government offered substantially increased funding for VET on the understanding that the States and Territories enter into an agreement to establish a national training system. The Australian National Training Authority (ANTA) was incorporated under the ANTA Act 1992 to provide national strategic planning and the allocation of funds for VET with each State having a planning body to facilitate planning and co-ordination of VET within the State; in New South Wales this is the Board of Vocational Education and Training (BVET). Changes in the provision of VET are being effected through a national training reform agenda (NTRA) in which there is a reinforced emphasis for TAFE on occupational, skill-based training and competency-based education. The national vocational education and training system (NVETS) and its implications for TAFE NSW especially for curriculum development are examined in Chapter Three, Section 3.5.
2.2 THE TAFE NSW CURRICULUM DELIVERY CONTEXT: CURRICULUM FEATURES, TEACHERS, STUDENTS AND THE CLASSROOM

2.2.1 Curriculum Features

In examining the history of education in New South Wales, Barcan (1965) posits that:

The curriculum of any education system provides an insight into the social function of education within that system and also some notion of its underlying educational philosophy. (Barcan, 1965:2)

As seen in Section 2.1, TAFE NSW’s early beginnings can be linked to developments in technical education overseas, particularly Great Britain. In relation to the curriculum, a statement contained in a memorandum to the NSW Government for instituting the Working Men’s College (to become Sydney Technical College) in 1874 referred to recommendations of a Royal Commission on Scientific Instruction in Great Britain at that time; the Committee recommended these objectives as being worthy of adoption in the colony:

That courses of lectures be given in connection with the collection of physical and mechanical instruments, the establishment of which we have proposed; the object of these lectures being to illustrate the progress of scientific and mechanical discovery and invention.

That the establishment of lectures on science, accessible to all classes on payment of a small fee, should be promoted by the Government in the great centres of population.
That, in the first instance, with the view of carrying out the preceding recommendations the system of instruction of this kind, which has already been established by the Government in the metropolis, should be developed by the institution of courses of lectures on the principal branches of experimental and natural science. (Sydney Mechanics’ School of Arts Committee, 1874)

The Committee, while drawing on this rationale for technical education, emphasised that classes be of a more practical nature in the new Working Men’s College and, on its own role, it had stated earlier that “the primary objective for which they (the Committee) were appointed” was,

... to improve the present system of classes in connection with the institution by making them, or a portion of them, more practical than at present they appear to be, and to add some others which might prove of great utility to the members. (Report of the Working Men’s College Committee, 1873)

This practical approach to curriculum delivery was supported by classroom-based teaching methods rather than lecturing as had mostly been the mode in the Mechanics’ Institutes (Section 2.1.2). Several years later the new Board of Technical Education of New South Wales in 1883 referred to the mode of curriculum delivery as “teaching” a mixture of theory and practice and in advertising its courses for 1884 the Board couched its manifesto in theoretical (scientific principles) and practical teaching terms:

... the Board of Technical Education has announced that the object of technical instruction in New South Wales will be to improve the industrial knowledge of workmen by teaching the sciences
and principles underlying their handicrafts. Such teaching will be illustrated by the best apparatus and machines that can be obtained, and by visits to workshops, manufactories, etc. (Prospectus for Sydney Technical College, 1884)

The mode of delivering this practical, applied curriculum, then, was by “teaching”, supported by relevant apparatus and machines and workshop field visits. Learning took place in a classroom and students attended classes where groups were relatively small and knowledge and skills were imparted in a student centred, structured environment with learning by classroom teaching, lesson notes and closely monitored attendance (TAFE NSW, Quarterly, 1979; TAFE NSW Information Services, 1983). The curriculum was underpinned by an ethos of understanding basic and scientific principles (as seen in Section 2.1 above) not just rote mechanical learning and operation as evidenced in the following extract:

New classes will be formed for Woodcarving ... similar to those now in operation at Finsbury Technical College, and competent instructors have been selected from workmen engaged in the various trades, who will impart to artisans and apprentices the science relating to their daily callings. (Prospectus for Sydney Technical College, 1884) (Emphasis added)

There was an underlying notion of rigour, detail, precision, measurement and theoretical understanding attached to the learning of these handicrafts and trades of their “daily callings” (see Section 2.1.2).
Curriculum development took place in what would be referred to today as a practical, needs based, occupational skills, work integrated and learner focused context. As seen in the extract above, the delivery of curriculum was effected by teachers recruited directly from the field with a background of first hand work place knowledge and experience. In the classrooms were post-school, adult students bringing their first hand daily work experience with them.

This curriculum was designed to provide a mixture of theory and practical in a structured teacher and student classroom situation, underpinned by a commitment to understanding and the learning of principles, not just the mechanical acquisition of skills. This approach supported the idea of education and training being closely integrated with the occupational requirements of the workplace.

Although TAFE NSW has broadened its Curriculum base over the years (particularly since Kangan (1974) and its further education role) there has been a prevailing *fundamental character* which is that its educational product is technical and vocational; the department’s curriculum delivery is grounded in the practicalities of teaching certain technical, applied skills. These facets together with the themes of experienced teachers, learning through practical work, emphasis on theory and principles and teaching not lecturing, will be more fully examined and extended upon in a present day context later in a classroom case-study (Chapter Four). It is interesting to note at this point, though, that there is a continuity of these underlying features in TAFE NSW spanning a period of more than one hundred years.
This emphasis on teaching and practical application continued even after the recent comprehensive Management Review (Scott, 1989) of the department. TAFE NSW’s Corporate Plan in 1990, for example, stated as one of its four major Corporate Goals to have an “Effective and Supportive Student Learning Environment” which is to be achieved, *inter alia*, through practical instruction, teaching strategies and skill development:

Training and supporting teachers in the use of a wide variety of instructional techniques.

Adopting learning media technologies that improve student access to programs and improve student skill acquisition.

Encouraging the use of student-centred learning strategies.

Expanding industry sponsored student activities which reward excellence and promote technology and skill development. (TAFE NSW, 1990:20)

### 2.2.2 Teachers, Students and Classrooms

Extending from this vocational, work-based, practical and applied teaching orientation to curriculum there are several distinguishing features, relating to teachers and students, that set TAFE NSW apart from the school and tertiary system. To assist in identifying these characteristics the following section focuses on the *Industry Training Division of Business Services*, one of the oldest and largest sections in TAFE NSW (about to be restructured into the *Business and Public*
Administration Educational Services Consortia). This will also serve to illustrate the nature of TAFE NSW as a lead in to a case-study in Chapter Four.

Business Services Industry Training Division

The Business Services Industry Training Division, TAFE NSW (Business), was one of the eleven original departments offering evening courses in the new Sydney Technical College summer session 1884; subject areas in the Department of Commercial Economy as it was then known were Commercial Class, Phonography, Calligraphy and Correspondence, Actuarial Science and Bookkeeping. These and other subjects, such as shorthand and arithmetic, had beginnings in the Sydney Mechanics’ School of Arts. A comment made by a Bookkeeping Teacher in a TAFE in a Technical Education NSW Monograph 1909 is both instructive of the practical educational emphasis underpinning the Department and its commercial orientation.

The Bookkeeping class is a popular one, and has an average nightly attendance of about fifty students, comprised principally of young men who come to this class to learn and to improve their knowledge of this important subject. ... Many businessmen also take advantage of the class, for: ‘Bookkeeping is the very key to our position, and the records of our Bankruptcy Court show us how many fortunes have been wrecked ... through ignorance of this vital part of commercial knowledge’. (TAFE Technical Education NSW Monograph, 1909:181)

The Industry Training Division which is a State wide structure combines what were two separate departments Business (Commerce) and Office Administration; for many years these two areas were one,
coming under the Commercial Department. In 1950 the newly formed, separate Department of Technical Education in New South Wales made it clear that commercial education was central to its educational brief: the stated aim of the Commerce Department was that it:

Provides a wide range of vocational instruction in the fields of technology, commerce and fine arts. In the main these courses give part-time supplementary instruction to both adolescents and adults already in employment... (Technical Education Handbook, 1950:1)

The Commercial Department in 1950 offered, across the State, six evening part-time courses: Accountancy Diploma (5 years), Accountancy Certificate (4 years), Cost Accountancy (1 year), Company Secretarial Practice (1 year), Local Government Clerks (3 years) and Bankers' Institute (3 years). One special full-time Day Secretarial Course (1 year) was offered with the stated aim of 'giving vocational training to fit the student for any type of position met with in the modern office' (Technical Education Handbook, 1950:30).

Courses and Vocational Areas in Business Services

TAFE (Business) is the largest enrolment Industry Training Division in New South Wales with 85,309 enrolments in 1995 (total TAFE NSW enrolments were 411,643) across more than 150 courses (TAFE NSW, 1996(b)). In 1993, 73,467 were enrolled in the Associate Diploma, Advanced Certificate and Certificate Awards which were developed to meet specific training and vocational needs. The remaining 18,153 students were enrolled in Statement Awards (initial vocational and courses of less than 200 hours in total) (TAFE NSW, 1994). The courses and respective awards are offered across a number of diverse
vocational areas; in the Illawarra Institute where the case-study in Chapter Four is located, for example, Associate Diplomas (four years part-time, two years full-time), Advanced Certificates (three years part-time), Certificates (one or two years part-time) and short courses are offered across a wide range of different industry specialist areas: Keyboarding and Word Processing, Office Administration, Organisational Support, Secretarial Support, Accounting, Finance, Insurance and Customs, Legal Support Services, Human Resource Management, Management and Small Business, Marketing and Advertising, Retail and Wholesale.

An example of a course from one of these vocational areas is the Management Advanced Certificate (see Appendix 11), one of the longest running courses in the Training Division, now designated Management Associate Diploma under the new Australian Qualifications Framework. It is a three year, two nights a week course (a total of 648 hours) with sixteen subjects over the three years. In the first year there are six foundation subjects followed by ten subjects over the following two years. The course is aimed at managers or potential managers of small to medium businesses:

This course teaches you about the management of a profit centre in a small to medium business or in a division or branch of a large organisation. (TAFE NSW Handbook, 1996:228)
A subject within this course (and the Associate Diploma), Operations Management, is the focus of a case study, in Chapter Four. This course (and subject) is one of a range of courses from Business Services catering for mature, part-time students attending classes after work in their own time.

**Students, Teachers and Classroom in Business Services**

Curriculum for vocational education in TAFE NSW (Business) is implemented in a teaching and learning environment of students attending mostly at night part-time (one night for basic courses, two nights for Advanced Certificates and up to three nights for Associate Diplomas) employed, or aspiring to be, in a work area related to their course. The majority of students attend in their own time and are mature age: in 1993, for example, of the enrolments in TAFE (Business), 74% (67,476) of the students enrolled were 20 years of age and over and 34% (31,026) were between 25 years and 39 years of age; (64%) (58,926) were female (TAFE NSW (1994) Statistical Services).

Students entering TAFE (Business) courses are adults bringing a variety of work and life experiences with them to the classroom. They are mostly attending in their own time with a commitment to education and training for employment and career reasons. The courses offered in the Training Division are usually supported by professional bodies for example, Australian Institute of Management for the Management Associate Diploma; National Institute of Accountants for Associate Diploma Accounting) and in some cases fulfil licensing requirements (for example, Property Agency Advanced Certificate for the Real Estate Services Council).
Teachers both full-time and part-time have work related experience and qualifications. Both full-time and part-time teachers enter the department with at least three years relevant vocational experience (on average eight years experience) and usually a related degree or other appropriate qualifications. For all teachers in TAFE NSW a distinguishing feature is the vocational, work related experience and knowledge they bring to the position; the emphasis for appointment is practical, real world, "hands on" experience. Essential requirements for teaching in the Management Advanced Certificate, for example, are:

Together with appropriate qualifications (a degree for full-time teachers)

1. At least three years appropriate industry experience as an owner/manager,

or

2. At least three years appropriate industry experience.

(TAFE NSW (Business), 1992:7.2.2)

The teachers' credibility in the classroom rests on this vocational, occupational background and for that reason teachers are appointed to individual subjects within a course. Curriculum documents require the teacher to deliver content with a practical emphasis by reference to current workplace examples and drawing on industrial or commercial experience. All full-time teachers are fully trained as teachers (Diploma of Education or Teaching) by TAFE NSW and part-time teachers are strongly encouraged to attend teacher education courses.
The characteristics of TAFE (Business) students have already been noted. The teaching and learning environment of a typical TAFE (Business) classroom would have up to thirty students attending part-time for six hours per week (commencing 6.00 pm and finishing 9.00 pm, two nights a week) with ages ranging from, say, eighteen years to sixty years. The vocational emphasis of courses, alignment to industry and the teacher's motivation for classroom relevance is summed up by the following extract from the 1990 TAFE NSW Handbook.

TAFE has the course for you. TAFE is the major provider of skills to the Australian workforce. Vocational courses cover semi-skilled, trade, post-trade, technical, middle management, para-professional and professional courses. TAFE's close links with industry keep it abreast of industry developments and training needs and responsive to continuing changes within our economy. (TAFE NSW Handbook, 1990:3)

The TAFE NSW Classroom and the Curriculum

There are important differences between the teaching and learning environment of TAFE NSW and school classrooms.

As Section 2.1 shows, in TAFE NSW classrooms more than 80% of the students are part-time and are almost all adults with a great majority attending TAFE in their own time and employed in the current workforce. This is clearly in marked contrast to the school classroom where students are full-time, mostly adolescent and with little or no work experience.
Another important difference between the two systems is the nature and scope of courses and subjects offered by TAFE NSW. Unlike the school system, TAFE educational offering is through courses or programs of studies rather than a number of single subjects as in the school system. Blachford (1986) sums up the situation:

In the TAFE system the term "curriculum" tends to be used differently from the way it is used in schools, since TAFE students generally undertake specific courses rather than a set of different subjects. Furthermore, courses undertaken by TAFE students are selected from a large number of possibilities. The students in TAFE tend to be adults, many with more-or-less clear personal goals in mind. Many also have had a breadth of life experiences and possess a self-awareness that influences their preferred choice of learning style. (Blachford, 1986:11)

The classroom and course differences in the TAFE system tend to set it apart from school processes. This has important implications for understanding curriculum development processes in TAFE. McBeath (1986 and 1991) notes that:

the problems and solutions of school-based curriculum do not transfer easily to practice in TAFE vocational education... (and further) ... the answers to such questions as student needs, sequencing, accreditation, delivery methods and student assessment are not necessarily relevant to vocational education for adults. (McBeath, 1986:3)

McBeath also comments that "vocational education has tended to be far more concerned with the 'product' than schools, and especially so when it is based on occupational data" (McBeath, 1991:4). The product approach refers to the particular skills and abilities required of
vocational training and the workplace performance required of TAFE curriculum outcomes.

Other observations by researchers of TAFE NSW curriculum reinforce these differences but stress the need to also focus on processes. The Task Force on *Procedures and Practices in Curriculum Development* in TAFE (NSW) (1982) comment that:

_A further problem for TAFE is that much of the curriculum literature available refers to the curriculum processing in the classroom, and is derived from experiences of education at the primary and secondary school levels._ (TAFE Curriculum Task Force, 1982:15)

Blachford (1986) in his investigations of curriculum development models in TAFE also notes the need for identifying and analysing TAFE classroom differences:

_In terms of the goal of education, the dominant ideology within TAFE is clearly the vocationalist ideology. This provides the taken-for-granted ideological framework within which much of the debate about course development, course accreditation, and organisational administrative arrangements takes place. However, to assert this skill leaves open the key issues of the nature of such vocational courses, and the relationship between learners, teachers and curriculum._ (Blachford, 1986:6)
2.3 Common Threads and Distinguishing Features

The above sections have examined TAFE NSW’s background, historical setting and delivery context. Common threads and distinguishing features run through TAFE NSW’s history and persist to the present day. These threads and features identify particular TAFE NSW traditions and characteristics which serve as an important background context for curriculum development in TAFE NSW. They are summarised below and will be returned to in Chapters Five and Six where they are incorporated in the conceptual framework and the thesis model.

* TAFE NSW is a very large government funded educational organisation with a long tradition of responding to the needs of industry, commerce and the community.

* In addition to meeting economic and social needs it responds to individual needs with a balance of general (e.g. literacy and numeracy support, Adult Basic Education) and vocational education and training (e.g. Business, Engineering, Information Technology).

* There has been a consistent and dominant focus of providing education that is practical, relevant and applied. The traditional method of delivering this education has been classroom teaching, supported by college workshops and facilities and work site visits.
Along with this practical applied approach there has been an emphasis on understanding basic and scientific principles, combining theory and practice.

Further, there has been an emphasis on 'being able to do the job' and 'specific skills on the job' – an emerging concept of competence is evident.

Courses have been accessible to all, with day and evening classes and geographically made available for both urban and country students.

Although there has been a traditional separation of TAFE NSW (technical education) from the school system, there have been clear links and educational pathways between the two systems for at least 70 years.

There are several features in respect of students, teachers and curriculum which, in particular, distinguish TAFE NSW from the school system and other post-compulsory educational institutions:

Both teachers and students have traditionally brought a wide variety and depth of work and life experiences to the TAFE NSW classroom.
The majority of students attend part-time, are adults, attend in their own time (mostly at night) and, for many courses, are concurrently employed in the current workforce.

In TAFE NSW, unlike the school system, students take small numbers of closely related work orientated courses or programs of studies rather than a number of single, disparate subjects.

2.4 THE RESEARCH PROBLEM, SPECIFIC PURPOSES AND IMPORTANCE OF STUDY

2.4.1 The Problem

As seen in Chapters One and Two, TAFE in Australia is under close scrutiny by politicians, employers and educators. In NSW significant organisational changes have taken place which have primarily focused on structural aspects of TAFE NSW and related efficiencies of operation, as the role of the Institution and the delivery of its services have been reviewed.

Educational provision is the prime objective of TAFE NSW and while structural changes have been effected to support and enhance educational delivery and policy changes made to improve resource management, there is a need to focus directly on educational matters relating to this prime objective. Recently, in a most significant
document for TAFE NSW the then Managing Director of NSW TAFE Commission made the following comment:

The need to look again at its (NSW TAFE Commission) role and the delivery of its services is critical if the system is to continue to maintain high quality post-compulsory education and training to meet the priority needs of industry and the wider community. (Ramsey, 1992(a):10)

This study focuses on an area central to the delivery of services and the educational provision: curriculum development. This is at a time when TAFE NSW is responding to a new and evolving national training system. There is a need for greater transparency of the TAFE NSW curriculum process enabling deeper understanding and greater accountability. As Chapter Three will show, there is much curriculum literature and related curriculum theory building activities which can be drawn upon to assist in understanding the TAFE NSW system but much of this literature relates to the school system and lacks a TAFE context. Other literature and models more specifically concerning TAFE, while helpful, do not provide a sufficient framework for understanding what actually happens beyond the design and documentation stages of curriculum, nor provide an adequate basis for analysis of the curriculum development process, particularly in light of recent VET policies and directions (Chapters One and Three), which can help improve the curriculum development system.

The central problem addressed by this thesis is to construct a relevant curriculum development model for TAFE NSW. This model will incorporate the special characteristics of TAFE NSW and take into account its broad social and economic context. The model will also
have application to the wider TAFE system in Australia (Chapter One, Section 1.4). TAFE operates across the Australian states and territories with different administrative structures but these states and territories have very similar characteristics to TAFE NSW – the largest TAFE representing over 40 per cent of the national effort – with respect to origins, courses, students and teachers. There are common origins in meeting the needs of industry and the community with roots in the 19th century mechanics' institutes, working men's colleges and schools of mines developed in capital cities and provincial centres (based on the Mechanics' Institute Movement in Great Britain) (ESFC/NBEET, 1991:10). There is also a common TAFE tradition of providing courses which are practical, relevant and applied, both teachers and students have traditionally brought a variety and depth of work and life experiences to the classroom and the majority of students attend part-time and are adult (Goozee, 1995, Chapter One; ESFC/NBEET, 1991).

A TAFE national identity has been evident especially since the impact of the Kangan Report (1974) (Chapter Two, Section 2.1.2) and more recently with the emergence of a national training system centrally coordinated by the Australian National Training Authority, with support from state VET agencies and the introduction of a national competency-based education and training system.

This means that in each state and territory TAFE is working with the same centrally mandated curriculum system e.g. national competency standards, national curriculum registration and accreditation and national framework for the recognition of training (NFROT). So any proposed model of curriculum development for TAFE NSW is likely to be relevant to each of the state and territory TAFE systems. It is also
likely that private and other providers in the VET sector would find much in this model which is relevant to their situation.

The need for a curriculum development model has a particular urgency at the present time as TAFE NSW and indeed the wider TAFE and VET system is undergoing considerable change in its approach to designing and formatting curriculum with an increased emphasis on competency-based vocational education and training at the national level. A viable curriculum model will need to be able to encompass the emerging national vocational education and training system (NVETS).

2.4.2 Specific Purposes of the Study

Chapter One (Section 1.2) outlined the major purpose of the study. Specifically, this study seeks to demonstrate by a review of curriculum literature and theory, together with a case study and other classroom research, that TAFE NSW is sufficiently different to set it apart from the school system and other post-compulsory education systems so that present curriculum models do not adequately represent the TAFE NSW process.

The literature review in the study endeavours to illustrate that while curriculum literature and related curriculum models, both within the outside TAFE NSW, are comprehensive, extensive and helpful in suggesting general principals of curriculum development, there are certain distinguishing characteristics of the TAFE NSW curriculum development process not sufficiently acknowledged. In addition, a case study along with further literature review will investigate the role of
the classroom beyond mere implementation. The thesis examines the
nature of the links between the work of curriculum development and
the work of teaching. The study aims to offer a curriculum
development model which builds on these links.

**Research Purposes of the Study**

The lack of a suitable curriculum model for TAFE NSW and the extent
of the relevance of existing curriculum material are the issues this
study seeks to pursue. If TAFE NSW is perceived as being different to
the school system, then the differences have to be clearly identified
before investigating whether a more appropriate TAFE NSW model
can be developed incorporating these differences. The importance of
the classroom activities in the TAFE NSW curriculum process are also
subject to investigation. As a consequence this study proposes to:

1. Determine whether there are certain
distinguishing features and differences
relating to TAFE NSW that set it apart from
the school system and other post-compulsory
educational institutions.

2. Examine whether such differences may affect
the curriculum development processes in the
Business Service Industry Training Division
of TAFE NSW.

3. Ascertain from a review of curriculum
literature and related theory (from within and
outside TAFE) how relevant this material is to
TAFE NSW curriculum processes.

4. Explore the importance of the effects that
teacher and student interaction in the
classroom in TAFE NSW have on curriculum
development by (a) reviewing literature and
(b) effecting a case study of a sample classroom
situation and carrying out other classroom
investigations.
5. Construct a curriculum development model for TAFE NSW which draws on curriculum theory and practice and (a) incorporates special features and characteristics of the system, (b) reflects curriculum as experienced, in the classroom, (c) accommodates economic and social contexts within which curriculum is developed including the National VET System.

6. Offer a model which can serve as a practical framework to help improve TAFE NSW’s curriculum development processes.

2.4.3 The Importance and Relevance of the Problem

The problem being addressed by the study is related to a larger issue - the dearth of TAFE related research into the nature of curriculum development.

In 1982 the following comment was made by a New South Wales TAFE Task Force on Curriculum Development:

A comprehensive literature search including an ERIC search ... contents of over forty reference books and journal articles ... although the literature consulted abounds with descriptions and models of curriculum development for the classroom teacher, in particular for primary and secondary levels, there was a paucity of publications relevant to a centralised system such as TAFE. In the vocational area, the literature was predominantly descriptions of curriculum development based on linear systems model task analysis procedures. (TAFE Curriculum Task Force, 1982:5)
This was found by the author, following extensive literature review, to be still valid to-day – despite considerable political and policy focus on TAFE and numerous TAFE related publications over the past decade.

It is crucial that the specific nature of TAFE NSW curriculum be better understood given the current interest in TAFE NSW as a major educational provider and its significance in a newly emerging national vocational education and training system (NVETS) and for other background reasons already outlined in Chapter One. An important aspect of this study is to identify characteristics and features of TAFE NSW that will help distinguish it as a provider of education requiring particular curriculum attention.

In these changed times there is a need for greater understanding and transparency of TAFE’s curriculum processes which support its core business, delivering courses or programs. Wiltshire (1993), in discussing research gaps in vocational education in Australia, recently made the following observations concerning the TAFE curriculum process:

no doubt it is sound, and carefully nurtured within TAFE systems, but the way TAFE curriculum is developed is a mystery to most people (even those in education itself). (Wiltshire, 1993:39)
2.4.4 Curriculum Terms

There is a vast array of definitions of the concepts *curriculum*, *curriculum development* and *curriculum model* each reflecting a particular perspective. Stenhouse (1975) sums up the situation as follows:

Definitions of the word curriculum do not solve curriculum problems; but they do suggest perspectives from which to view them. (Stenhouse, 1975:1)

Curriculum

Curriculum is a complex concept which is used by different writers in many different ways. It's meaning in the TAFE context will be clarified throughout this work.

The National Board of Employment, Education and Training (NBEET) refers to "'curriculum' as an umbrella concept – comprehensive in scope and complex in nature". (NBEET, 1992:1)

As a starting point for this thesis the term curriculum is taken to have the meaning suggested by Jenkins and Shipman (1976):

A curriculum then is concerned with prerequisites (antecedents, intentions), with transactions (what actually goes on in classrooms as the essential meanings are negotiated between teachers and taught, and worthwhile activities undertaken) and, with outcomes (the knowledge and skill acquired by students, attitude changes, intended and unintended side effects, etc.). (Jenkins and Shipman, 1976:5)
In addition to prerequisites, transactions and outcomes a curriculum is shaped by its context or setting.

Curriculum Development

In a basic sense curriculum development can be defined as "planning and designing a curriculum. Used synonymously with curriculum making" (Marsh, 1986:6).

In this thesis curriculum is used as a holistic and comprehensive concept which includes curriculum design, documentation and the experiencing of curriculum in the classroom.

Curriculum Model

"A construct to highlight and simplify key curriculum elements, and show their interrelationship" (Marsh, 1986:6).

A discussion of the nature of curriculum theory and the use of curriculum terminology follows at the beginning of the next Chapter (Section 3.1).
Chapter Three

Curriculum Literature and TAFE NSW
INTRODUCTION

This Chapter reviews curriculum literature both across the curriculum field and with specific reference to TAFE NSW. A major purpose of the review is to ascertain how relevant the general curriculum literature is to understanding TAFE NSW curriculum development, given the distinguishing features and characteristics identified in the previous chapter. The central aim of the chapter is to assess how useful this literature is in developing a conceptual framework for a model which will more adequately portray the curriculum development processes specific to TAFE NSW. A related aim is to determine the extent to which curriculum theorists and writers acknowledge the importance of the role of the classroom as a significant site of curriculum development. An important focus of this thesis is the classroom and its role in curriculum beyond that of a site of implementation.

The review of curriculum literature is organised into seven sections, as follows:

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The chapter commences with a brief comment on the diverse nature of curriculum theory and the differing perspectives that underlie curriculum terminology.

The next section focuses on curriculum literature from the curriculum field generally where much of the literature is implicitly school-related. There is a review and analysis of major contributors to curriculum literature across four categories of curriculum approaches and the section concludes with discussion of the relevance of this literature to NSW TAFE and highlights several pertinent factors.

As a high proportion of students enrolled in TAFE NSW are adults, section three focuses on the field of adult and tertiary education and considers the implications for TAFE NSW curriculum development.

The fourth section reviews TAFE curriculum literature written from within and outside the NSW TAFE system; the writers from within the TAFE system provide an internal perspective and those from outside the system present models and views specific to TAFE but with an external perspective.

The fifth section addresses the area of vocational education and training with a particular focus on recent developments in the national and state vocational and education training systems and the move to a competency-based approach to curriculum. This Federal government-driven initiative in curriculum development is effecting important changes to vocational education curriculum particularly in
respect of curriculum administrative practices and procedures. The move to a national, competency-based education and training system is then discussed in relation to TAFE NSW's curriculum practices.

Section Six examines literature relating to the classroom interaction process including reference to hidden or unplanned curriculum.

The Chapter concludes with comments on the findings of this review of curriculum literature and draws together these findings with a brief overview on their relevance to curriculum development in TAFE NSW.

3.1 CURRICULUM THEORY AND TERMINOLOGY

The following two related points are raised not only as an introduction to the literature review but as a precursor to the conceptual framework being developed in Chapter Five which supports the thesis model.

The first point concerns the difficulty of identifying a coherent, substantive, stable body of curriculum theory underpinning the complexities of curriculum practices. The following three comments from within the curriculum field made over the past twenty years are illustrative of the problem.

In 1976 Jenkins and Shipman summarised the state of the field in curriculum studies as follows:
... there is no stable body of explicit curriculum theory underpinning the vicissitudes of practice, although a practitioners' theory will attempt to describe, explain and justify policy alternatives. (Jenkins and Shipman, 1976:124)

Later, in 1986, Marsh comments that:

The issues are so diverse and variable that it would seem to be impossible to produce the theory of curriculum. Many have tried to produce a theory and some of their ideas have endured over the decades; others have short-term acceptance and prominence only. (Marsh, 1986:239) (Emphasis in original)

A comment by Walker (1980) on the curriculum field summarises the position:

The overall impression is certainly not of a disciplined body of knowledge or of a profession based upon such a body of knowledge. If the curriculum field is a field, it is a field of problems, problems so divergent that no coherent body of knowledge can be singled out as uniquely appropriate ... the field resembles a gigantic market place of ideas and proposals ... a slice of public life itself. It is as rich and varied as that life ... it resists our efforts to reduce it to an orderly stable pattern. (Walker, 1980:81)

The situation has not changed significantly since 1980 except that it has become even more rich and varied!
The other related point refers to differences in meanings and perspectives across the field and the related diversity in terminology. Curriculum terminology is referred to in Chapter Two (Section 2.4.4); the following complements what is said there.

Curriculum can be and is conceived in many different ways. Stenhouse in offering his definition of curriculum comments as follows:

Of course this definition reflects my own perspective. A curriculum is rather like a recipe in cookery ... a recipe can be varied according to taste. So can a curriculum. (Stenhouse, 1975:4, 5)

More recently Reid in discussing the topic of curriculum inquiry makes reference to the concept of curriculum in asking the following question:

Who is to tell us that what we are doing is not curriculum inquiry, when we don’t know what curriculum is? (Reid, 1992:165)

A writer’s personal theoretical perspective underlying curriculum contexts may not always be clear or explicit and this has implications for any survey of the theory in the curriculum field, since as Gullion states “the relevance, clarity and value of work in curriculum development rests very heavily on the writer’s theoretical foundations” (Gullion, 1973:13).
The differing curriculum perspectives of writers is reflected in the following sections which attempt, as part of the review, to clarify each writer's theoretical stance.

3.2 'GENERAL' CURRICULUM LITERATURE

This section focuses on literature from the curriculum field generally. A review and analysis of the work of some contributors to curriculum literature representing a broad cross-section of different traditions and approaches to curriculum theory building is offered with the purpose of ascertaining how relevant this literature is to TAFE NSW curriculum development, given the distinguishing features and characteristics of TAFE NSW identified in Chapter Two above.

For the purposes of this review four curriculum approaches are considered. These are not mutually exclusive but are broad areas useful in organising theoretical approaches. Within these approaches the writers' assumptions and explicit beliefs are identified to help clarify their theoretical foundations and relevance to TAFE NSW in working towards the conceptual framework of the thesis model. The four approaches reviewed are:

(i) The Objectives-Based Tradition
(ii) Process Approaches
(iii) Practical Theorists
(iv) Critical Theorists.
3.2 (i) The Objectives-Based Tradition

The origins of modern curriculum theory can be traced back to America in the 1920's (Pinar and Grumet 1981). Franklin Bobbitt was closely associated with the origins of the formal study of curriculum through his books *Curriculum* (Bobbitt, 1918) and *How to make a Curriculum* (Bobbitt, 1924) and his work was built on by R. W. Tyler and Virgil Herrick. Bobbitt's curriculum-making approach was guided by his belief that "an age of science is demanding exactness and particularity" (1918:41) and that the highest priority for education was a scientific technique for the determination of curriculum. What we see in Bobbitt's approach, according to Eisner,

is a serious effort to make curriculum planning rational and education meaningful (p. 34) ... systematic and meticulous. Education for him was a no nonsense affair. (Eisner, 1967:40)

This systematic approach was guided by a set of logical curriculum-making principles in which "the first step in curriculum-making is to decide what specific educational results are to be produced" (Bobbitt, 1924:32) and "the results to be produced should be stated in human terms" (Bobbitt, *loc. cit.*), that is, in terms of behaviour. In his guiding principles for curriculum making he began "with the simple assumption, to be accepted literally, that education is to prepare men and women for the activities of every kind which make up, or which ought to make up, well rounded adult life" (Bobbitt 1924:7). The curriculum was to be goal directed, learner centred and to draw upon (for its objectives) "the actual activities of mankind" (Bobbitt, 1924:9).
In *How to Make a Curriculum* Bobbitt (1924) listed 160 educational objectives relating to 9 significant areas of human life based on activity analysis and leading to performance indicators for the school curriculum. After analysing "the broad range of human experience in major fields" (1924:8), Bobbitt put forward the following classification "based on activities which ought to make up the lives of men and women; and along with these, the abilities and personal qualities necessary for proper performance" (1924:8).

1. Language activities; social inter-communication.
2. Health activities.
3. Citizenship activities.
4. General social activities – meeting and mingling with others.
5. Spare-time activities, amusements, recreations.
6. Keeping one’s self mentally fit – analogous to the health activities of keeping one’s self physically fit.
7. Religious activities.
8. Parental activities, the upbringing of children, the maintenance of a proper home life.
9. Unspecialised or non-vocational practical activities.
10. The labours of one’s calling (occupational activities).

(Extracted from Bobbitt, 1924, pp 8-9)
The first nine areas Bobbitt saw as constituting general training; the last area of occupational activities he saw as requiring specialised training for each occupation in the workplace with intended learning achievements and was included “for sake of completeness” (1924:29). Unfortunately for this study of TAFE NSW he did not further elaborate on this area with details of educational objectives. He sums up the situation as follows:

For any individual, the total list of his educational objectives will be those of the foregoing nine lists plus those of the specific occupation which he intends to enter. (Bobbitt, 1924:29) (Emphasis in original)

An example of Bobbitt’s approach, applied to a specific occupation, is his attempt to formulate the objectives of teacher training institutions. In 1924 he commented that “the teacher-training institution is a vocational school, for it trains teachers to perform functions, which are vocational functions” (Bobbitt, 1924 (b):187).

Bobbitt proceeded to list and describe six major fields of teacher activity claiming that “the abilities to perform these tasks, then, are the fundamental teacher-training objectives - the abilities to do the jobs are the objectives” (1924 (b):188) (Emphasis in original). The six major fields of teacher activity were formulated by Bobbitt as follows:

1. To ascertain the character of the native powers of every child entrusted to a teacher’s care.
2. To forecast the future place of the child in the adult world.
3. To determine the pupil's activities and experiences.

4. The provision of the necessary material facilities (e.g. books, maps, tools, playgrounds, home gardens).

5. The provision for the pupil of a proper growth-producing human environment (e.g. the personal and social conditions ... stimulating the pupil to a normal growth-producing exercise).

6. To observe continuously the development of the child's power to function in the expected degrees along the different desired and expected lines. (The objectives are the expectations.) (Bobbitt, 1924 (b):190-195)

He concludes by commenting on the performance of specific tasks saying that:

If we can now break these up, each with its specific task we shall have the activity objectives of teacher training ... (and that) ... when we know specifically what teachers should do along these six lines, then we shall be able to know what the leaders and directors of teachers should do. (Bobbitt, 1924 (b):196)

Thus, curriculum for vocational education, couched in terms of instructional or behavioural objectives, was a concern from the very beginnings of the study of curriculum.

Tyler and Herrick in the 1940's carried on the objectives, means-end (where the ends of the curriculum are firstly defined, then suitable means are sought to secure them), needs-based approach of the Bobbitt tradition, believing that curriculum development should be a rational, systematic and orderly process. The Tyler rationale presented first at a
conference on curriculum in *Towards Improved Curriculum Theory* (1947) and later in his *Basic Principles of Curriculum and Instruction* (1949) arises from his premise that "the organisation of learning experiences... is a very significant problem in curriculum construction" (1947:60) and that:

Without organisation, learning experiences are isolated, chaotic and haphazard. No matter how effective an individual learning experience may be, if it is not followed up in subsequent phases, it is not likely that significant changes will take place in the learner (Tyler, 1947:60).

Fundamental to Tyler's curriculum approach is the initial setting up of aims and objectives; the organisation of learning experiences flows from this critical first step. He distinguishes four major tasks or elements in curriculum construction which "indicate the limits of organisation in relation to the total task of curriculum building" (Tyler, 1947:61) and, according to Herrick in a paper presented at the same conference in 1947, "given that every learning situation must include a learner, a purpose, a content and a process, every curriculum design must also recognise and account for the part these factors play ..." (Herrick, 1947:38). The four tasks or questions are identified by Tyler as:

1. "What educational purposes should the school seek to attain?"
2. What educational experiences be provided that are likely to attain these purposes?
3. How can these educational experiences be organised?
4. How can we determine whether these purposes are being attained". (Tyler, 1949:1).
The primary starting point for this process is with analysing the need or problem that has led to developing a curriculum. "Educational purposes" are essential to the model and these are determined by three sources as depicted in the following model (Figure 3.1).

**FIGURE 3.1**
**TYLER'S CURRICULUM MODEL**

Like Bobbitt, Tyler and Herrick see the need for co-operative effort in formulating curriculum, that

No one person is going to be able to encompass all the knowledge or to perceive all the problems that would be essential in the formulation of an adequate concept of curriculum. (Herrick and Tyler, 1947:120)
Tyler and Herrick go further than Bobbitt in calling for co-operative help from specialists (subject specialists and learning psychologists, for example). These screen the learning objectives arising from the three sources. The screening process is shown in Figure 3.1.

Tyler did not intend his approach to be used as a detailed manual for curricular construction but rather as an outline or guide (1949:1). In his later years, discussing *Specific Approaches to Curriculum Development*, Tyler commented that his approach was practical rather than theoretical:

> curriculum development is a practical enterprise, not a theoretical study. It endeavours to design a system to achieve an educational end ... and is not primarily attempting to explain an existential phenomenon. (Tyler, 1975:220)

Much has been written over the years on the strengths and weaknesses of the model and much discussion stems from the fact that the model is a framework and does not set out the values which must form the basis of any curriculum (Section 5.2.2 (iii), Chapter Five discusses this point). The following comments by Kemmis, Eisner and Kleibard are examples of criticisms relating to the absence of values in the model.

Kemmis argues that:

> it is most articulate about how to build a curriculum, and least articulate about why and for whom. In short, it assumes rather than provides an answer to the central curriculum question about the relationship between education and society. (Kemmis, 1986:51) (Emphasis in original)
Eisner claims a prime concern is that "Tyler, like Bobbitt, underestimates the importance of values as a guide to the selection of data sources he would use in making curriculum decisions". (Eisner, 1967:43)

Kliebard comments on the situation as follows:

> to say that educational objectives are drawn from one’s philosophy, in turn, is only to say that one must make choices about educational objectives in some way related to one’s value structure. This is to say so little about the process of selecting objectives as to be virtually meaningless. (Kliebard, 1975:80)

However, in setting up a framework or rationale for curriculum development Tyler is not excluding societal values from the process. He incorporates a place for values in his framework at the source level – student, society and industry and subject or discipline. While Tyler acknowledges the importance of values, his aim is not to prescribe what the values are but to provide a mechanism or framework for their inclusion as part of his rationale. Hlebowitsh (1992) makes the point that,

> to criticise Tyler for what he did not write (and for what others have appropriated) is to perform an injustice against what he did write. (Hlebowitsh, 1992:536) (Emphasis in original)

Tyler is discussed at length here because of his influence on TAFE curriculum. TAFE documents often make reference to the Tyler rationale without always realising its full implications – often a rather narrow interpretation is placed on Tyler’s proposals.
Goodlad, a student of Tyler, extended the Tyler rationale focusing strongly on values. In his 1966 model (Goodlad, 1966 (b)) he requires the elaboration of values at societal, institutional and instructional levels but like Tyler he is not making a judgement nor prescribing what the values should be: he leaves this to others. Later Goodlad added a further level or domain to his model which he called the personal which brings into focus the place of students in the overall forces determining curriculum. This aspect, described by Goodlad "as a dynamic rather than static place for students" (1979:35) is included because there is:

... increased attention to students as potential *generators* and not merely passive recipients of curricular ends and means ... (and this) ... draws attention to a relatively neglected domain for development and research. (Goodlad, 1979:345, 6) (Emphasis added)

He further comments that:

Ironically, the most neglected data source in making curriculum decisions is the experience of the students who are at the viewing and receiving end of all these complex processes. (Goodlad, 1979:37)

The four levels from which values are selected or facilitated are depicted by Goodlad in Figure 3.2 below:
FIGURE 3.2
GOODLAD’S FOUR DOMAINS

<table>
<thead>
<tr>
<th>Educational Goals Selected by a Controlling Agency (such as School Board)</th>
<th>Educational Objectives and Activities Selected by the Professional-Technical Staff (Teachers, Administrators, etc.)</th>
<th>Educational Objectives and Activities Selected by Teachers</th>
<th>Curricula Experiences of Students Personal Level or Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Societal Level or Domain</td>
<td>Institutional Level or Domain</td>
<td>Instructional Level or Domain</td>
<td></td>
</tr>
</tbody>
</table>

(Goodlad, 1979:22)

Thus the curricula experiences of students are acknowledged in Goodlad’s later work as a central part of the values which determine the curriculum. This is a theme which it will be argued is particularly important in the TAFE context as students often come to TAFE with a rich and varied background of relevant experience.

3.2 (ii) Process Approaches

Skilbeck questioned the rational objectives approach and developed a School-Based Curriculum Development (SBCD) Model, known as the situational analysis approach. The model is a dynamic holistic one which incorporates aims and objectives (goals) but is not dominated by them. It is premised on the view:
That school engages in complex transactions or interactions with its environment which involves exchanges of ideas, resources and people through a network of communication systems. The curriculum as taught is an example of such a communication system. (Skilbeck, 1972:154)

Given that societal values are an important determining factor of curriculum, Skilbeck commences not with a statement of objectives but with a situational analysis. Jenkins and Raggatt (1974) suggest that:

Skilbeck offers a model of the curriculum that allows it to be flexible and adaptable in order to respond to a variety of complex forces ... in the initial stage curriculum-building is much more influenced by context. (Jenkins and Raggatt, 1974:22)

The following early diagram by Skilbeck depicts this context.

**FIGURE 3.3**
SKILBECK'S CURRICULUM CONTEXT

![Diagram of Skilbeck's Curriculum Context](image)

**Note:** Transactions between curriculum and environment are interactions. They are not one-way messages into the school, which determine the curriculum (Skilbeck, 1972:155).
Curriculum development commences with an analysis of the situation or the context of the curriculum both internal and external to the educational institution. The basis of the idea is that "the best place for designing the curriculum is where the teacher and learner meet". (Reynolds and Skilbeck, 1976:99.) Curriculum development for Skilbeck commences with an appraisal of the learning situation at the school (institutional) level. The underlying rationale is to move away from a means-end approach and to analyse the learning context (by "situational analysis") and develop the curriculum around this analysis not on an abstract statement or package of pre-specified behavioural objectives:

The model does not assume the task in education is to define a precise objective and to find the most effective and efficient means to attain that end. (Reynolds and Skilbeck, 1976:110)

From this situational analysis curriculum development proceeds, for Skilbeck, "through the phases of goal formation, program building, interpretation and implementation, and monitoring, assessment, feedback and reconstruction" (Reynolds and Skilbeck, 1976:109). The phase of goal formation, originally described by Skilbeck as "Preparation of Objectives" (Skilbeck, 1972:161) is confusing since it appears to support a rational, objectives approach. Skilbeck, though, is referring "not necessarily to ends or outcomes" but to a "continuing process, not an end point" (Reynolds and Skilbeck, 1976:110); he sums up his opposition to the behavioural objectives approach as follows:
To specify all their goals in advance, in terms of discrete items of measurable behaviour, is fatuous... some goals may be formulated in this way, but they refer only to a very small part of what is important in education. (Reynolds and Skilbeck, 1976:110)

Skilbeck states that the model:

does not presuppose a means-end analysis ... it encourages teams or groups of curriculum developers ... to see the process as an organic whole and to work in a moderately systematic way. (Skilbeck, 1976:97)

and that:

the curriculum is planned and its outcomes are assessed as a totality. (Skilbeck, 1973:123)

The approach is not intended to be a linear one, curriculum development may commence with situational analysis and proceed in any order.

The task of "situational analysis" may be approached through a review of (a) external and (b) internal factors. Skilbeck has provided only a few summaries and discussion (1972; 1976; 1984) of these external and internal factors which constitute the curriculum situation, or context, to be analysed and has provided little detailed elaboration: the following is a summary of the factors which "constitute the situation".
FIGURE 3.4
SKILBECK'S SITUATIONAL ANALYSIS FACTORS

<table>
<thead>
<tr>
<th>External</th>
<th>Internal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cultural and social changes and expectations, including parental expectations, employer requirements, community assumptions and values, changing relationships (e.g. between adults and children) and ideology.</td>
<td>1. Pupils: aptitudes, abilities and defined educational needs.</td>
</tr>
<tr>
<td>2. Educational system requirements and challenges (e.g. policy statements, examinations, local authority expectations or demands or pressures, curriculum projects, educational research).</td>
<td>2. Teachers: values, attitudes, skills, knowledge, experience, special strengths and weaknesses, roles.</td>
</tr>
<tr>
<td>3. The changing nature of the subject matter to be taught.</td>
<td>3. School ethos and political structure: common assumptions and expectations including traditions, power distribution, authority relationships, method of achieving conformity to norms and dealing with relevance.</td>
</tr>
<tr>
<td>4. The potential contribution of teacher support systems (e.g. teacher-training colleges, research institutes).</td>
<td>4. Material resources including plant, equipment and potential for enhancing these.</td>
</tr>
<tr>
<td>5. Flow of resources into the school.</td>
<td>5. Perceived and felt problems and shortcomings in existing curriculum.</td>
</tr>
</tbody>
</table>

(Skilbeck, 1972: 159, 160)

A further significant feature of the model is the involvement of teacher and student in the curriculum development process: "the teacher is a major focus of curriculum development efforts" (Skilbeck, 1973:123). He points out though that while teachers have a central role "it is not the same as teacher controlled development – since the school is a community in which many partners and interests interact". (Skilbeck, 1984:19). For a flexible interaction with its environment and to maintain an openness and a responsiveness with the whole culture, the institution needs to be:
Guided by teachers who are sensitive to contemporary movements in society and skilled in cultural analysis, curriculum making will strengthen and intensify the system of transactions and exchanges. (Reynolds and Skilbeck, 1976:103)

A further reason given for support of School Based Curriculum Development (SBCD) is:

the need to relate the processes of curriculum making to the experience of the learner and the life of the school to changing social realities. (Reynolds and Skilbeck, 1976:103)

Skilbeck also advocates greater student participation in curriculum development commenting that:

We cannot be satisfied with the suggestion that the learner simply ‘receives’ the curriculum. The learner must be active, responsible and engaged with the learning task. (Skilbeck, 1984:244)

Goodlad, as seen in the previous section, has a similar approach.

The Stenhouse (1975) process model moves further away from the objectives, rational model and is concerned with the processes and practical implementation of curriculum rather than the product. The model rejects the use of pre-specified aims and objectives and focuses on content, understanding, method and procedures for learning and evaluation. For Stenhouse, the curriculum revolves around educational experiences and processes, outcomes cannot be predicted and should not be pre-specified. The model puts considerable responsibility on the teacher since, as Stenhouse states:
It rests upon the quality of the teacher ... is committed to teacher development ... Any process model rests on teacher judgement rather than on teacher direction. It is far more demanding on teachers and thus far more difficult to implement in practice ... (Stenhouse, 1975:96, 97)

Stenhouse also holds that:

... largely on logical grounds, it (the process model) is more appropriate than the objectives model in the areas of the curriculum which centre on knowledge and understanding. The objectives model appears more suitable in curricula areas which emphasise information and skills. (Stenhouse, 1975:97)

This has particular relevance to TAFE because much of its curriculum material goes beyond information and skills. For example, the Advanced Certificates in Community Welfare and Personnel Management require that students be trained in people skills and be able to make decisions in areas such as interviewing, recruitment and field placement; the Advanced Certificate in Engineering requires students to be able to analyse, evaluate and make decisions about technical engineering matters and be able to apply appropriate occupational health and safety practices.

Marsh has provided the following summary of the Stenhouse "process" approach "using information from various papers" (Marsh, 1986:44).
Elliott (1991) who worked with Stenhouse over a number of years writes of Stenhouse having "spent a great deal of his life attacking the intrusion of technical rationality into curriculum planning" (Elliott, 1991:135). The alternative process model is underpinned by a different set of assumptions to that of technical rationality and Elliott provides a helpful insight into Stenhouse's process approach in the following extract which examines the rationale behind the approach, as follows:
• Questions about ends cannot be separated from questions about means.

• The value of human activities lies in their intrinsic qualities. Ends justify means because they specify qualities realized in the activities (processes) themselves. They are not extrinsically related outcomes.

• Activities are justified by their intrinsic ends, and these do not refer to observable effects. They are justified, not on the basis of observable effects, but on the basis of judgemental inferences about the manner in which they are performed.

• Rational action proceeds from practical deliberation about how to realize ends-in-view in concrete activities within particular complex situations. Such ends-in-view cannot be operationally defined in terms of the means they are constituted by in advance of the situation. Means are determined in situ and therefore always involved an element of ‘shooting in the dark’. There is a sense in which the ends are operationally defined through the selection of the means to realize them. In abstract form they remain essentially vague... (Elliott, 1991:137)

Stenhouse focuses attention on the “teacher as researcher” aspect of curriculum development and of particular interest is the key role that he assigns to teachers and the judgments and decisions made by teachers with students. He believes that “curriculum study should be grounded in the study of classrooms” (Stenhouse, 1975:75) and that a curriculum model should reflect the realities of the classroom.

The job of the teacher in his negotiation with the student group may be seen as an attempt to influence the content through which they interact and the criteria or standards which govern the orientation of their interaction. (Stenhouse, 1975:45)
Effective curriculum development, argues Stenhouse, “depends upon the capacity of teachers to take a research stance to their own teaching” (Stenhouse, 1975:156). He places strong emphasis on teacher participation in the curriculum process and in doing so “Stenhouse provided an alternative, much more humanistic view of teachers, research and curriculum ...” (Lawton, 1983:8).

Stenhouse views education as a very practical activity and identifies curriculum “as a particular form of specification about the practice of teaching and not a package of materials or a syllabus of ground to be covered” (Stenhouse, 1975:142). A comment in a paper delivered to an environmental education conference indicates the importance he attaches to the classroom interaction between teacher and students as the curriculum is “experienced”.

Books belong to academics, curricula belong to classrooms and classrooms belong to teachers, and therefore I think it is extremely important to see curriculum as an area of discourse among people engaged in education.

Curriculum is about educational ideas disciplined by practice and practice illuminated by educational ideas, and it is from this standpoint that I want to look at environmental education. (Stenhouse, 1977:36)

Stenhouse highlights the importance of teachers and the classroom in the curriculum development process. He emphasises the dynamic interaction between teacher and student as the curriculum is experienced. The curriculum process is more than just a logical, rational sequence – it involves educational experiences.
While Huberman's view is less radical, his interest is also with teachers and their role in the curriculum process, particularly at the classroom interface. The Huberman (1983) model, focuses on curriculum in use and is based on the assumption that teachers, as curriculum planners are influenced by within-school factors, classroom environment factors and their own motives in selecting knowledge for a curriculum and that classroom teachers are chiefly interested in how to use knowledge and not so much concerned with extending and developing it. In this instrumental approach the concern is for practical application not with knowledge for its own sake.

Huberman claims that teachers have certain knowledge preferences and that in their selection of knowledge for a particular curriculum, knowledge has to be practical and useful.
FIGURE 3.6
SIMPLIFIED SCHEDULE OF HUBERMAN’S APPROACH

<table>
<thead>
<tr>
<th>Factors/Motives</th>
<th>Knowledge Selected for Curricula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within School</td>
<td>1. Forms of knowledge have to be practical and useful for most students.</td>
</tr>
<tr>
<td>Teachers’ Motives</td>
<td>2. Knowledge obtained from students/other teachers is preferred</td>
</tr>
<tr>
<td>Classroom Environment Factors</td>
<td>3. Knowledge obtained locally is also preferred.</td>
</tr>
<tr>
<td></td>
<td>4. Knowledge actually used depends upon influence of change-agents and capability of interests.</td>
</tr>
</tbody>
</table>

(Simplified and adapted from Huberman, 1983 and Marsh, 1986:48)

The Huberman model, according to Marsh:

underlies the craft-orientated nature of teaching, and the question of how curriculum planning somehow accommodates the motivations and incentives of teachers. (Marsh, 1986:51)

Huberman brings to the fore the influence of teachers as they work with the curriculum in the classroom. He describes his practical, instrumental approach as follows:

the global image emerging from the classic and recent studies of knowledge used by teachers is that of practically orientated professionals drawing chiefly on their own and their peers’ experience to
resolve problems or otherwise modify their instructional practices ... There is a good deal of recipe collecting and exchanging, enabling teachers to expand their instructional repertoire, their bag of tricks. (Huberman, 1983:483)

3.2 (iii) Practical Theorists

Schwab (1969) contends that no one, generalised, universal set of curriculum principles can possibly form the basis of a unified theory (or meta theory), given the range and diversity of the problems and understandings in the curriculum field.

For this reason "relevance" and "responsiveness" are key features of Schwab's practical, non-theoretical, pragmatic approach to curriculum. While he does not develop a framework or structure for curriculum development, he raises a number of practical curriculum concerns.

Advocating a practical, common-sense approach to curriculum, Schwab states that:

It is this recourse to accumulated lore, to experience of actions and their consequences, to action and reaction at the level of the concrete case which constitutes the heart of the practical. (Schwab, 1969:320)

Schwab reacts to the Tyler rational approach commenting that:
Its focus on 'objectives', with their massive ambiguity and equivocation, provides for too little of the concrete matter required for deliberation and leads only to delusive consensus. Second, those who use it are not trained for the deliberative approach it requires. (Schwab, 1969:330)

Believing that there has been too much reliance on theory in the curriculum field he proposes that curriculum developers should develop the "art of the practical" and a more open-minded, eclectic approach. Schwab's concern for "the practical" extends into the classroom "through direct and empirical study of action and reaction" (1969:323) rather than relying on theory. Schwab contends that: "the field of curriculum is moribund, unable ... to continue its work and desperately in search of more effective principles and methods" (1969:306) and:

The curriculum field has reached this unhappy state by inveterate and unexamined reliance on theory in an area where theory is partly inappropriate in the first place and where the theories extant, even where appropriate, are inadequate to the tasks which the curriculum field sets them. (Schwab, loc. cit.)

The development of "the practical arts" including a commitment to "practical deliberation" is his means of overcoming the failures of theory (Schwab, 1969; 1971). For Schwab curriculum development should be a more practical discipline through: (a) piecemeal alteration, not to just replace or dismantle existing practices but to add, improve, (b) identifying difficulties, problems and ills of the curriculum where the problems lie within the process, and, (c) thinking about and developing alternative solutions to identified, recognised curriculum
problems. "Practical" deliberation is a common sense approach of dealing with curriculum problems. Commitment to the process of deliberation for Schwab is:

... complex and arduous ... requires consideration of alternatives if it is to be most effective. It treats both ends and means as mutually determining one another. It must try to ascertain the relevant facts in the concrete case. It must generate alternative solutions. It then must weigh alternatives ... and choose, not the right alternative, for there is no such thing, but the best one. (Schwab, 1969:328)

Schwab's (1969) view of theory for curriculum is that it should be a practitioner theory. In a later work (Schwab, 1973) he puts forward three operations necessary for the translation of the practical into curriculum: "discovery of one another by collaborators, coalescence of what is discovered, utilisation of the coalesced bodies for new educational materials and purposes ..." (Schwab, 1973:501). It is interesting to note that in his later years Tyler recommends that in selecting objectives, the Schwab procedure of group deliberation be used (1975:227).

For Reid, like Schwab, curriculum has to be responsive to concrete, tangible situations; Reid poses two very practical questions implicit in community centred curriculum problem solving:

How can communities adequately debate questions of curricula ends and means, and how can curriculum studies be conceived as an enquiry that assists in the resolution of curriculum problems? (Reid, 1978:3)
His focus is on the practical 'how' questions as this extract illustrates. He works from a premise that 'the what' question entails 'the how' and 'the should' question and that "the main instrument for the solution of curriculum problems is deliberation or practical reasoning" (Reid, 1978:49). As with Schwab, he suggests the aim is to examine what is there already in "a tradition of practical reasoning is built up through extending, elaborating and refining the criteria by which actions are to be justified" (Reid, 1978:50). Thinking about the curriculum involves tasks, rather than abstract thoughts: "the job of curriculum theory is to find ways in which conceptions can be made real" (Reid, 1978:18). Curriculum tasks involve active participation in planning, implementing and evaluating student learning experiences (Reid, 1978:35, 36). This could mean, for example, involvement of teachers in curriculum development and also sharing of ideas among teachers.

Walker's (1971) contribution to curriculum development through his naturalistic approach follows Schwab's (1969) ideas on the practical and, in Reid's words, "represents an important break with tradition" since it attempted to analyse and describe how curriculums are actually made and is "built on judgmental and impressionistic data" (Reid, 1978:33) through empirical data (i.e. observations of the process in 'natural' contexts).

In contrast to the classical, rational model (of Tyler, for example) in Walker's model:

Objectives are not a starting point but a late development of the curriculum making platform and ... are only one means among others for guiding our search ... (Walker, 1971:59)
The Walker approach which comprises "a platform", "deliberation" and "a curriculum's design package" is called naturalistic because "it was constructed to represent phenomena and relations observed in actual curriculum projects" (1971:51). Of particular interest is the "platform" element which is an attempt to describe how a curriculum process commences; as such it includes conceptions, theories, aims, images, procedures and values that curriculum developers bring to the curriculum development process:

The curriculum developer does not begin with a blank slate. He [sic.] could not begin without some notion of what is possible and desirable educationally. The system of beliefs and values that the curriculum development brings to his [sic.] task and that guides the development of curriculum is what I call the curriculum's platform. (Walker, 1971:52)

Such values are an important aspect of curriculum development and are returned to in Chapter Five.

3.2 (iv) Critical Theorists

A more recent approach to curriculum development theory is critical reflection which holds that all curriculum work should be approached in a "critical" manner. Drawing on the philosophical works of Habermas this approach calls for curriculum work to be:

undertaken in a context of critical reflection so that the best alternatives can be chosen and then evaluated in the light of learners' and teachers' experiences. (Lovat and Smith, 1990:15)
The approach to curriculum theory for critical theorists is premised on "a new way of assessing the notion of knowledge" (Lovat and Smith, 1990:73) which is based on Habermas's theory of knowledge and is claimed by critical theorists to be applicable to any area of study (Lovat and Smith, 1990:73). Three ways of knowing are identified: technical knowing, interpretive or hermeneutical knowing and critical knowing. In essence these refer to the following:

Technical knowing: the knowing of facts and figures – typically the sort of knowledge that comes from empirical verification. Also refers to the name that comes from symbols in the form of signs, numbers, letters and words which are accepted as right or wrong.

Hermeneutical knowing: the negotiation of meaning and understanding through communication, language.

Critical knowing: self-reflective knowing, knowing from the inside – we know by something happening inside us.

(Extracted from Lovat and Smith, 1990:74, 75)

The implications for curriculum of these types of knowledge are seen by Lovat and Smith to be significant in that they can influence approaches by the teacher to the classroom situation (and hence student learning) and thus underpin curriculum planning (Lovat and Smith, 1990:80-85).

The curriculum process is underpinned and informed by a series of decisions and judgements by the curriculum planners and the teacher; the process is seen as a problem solving one in which
the teacher processes a complex variety of stimuli and information and uses this to make decisions and solve problems: the teacher's key roles in this are those of information processor, manager, decision-maker and problem-solver. (Lovat and Smith, 1995:2)

Critical theorists focus on curriculum practice particularly at the classroom level; the major concern is the context within which the teacher delivers the curriculum and with the factors influencing the teachers' ideas and practices. Implications for curriculum development of this critical approach are that teachers and students engage in the curriculum's delivery through classroom interaction and negotiate the processes and the content of the curriculum. Further, through interaction and negotiation teachers and students make meaning together and construct an understanding which is meaningful to them.

Central to critical theory in a concern with the exercise of power. In relation to curriculum this is a particular concern at the present time with the power and influence over education and curriculum of "government and other social forces whose interests in education is valid but incomplete, and anything but subtle" (Lovat and Smith, 1995:183). A consequence of this is the weakening of the power of professional educators. In this context the role of the teacher and students negotiating and making meaning for themselves at the classroom interface becomes significant.

Given this context and the various perceptions, theories, assumptions, ideas about learning and teaching, subject matter and knowledge which underpin curriculum planning and teaching, critical theorists
seek "critical awareness" of curriculum practice by the participants themselves because in the end "it is the teacher, with the learners, who finally makes it work" (Lovat and Smith, 1990:ix). The curriculum is negotiated and given meaning by the participants (not inconsistent with Stenhouse) particularly when it is concerned with Hermeneutical and Critical Knowing rather than Technical. In Section 3.2 (ii) it was argued that TAFE is concerned with much more than information and skills (Technical Knowledge).

3.2 (v) Summary

Clearly, as foreshadowed in Section 3.1, there is no coherent, substantive, stable body of curriculum theory which underpins or represents the curriculum development field. The criteria and procedures for the development of curriculum are inextricably linked with the philosophy and value-position of the writer as is to be expected in a field where intentions and values are fundamental. The principles and processes of curriculum development in a particular situation, then, may be founded on one or more different perspectives.

The origins of curriculum theory in the 1920's, arose from theorists in the objectives-based tradition. Bobbitt, Tyler and Herrick and Goodlad from this tradition adopt a logical, rational approach in which educational objectives are identified firstly, before proceeding with the curriculum content, method and evaluation; Goodlad adds the particularly important dimension of the role of the student as part of
development. The Tyler and related "objectives" models provide an ordered, means-ends structure or framework for curriculum development.

Other approaches reviewed (Process, Practical Theorists and Critical Theorists) reject this rational, ordered (and what was to become behaviourist dominated) approach of specifying objectives at the outset and focus more on curriculum context and the explicit statement of values. Skilbeck, for example, emphasises the whole curriculum, is committed to environmental responsiveness and holds that curriculum development may commence at any phase and not necessarily be constructed on a means-end basis. Generally, theorists considered under these other approaches, Skilbeck, Stenhouse, Huberman, Schwab, Reid and Walker call for a less rigidly theoretical and logically structured approach and support a more open, flexible and practical approach recognising the complex, holistic nature of curriculum work; Lovat and Smith argue for a more reflective approach at the student-teacher and classroom level.

While differing assumptions and strategies for curriculum development are manifest across the above approaches, one aspect which all have in common is that curriculum content be relevant and responsive to needs. As seen above, theorists approach this aspect with a variety of depth and detail: Bobbitt prescribes nine significant areas (and 160 objectives); Tyler nominates three major source areas and two screening specialists; Skilbeck posits a more comprehensive approach through situational analysis and goal formation; Stenhouse emphasises curriculum research and development by teachers in their own classroom and sets out some general principles; Schwab suggests
group deliberation; Reid's solution is practical reasoning and deliberation; Walker recommends a "platform" where the curriculum process commences, and Lovat and Smith advocate a reflective critical approach involving all participants.

Clearly there is no one model or formula for approaching this important curriculum element of meeting community needs; this feature will be returned to in the thesis model.

3.2 (vi) The Relevance of the Literature to TAFE NSW

The curriculum literature reviewed above does not address TAFE NSW as such, the contributors primarily focus their theories and models on the school system. In Chapter Two it was shown that there are specific features and characteristics of the TAFE NSW system which set it apart from the school system (and other post-compulsory educational institutions) and which affect curriculum development. Factors which characterise this difference include the background of the teachers, the age and maturity of the students and the type of courses offered. This is not to suggest, though, that the literature does not have relevance and application to curriculum development in TAFE NSW.

Curriculum principles formulated by objectives models such as Bobbitt in the 1920's, and later by Herrick and Tyler in the 1940's provide an appropriate but limited framework for depicting TAFE NSW curriculum processes. The ends-means, objectives, needs based approach in their models is consistent with the relevant, practical,
vocationally orientated features of TAFE NSW already identified. Goodlad’s focus on the “personal level or domain” of students and his strong emphasis on values adds a necessary dimension to the rational approach. He brings into closer focus the role for students in the overall processes affecting curriculum development. TAFE NSW, as already identified in Chapter Two, is directly concerned with student needs. This feature will be returned to in Chapters Five and Six.

Bobbitt’s (1924) detailed work on educational objectives couched in instructional or educational terms and based on activity analysis (Section 3.2 (i)) bears close resemblance to the key competencies approach identified in the Finn Review (1991) and the Mayer Report (1992) which also state objectives in terms of intended learning achievements and behavioural outcomes (discussed later in Section 3.5.1). Further, Bobbitt’s proposal for developing teacher education programs with reference to major fields and tasks of specific teacher activity (Section 3.2.1) is similar in approach to the influential Carmichael Report (1992) on vocational training which is founded on a competency based, objectives approach concerned, like Bobbitt, with attaining specific vocational skills (Section 3.5.1).

Bobbitt’s guiding principles of setting up and specifying objectives for curriculum development have had a continuing relevance to TAFE NSW in terms of its nature and role as reflected in the following quote – in which strategic goals for curriculum development in TAFE NSW are stated in “objective” terms:

To provide a program of curriculum development ...
... which ensures high quality and relevance of all TAFE courses and which is responsive to changing needs of students through: development of
courses with clearly defined educational objectives, structure, content ... information gathering, educational research and liaison with industry and the community ... evaluation of curricula to ensure they fulfil the educational objectives for which they have been designed ... (TAFE NSW, 1983:17)

More recently in the competency-based approach as set out in the first edition of the *User's Guide to Course Design for Competency-Based Curriculum* (ACTRAC 1992) the following instruction to use "objective" terms was given:

All courses must be written so that they:

- refer to the competency standards (or equivalent) developed through a skills analysis on which the course is based;
- are expressed in such a way as to make it possible to ascertain clearly if the required competency has been achieved.

Both skills and knowledge statements should be written in this way and should take the form of a short sentence with three elements as follows:

**the learner will be able to ...**

- a verb specifying the activity
- an object of the activity
- the conditions of the activity.

*(ACTRAC, 1992:1.6)*

This is very similar to earlier behavioural objectives work – Mager, 1975, for example, describes the characteristics of a useful objective as:

1. Performance (what the learner is to be able to do)
2. Conditions (important conditions under which the performance is expected to occur)
3. Criterion (the quality or level of performance that will be considered acceptable).

(Mager, 1975:23)

The Tyler approach clearly has significance in its application to TAFE NSW curriculum processes. The question of relevance is particularly important: Tyler's model is driven by his belief that "a curriculum must be ever relevant in the best sense of the word" (1975:227). The analysis of needs in constructing the curriculum and subsequent development of learning objectives to meet these needs is a logical mechanism aimed at ensuring relevance and, as shown in Chapter Two, a strong feature of TAFE NSW's curriculum approach is to maintain relevant education for its students - ensuring that students be skilled in certain more or less clearly defined areas. In the past these have been set out in student-centred behavioural terms and now, more recently, in outcomes and competencies. These are all closely related to what has been called here the objectives approach of Bobbitt and Tyler.

Also, given that the Tyler approach is a practical one based on meeting student and community needs (from the data source), the model can cater for the useful, practical, vocational and applied focus of TAFE NSW curriculum processes.

The rational, technical framework and accompanying guidelines for curriculum construction of Tyler also have relevance to TAFE NSW. Marsh (1986) comments that:
Planners at the TAFE level, with their concentration upon skills development, have indicated a preference for module planning, and thus technological and behaviourist algorithms (Marsh, 1986:62).

An example of the use of the Tyler model in curriculum development in TAFE NSW is that, for a number of years, the Sydney College of Advanced Education: Institute of Technical and Adult Teacher Education drew upon the Tyler model to lecture teachers of TAFE (enrolled in the Diploma of Teaching program) on TAFE's curriculum development policy in the course *Curriculum Development in TAFE*. Required reading for the course until recent years was a directed study Booklet entitled *Curriculum Construction in TAFE* (Bennett, 1981) in which there is a section on Selection and Development of Curriculum Objectives and Content (Topic 3) which refers in some detail to the Tyler model as a guideline for teachers: "illustrating six principles to follow in selecting curriculum objectives and content" (pp. 16-20). (Appendix 3). In relation to the process of curriculum development the Booklet states:

> Tyler’s model represents one approach to identifying and selecting curriculum objectives and related content. Procedures followed in developing a curriculum or designing a course of study show some variations in approach but most procedures take into account the six principles derived from Tyler's model. (Bennett, 1981:21)

While the relevance to TAFE NSW of curriculum theorists in the objectives-based tradition is widely recognised, there are other approaches which also have potential to contribute to theory building in TAFE, as follows.
The underlying rationale and cultural context of Skilbeck’s model, for example, relates closely to the TAFE NSW curriculum characteristic of responding to commerce, industry and the community. The concept of a situation to be analysed, central to Skilbeck’s cultural processes approach, is pertinent to the practice of curriculum development in TAFE NSW given that, as shown in Chapter 2, Section 2.1 above, a driving force underlying TAFE NSW curriculum rationale is to be relevant and responsive to community needs. Skilbeck posits that: “many factors, both external and internal to the school, enter and vitally influence the curriculum and affect our efforts to modify it” (Skilbeck, 1973:116).

Laird and Stevenson (1993) comment that Skilbeck’s factors have some limitations in their specific application and relevance to vocational education because:

The language used in its description and the elaboration of factors make it difficult to apply directly in vocational education. For example, it does not give explicit attention to distinctive philosophical, sociological, psychological, historical and economic factors which have shaped vocational educators’ perceptions of the nature and role of knowledge and education. Furthermore, occupational analyses, which are often undertaken in vocational educational curriculum development in order to canvass the needs of industry and business, are not accommodated readily, but need to be. (Laird and Stevenson, 1993:81)

Despite this the factors do provide a very useful general framework for a TAFE NSW curriculum development model. The external factors that have direct relevance to the environment in which TAFE NSW works include, for example, as listed by Skilbeck (Figure 3.4 above),
"employer requirements" and "policy statements" (which is taken to refer to socio-political forces), "changing nature of subject matter" and "resources flow"; all these factors have a direct bearing on TAFE NSW's curriculum context. Similarly, the internal factors relating to students, teachers, institutional structures resources and perceptions of curriculum (Figure 3.4 above) are very much part of the TAFE NSW curriculum implementation environment. Generally the flexible, responsive, dynamic ongoing nature of Skilbeck's situational analysis approach is most relevant to the TAFE NSW curriculum "situation" and provides a framework for TAFE NSW curriculum development context and perspective.

The importance of the implementation stage of TAFE NSW's curriculum development, with the distinguishing features of its classrooms outlined in Chapter Two (e.g. students are mature age, have a significant life and work experience and teachers have vocational backgrounds), is clear in Skilbeck's focus on the teacher and student participation in the curriculum development process. As outlined in Chapter Two, and examined in the case study Chapter Four, the teacher and students in TAFE NSW at the classroom interface are a critical part of the curriculum development process.

Stenhouse also addresses the aspect of teacher and student participation in his curriculum approach with specific focus on the role of the teacher as researcher and attention to the realities of the classroom where the curriculum is grounded. His process model is, as Stenhouse himself says, perhaps more suited to curricula which centre on knowledge and understanding; whereas the objectives model is, as he says, more suitable to information and skills based curriculum
areas. Much of TAFE NSW's work goes well beyond what Stenhouse describes as information and skills based and in these circumstances it is clear that the Stenhouse process approach has relevance. The significance of this process to TAFE NSW is further investigated in Chapter Four.

A similar point can be made in connection with the critical theorists. As shown in Chapter Four, TAFE NSW is not merely concerned with technical knowledge but with interpretive or hermeneutical knowledge and critical knowledge. The TAFE NSW classroom is also shown (Chapter Four) to be a site of curriculum negotiation and interpretation of meaning between teachers and students (e.g., for the students' work situation), knowledge is not necessarily fixed. The critical approach, as with the process approach to curriculum development, is also relevant to TAFE NSW.

Huberman's interest in teachers and their motivations and incentives at the classroom level is also most relevant to the TAFE NSW system. A factor considered in Chapter Two above is the practical and useful nature of TAFE NSW's curriculum approach, and, Huberman's focus on the role the teacher plays in curriculum at the classroom level in selecting knowledge which is useful and practical is clearly appropriate.

The practical theorists Schwab, Reid and Walker all call for a more practical approach and provide useful guidelines for developing this idea in the curriculum process. Their concerns for curriculum to be based on deliberation (Schwab, Reid and Walker) practical reasoning (Reid) and actual curriculum activities (Walker) are particularly relevant to TAFE NSW because as indicated above and as will be
shown in classroom observations and the case study (Chapter Four), there is pressure on the teacher by the students to relate curriculum content in a practical, "common sense" way (example, to consider a wide variety of relevant examples) to actual workplace practices. The "translation of the practical" (Schwab) is particularly important for TAFE NSW's VET curriculum which, as shown in Chapter Two, rests on a long established tradition of being relevant and applied. The teacher draws on examples which demonstrate practical applications and is not able to rely on theoretical discourse to make content relevant. In fact as shown in Chapter Four, students take their own work experiences and knowledge to the classroom – they insist upon both relevancy and currency of content in relation to the workplace. Walker's reference to the values that curriculum developers bring to the curriculum development process also has relevance to TAFE NSW as it responds to the many factors that contribute to the currency and relevance of the curriculum in the market place.

Further, these three writers as with the others reviewed above all support the notion of responsiveness to the community and the cultural environment; as seen in Chapter Two this aspect is a hallmark of TAFE NSW.

3.2 (vii) Highlights

In summary, this examination of literature from the curriculum field revealed a number of concepts which, as shown above, have potential relevance to TAFE NSW. These curriculum theory ideas, highlighted
below, will be further discussed, extended upon and incorporated in the conceptual framework Chapter Five (Section 5.2.1 (i)) in support of the thesis model.

CONCEPTS FROM THE CURRICULUM LITERATURE
WITH POTENTIAL RELEVANCE FOR TAFE NSW

- Curriculum should be student centred and stated in terms of behaviour or instructional objectives. (Bobbitt, Tyler)

- Students are potential generators of curriculum, not just passive recipients. (Goodlad)

- Students are a most neglected data source in making curriculum decisions and a central part of the values which determine the curriculum. (Goodlad)

- Curriculum development is a process which revolves around educational experiences and goes beyond information and skills. (Stenhouse)

- The situation or context of the curriculum is essential. (Skilbeck)

- Curriculum should be context driven and responsive to the needs of industry and the community. (Skilbeck, Reid, Tyler ...)

- The best place for designing the curriculum is where the teacher and students meet. (Skilbeck)

- Processes of the curriculum should be related to the experience of the learner. (Skilbeck)

- Curriculum should be grounded and reflect the realities of the classroom. (Stenhouse)

- The teachers' role as researcher is central to curriculum. (Stenhouse)

- Curriculum is a form of specification about the practice of teaching. (Stenhouse)
• Teacher and student group negotiations may be seen as an attempt to influence the curriculum content. (Stenhouse)

• Teachers have preference for knowledge that is practical and useful. (Huberman)

• A practical common-sense approach should be taken to curriculum. (Schwab)

• Rather than rely on theory – should study action and reaction in the classroom (action and reaction at the concrete level) and this can be done in a ‘naturalistic’ way (how curriculum planning takes place in practice). (Schwab; Walker)

• The values that curriculum developers bring to the curriculum are an important underlying factor of the curriculum process. (Walker)

• Curriculum tasks involve active participation in planning, implementing and evaluation of student learning experiences. (Reid)

• The relationship of students and each teacher, as well as the teachers as a group are important – in the end the teachers and students make the curriculum work. (Lovat and Smith)

• Knowledge is not fixed – meaning should be negotiated between teachers and students. (Lovat and Smith)

3.3 ADULT EDUCATION LITERATURE

The adult education area is not limited to TAFE – it exists across the whole spectrum of higher and tertiary education. However with respect to TAFE, a report of the Senate Standing Committee on Employment, Education and Training in 1991, states that in Australia “the largest formal provider of adult and community education in every State and Territory is TAFE” (Senate Standing Committee, 1991:37). McIntyre (1991) notes that technical education has been a
singular provider of adult education, though this has not always been recognised or accorded high value (1991:45). He contends that at times a broad, liberal view of technical education as providing opportunities for working people to gain useful knowledge or improve themselves (Section 2.1, Chapter 2 identifies this) has been subdued by a narrower vocationalism, (a sense of skilling the workforce for industrial development). But McIntyre believes a broader view now prevails and comments that:

In recent years, technical education institutions in Australia have taken the broader view, and provided significant adult education opportunities. (McIntyre, 1991:45)

Chapter Two (Section 2.1) shows that TAFE in New South Wales is strongly identified as an adult education provider with, for example, more than half of its students over 25 years. The question arises then as to how a curriculum development model constructed in this study may be informed by curriculum literature focusing specifically on the adult learner. The following review examines adult curriculum literature with the aim of capturing curriculum theory ideas which could be useful in understanding TAFE NSW curriculum processes.

An examination of adult education literature reveals that a central focus is the teaching and learning aspects of curriculum (while much of the curriculum literature reviewed above emphasises the curriculum as a plan). Knowles (1978), a well known theorist in the adult education field, contends that teaching adults is different to teaching children and his theory of andragogy is premised on the view that adult learning takes "into account what we know from experience
and research about the unique characteristics of adult learners” (Knowles, 1978:51). His theory is based on several assumptions, which are:

1. The need to know. Adults need to know why they need to learn something before undertaking to learn it.

2. The learner’s self-concept. Adults have a self-concept of being responsible for their own decisions, for their own lives.

3. The role of the learner’s experience. Adults come into educational activity with both a greater volume and a different quality of experience from youths.

4. Readiness to learn. Adults become ready to learn those things they need to know and be able to do in order to cope effectively with their real-life situations.

5. Orientation to learning. In contrast to children’s and youth’s subject-centered orientation to learning (at least in school), adults are life-centered (or task-centered or problem-centered) in their orientation to learning.

6. Motivation. While adults are responsive to some external motivators (better jobs, promotions, higher salaries, and the like), the most potent motivators are internal pressures (the desire for increased job satisfaction, self-esteem, quality of life, and the like).

(Knowles, 1978:55-61)

All these ideas relate closely to TAFE NSW students. As will be evidenced in Chapter Four, students question why they need to learn a particular topic, they are self-driven and self-directed, they are ready and willing to learn and want to apply the learning to their work
situation. They bring a background of life and work experience to the classroom with pressures on them (or motivations) for their learning to be useful and applied. One area identified by Knowles which is particularly relevant to curriculum is that of the student being self-directed – summed up by Knowles as "once they (the adult student) have arrived at that self-concept they develop a deep psychological need to be seen by others and treated by others as being capable of self-direction" (Knowles, 1978:56).

Langenbach (1988) reviews a number of curriculum models in adult education and concludes that no single model can adequately account for the many different activities in the field (1988:217) and furthermore:

\[
\text{to seek one comprehensive model to account for all that is considered curriculum development in adult education would be an imprudent proposition. (1988, loc. cit.)}
\]

But he also considers that self-directed learning is the most important factor across all models (1988:148).

Merriam and Cafferella (1991) in their review of seven major theories in the adult learning area found strengths and weaknesses in the theories but found four components of adult learning which were widely acknowledged, including self-directed learning:

- adult learning is characterised by self-direction or autonomy
- the content of learning or triggers for learning are likely to be selected to the breadth and depth of the learner's life experience

- the learner consciously reflects on or monitors his or her own learning

- the learning that occurs is acted on or expressed.


Rogers (1996) in discussing the teaching of adults takes this even further, commenting that for adults "learning is self-directing – that is what makes them adult learners" (Rogers, 1996:60).

Quirk (1994) (a senior officer in TAFE NSW) points out that self-directed learning has implications for curriculum development design because "it calls for learner participation in curriculum planning, diagnosis of learner needs, goal-setting, and evaluation of educational progress" (Quirk, 1994:58).

and concludes that the concepts of self-development and self-direction "have gaps and weaknesses which need to be acknowledged" (1988, loc. cit.)

Candy (1987) reviews a number of assumptions in adult education (including self-directed learning) with a particular focus on the learner-control aspect. He comments that "... most explanations of learner dependency ignore one vital element, and that is the ability of adults to make rational choices for themselves ..." (Candy, 1987:173). He is convinced that adults are responsible for their own learning but questions whether they should be responsible for their own teaching (Candy, loc. cit.).

Scott (1992) considers that teachers in adult vocational education (AVE) in the 1990's face a number of challenges, for example: how to cope with the increasing complexity, unpredictability and variability of their daily work in AVE, establishing what constitutes effective AVE and training and thirdly, the need to develop a clearer and more comprehensive picture of what the term competence means in AVE (Scott, 1992:74). Scott also states that "on-going professional learning must involve the continuous upgrading of both their subject content and their skills as educators" (1992:69).

TAFE NSW highlights three important, distinctive principles of adult learning in a Teacher Orientated Workshop (TOW) manual as being:

- Adults want value for time – they are conscious at the time whether the education or training is required by their employer or they have chosen it themselves and will
make their own decisions about what in a training program or course is relevant or helpful.

- Adults are capable of reflective analysis – they have an ability to reflect, analyse, monitor progress and select from a range of strategies.

- Adults demand and command respect for their life experiences – they want recognition of their achievements and skills and acceptance of their views. (Teacher Education Service TAFE NSW, 1993:12-16)

Johnstone (1988) in discussing the curriculum needs of special education, an important area of adult education and of TAFE's educational brief, makes a point which extends from the area of general education into the field of adult education and curriculum. He comments that "all learning is a mediated experience" (1988:113) and that any teaching involves mutual respect between the teacher and the learner and an inherent respect for the task undertaken and strategies for achieving outcomes involve negotiated learning and collaboration between the parties. This relates to curriculum in that:

At the heart of curriculum planning, with its growing sophistication and its techniques for negotiated learning, is an old notion based on shared responsibilities and experiential principles. (Johnstone, 1988:114)

Kidd (1983) a well known contributor to the adult education field, sums up the situation in choosing or designing a curriculum for adults in the following comment. Appreciating adult learning characteristics, he calls for their participation in curriculum development:
It means understanding the needs and interests of the learner, understanding the situation in which he (sic) lives, and the kinds of content that may serve his (sic) needs ... It assumes the fullest possible participation by the learner in curriculum building. (Kidd, 1983:77)

This section set out to identify ideas in adult curriculum literature which could help further understand TAFE NSW curriculum processes. Much of the focus in adult curriculum literature is on the teaching and learning aspects of curriculum. Clearly there is a strong interest in the self-directed learning aspect of adult learners and what this means for the teaching of adults. But of particular importance for this study is that if adults follow a self-directed learning approach and take responsibility for curriculum with the teacher there are implications not only for teaching but for the curriculum’s development in the classroom – as it is experienced by teachers and students. This has implications for TAFE NSW’s curriculum because, as shown in Chapter Four, the students in being self-directed engage and interact with the teacher and negotiate, for example, the relevance and currency of content to meet their needs. This makes the classroom a critical part of the curriculum development process. It is of interest to note that this is not inconsistent with ideas put forward in the previous section by the critical theorists, that in their interaction in the classroom, students and teachers together construct an understanding and make the curriculum work.
3.4 TAFE CURRICULUM LITERATURE

This Section focuses on TAFE curriculum literature written from within and outside the NSW TAFE system. The works reviewed from within the NSW TAFE system, and thus providing an internal perspective, are drawn from a range of curriculum specialists employed by TAFE NSW over the past fifteen years. These authors offer views from within TAFE NSW as employees of the TAFE NSW curriculum services division and although not “official” TAFE NSW views they have some influence within TAFE through research and publications. Reference is also made to a TAFE NSW Curriculum Task Force (1982), the recent Curriculum Mechanisms in TAFE Project Team Report (1996) and to Broderick (1982) who, on behalf of South Australian TAFE, investigated TAFE curriculum development processes in TAFE across Australia.

A selection of writers from outside TAFE, who have written on the TAFE curriculum system, are then reviewed with the aim of providing an external perspective on curriculum development in TAFE.

In this review, particular emphasis is placed on the classroom site (interaction between teachers and students) in the writers’ accounts of curriculum processes.
3.4 (i) "Internal" Literature

As will be seen in the following Section, TAFE's efforts in curriculum have been pre-occupied over the last few years with the National Training Reform Agenda and the introduction of competency-based vocational education and training. In 1991, Geoff Hawke, then a member of TAFE's Industry Restructuring Task Force, referred to a national training revolution, commenting that:

A revolution has begun to take place in the last couple of years which is to change the face of vocational education and training in this country for many years to come. Differences which have existed in approaches to education and training across states and systems are a luxury Australia can no longer afford. (Hawke, 1991:7)

The impetus for the move to national competency standards has seen a national commitment to a competency-based curriculum approach (Section 3.5). The National Board of Employment, Education and Training in 1992 commented on the importance of competency-based training and TAFE's role as follows:

Perhaps the most striking feature (of CBT) is the drive towards competency-based training in the fields of training in which TAFE is a major provider. (NBEET, 1992:18)

In the last five years, then, the main curriculum focus for TAFE has been on the processes and procedures of CBT and its implementation - this will be dealt with in Section 3.5.
Prior to this "training revolution", work on curriculum development theory and model building by TAFE NSW was not extensive. The curriculum view within TAFE NSW was a limited one in the Tyler tradition, in which step by step procedures and mechanisms for the implementation of the curriculum were the main focus.

Svirskis (1980) (a TAFE NSW curriculum staff member at that time) posited that a curriculum model of TAFE NSW should be depicted in the Tyler tradition as "a means-end" one. Svirskis maintained that in such a model the objectives be viewed in terms of the tasks which students will have to perform in their work. In fact, this model is similar to the Bobbitt approach which is guided by a set of logical curriculum making principles the basis of which is to systematically detail educational objectives related to specific occupations and to train students for their role in the workplace guided by these objectives. It is of interest to note that Svirskis in 1980 also introduces a concept of competency in his approach and describes curriculum practice in TAFE as follows:

once the tasks which a graduate of a course is expected to perform have been analysed into skills and competencies, appropriate curricula and teaching methods are developed to produce a graduate. (Svirskis, 1980:141)

In some contrast to Svirskis, Haworth (1980), a senior TAFE NSW curriculum officer, developed a model which held to a means-end position but extends this to encompass students. His model depicted curriculum developed in TAFE NSW with students as an integral part of the whole process. Called "a student orientated vocational
curriculum model”, this complex model (Appendix 4) depicts the curriculum process in four phases:

- Phase 1 – Finding out what needs to be learnt;
- Phase 2 – Investigating how it is to be learnt;
- Phase 3 – Program Development, and
- Phase 4 – Implementation.

The model is based on needs analysis (skills and tasks) and is driven by an objectives approach, with student needs closely linked to the four phases listed above.

The role of the classroom and the associated interaction between teacher and students (as the students’ needs are met) is included in Phase 4 (Implementation) which is fed back to Phase 1 (Student Needs). The role of the classroom in meeting student needs is not made explicit in the model (it is subsumed under implementation); this is surprising given that the model is “student orientated”. The classroom experience is not perceived as a feature of the curriculum development process by Haworth, curriculum implementation just happens in the classroom.

The role of the teacher and student at the classroom level is made more explicit in a means-end model constructed by Ellis (1983) (then a curriculum officer in TAFE NSW) but with an emphasis on the process aspect in curriculum by including the element “teachers guide and student material” in the later stage of his *Curriculum Development Activities* (1983) model (Appendix 5). In referring to Teachers Guide and Student Material, Ellis states:
From syllabus performance objectives teachers derive lesson aims and objectives, select *appropriate* teaching strategies and design suitable teaching aids ... student material is prepared ... in accordance with the appropriate teaching strategies adopted. (Ellis, 1983:4)

But it should be noted that this is really about the plans for the process rather than the process itself.

This is a Tyler type model strongly driven by objectives based on occupational analysis with curriculum development portrayed as a sequence of activities the last step being a trial of the course evaluated against the objectives.

A TAFE NSW Curriculum Task Force on *Procedures and Practices in Curriculum Development* in 1982 developed a model of curriculum in TAFE which was an important discussion document at the time and was widely distributed across TAFE NSW. Confirming what has been previously said regarding the scarcity of TAFE research and publication (Chapter Two) the Task Force commented that after

A comprehensive literature search including an ERIC search (and) the contents of over forty reference books and journal articles ... the literature consulted abounds with descriptions and models of curriculum development for the classroom teacher, in particular, for primary and secondary levels, there was a paucity of publications relevant to a centralised system such as TAFE. In the vocational area, the literature was predominantly descriptions of curriculum development based on linear systems model task analysis procedures. (TAFE Curriculum Task Force, 1982:5)
The model was premised on two critical decisions considered separately as:

1. what is to be learned (i.e. curriculum considerations),

2. how is it to be learned (i.e. instruction considerations).

The model went deliberately beyond a linear Tyler representation and included more complex variables and interactions (Appendix 6). The authors acknowledged an objectives-driven approach as follows,

Generally the basic tenet of curriculum development in TAFE is that it forms a sequence that begins with needs assessment and the establishment of course outcomes, and follows on to selecting teaching and learning and assessment strategies ... (TAFE Curriculum Task Force, 1982:32)

but went beyond this and further argued that the idea of TAFE's curriculum development proceeding in a logical, straightforward, linear sequence is not borne out in practice – commenting that:

When in various linear systems models, sequences of activities are prescribed, the inference is that once the training objectives are established, all other decisions can be derived in a logical progression. In practice, the movement from one step to another is not so direct – the arrows mask what is often a confusion of decisions based on instruction, commonsense and experience. (TAFE Curriculum Task Force, 1982:19)
The authors view curriculum development as a planning process and introduce a number of other complex factors such as government policy, social change, client needs and vocational requirements which affect the interaction between curriculum and instructional consideration (Appendix 6).

The curriculum process depicted in this model shows the document or plan (what is to be learned) as separate to the instruction process (how it is to be learned) thereby keeping a distinction between curriculum and teaching activities. The Task Force acknowledges, though, that they should be integrated "that curriculum, evaluation and implementation should be interrelated in practice" (TAFE Curriculum Task Force, 1982:17). Whilst holding that curriculum development is essentially a planning process, the Task Force acknowledges the importance of the classroom:

When lesson delivery takes place the outcome in terms of learning experiences will be a product of teacher student interaction as well as planning. (1982:17)

The model depicts the teaching process as the "interaction" between the curriculum plan and teacher decisions.

In a manual for Teachers and Principals prepared by the College Curriculum Services Unit NSW TAFE (1989) under the heading Developing a Curriculum a series of eleven steps or stages are listed and described and also include a section Teachers' Guide and Student
Material. The teachers’ guide is to consist of: “lesson aims, lesson objectives, suitable teaching strategies, suitable teaching resources and assessment methods” (Curriculum Services Unit, 1989:22).

The approach remains largely a means-end one but with some recognition of interrelationship and process. The eleven stages are listed as follows:

1. Identify the occupation and the Job Types within the Occupation.
2. Carry Out an Occupational Analysis.
3. Develop a Task Inventory.
4. Analyse the Task.
5. Consider the Constraints.
6. Construct the Syllabus and Assessment Instruments.
7. Prepare Teachers’ Guide and Student Material.
8. Obtain Feedback.
9. Implement the Course.
11. Validation.

(Curriculum Services Unit, 1989:16-22)

This is similar to a competency-based approach and is not inconsistent with Bobbitt and Tyler and includes process aspects of feedback and evaluation.
Brady et al. (1990) from TAFE NSW Curriculum Support Division put forward a Curriculum Planning Model of "an appropriate systematic approach to curriculum planning for statewide major educational training problems" (1990:1) which lists a ten stage process (again similar to a competency-based approach) as follows:

1. Perceived Need for New Program.
2. Estimation of Expected Demand and Parameters of Need.
3. Determine Competencies and Level of Program.
4. Determine Program Aims/Objectives and Structure.
5. Program Viability.
7. Implementation.
8. Student Evaluation.

(Brady et al. 1990:4-8).

Step number six, the implementation stage, is depicted as follows (Figure 3.7):
FIGURE 3.7
BRADY'S CURRICULUM PLANNING MODEL: STEP 6

Staff Development of Teachers → Development of Educational Resources → Plan for Implementation

D 6

Able to Implement

GO BACK TO RELEVANT SECTION

YES

Provision of Resources → Staff Development

Implementation (includes Staff Development)

Evaluation of Implementation

Staff Development

Determination of difficulties in implementation

(Brady et. al. 1990:6, 7)
Again the actual classroom situation (process) is ignored. Whilst the model does not deal with the implementation phase between teacher and students at the classroom interface it does acknowledge this facet of the process in the premises upon which the model is based, as follows:

- Both those gaining the benefits of the training/education programs (the industry) as well as those delivering it should be involved in the planning process. In particular, the decision points should involve not only senior education staff but also employer/employee representatives.

- The continued existence of education/training programs that are educationally sound, cost effective and relevant to industry/students needs, usually depends upon –
  
  * identifying the jobs being trained for and/or a set of competencies
  
  * quantifying feedback from students about current course offerings
  
  * determining the competencies and the level of those competencies best (from an educational and cost effective perspective) developed (a) within a TAFECOM education/training program and (b) on the job
  
  * estimating emerging features in competency requirements
  
  * continually collecting available curricula and resource materials as well as industry based information
  
  * evaluating existing materials relevant to the project in hand
* rapidly responding to expressed needs with the skilled use of decision oriented research techniques and being able to draw on data from an on-going intelligence system

- The curriculum planning process not only results in a better product (a student graduating with the relevant competencies) but also creates a positive attitude change in those delivering the program thus ensuring its implementation.

(Brady et al. 1990:2, 3)

Two points of special interest above are Brady’s reference to student feedback (hence, participation) and competencies. The basic elements of this model are entangled with bureaucratic procedures and processes which make it hard to follow in places. It is essentially an objectives model based on training needs analysis and related competencies with curriculum development represented as a linear sequence of events rather than a complex set of elements interacting and interrelating. Brady comments, for example, that “curriculum planning is a continuous systematic process rather than a series of intermittent and ad. hoc. events” (Brady et al. 1990:2).

As part of the present restructure of TAFE NSW, a recently released Report focuses on improved curriculum “mechanisms”. Commenced in mid-1995 this two volume Report entitled: Meeting Customer Expectations: The Curriculum Mechanisms in TAFE Project states as background context that:

While the catalyst for the project is the DTEC/TAFE restructure, the continuing challenge in TAFE NSW is to ensure that the products and services from curriculum development activity
meet the expectations of external and internal customers. (Curriculum Mechanisms in TAFE Project Team, 1996:1)

Commenting that because public sector agencies such as TAFE are operating in more competitive and less regulated markets, there is a "common focus on improving levels of customer service, meaning outcomes and being more efficient in the use of public resources" (loc. cit.), the Report makes recommendations across five areas:

1. the establishment of Educational Services Consortia;
2. the establishment of Curriculum Support Units in Institutes;
3. the streamlining of accreditation and registration processes in TAFE (in relation to VETAB);
4. the achievement of savings target and resource efficiencies;
5. the development of a detailed implementation plan.

The Report aims to make for a more efficient curriculum system by creating appropriate structures for greater responsiveness, flexibility and customisation in meeting client needs. Significantly, though, it is more concerned with organisational structure and administrative efficiency than with the essential function of curriculum – its educational role. The recommendations are concerned with improving the system, particularly those relating to the Educational Services Consortia (ESCs) (seven ESCs will replace thirteen Training Divisions and the role of the ESC is to provide educational products and services), the establishing of Curriculum Support Units (CSUs) (these will assist the teacher and help customise curriculum to meet local needs) and the streamlining of accreditation and registration processes (to work in with new VETAB arrangements – see Section 3.5)
but there is little about the curriculum itself, its content and relevance as an educational plan or program. Whilst new arrangements for descriptor level curriculum development (a brief description of the purpose, learning outcomes, assessment criteria and conditions of a course or module in accordance with nationally agreed templates), accreditation and access to funds are very important, there remains the important issue of educationally – rather than just administratively – meeting client (industry and student) VET needs.

The Report observes that to achieve expected outcomes (e.g. curriculum that meets the needs of industry, community and identified groups with special needs in a timely and responsive manner) requires more than structural change and acknowledges that "what this (the structure recommended) amounts to is a significant gap in the service provided to teachers" (Curriculum Mechanisms in TAFE Project Team, 1996:10, 11). This is because, although Training Divisions or ESCs have the expertise, it is not their core function to provide support and the Institutes do not fulfil this function adequately through their Institute Managers (loc. cit.). The solution offered in supporting curriculum processes is to develop internal service agreements so that processes can be changed as necessary. But these agreements refer to products and service arrangements such as release of staff for curriculum development work and streamlining Accreditation and Registration processes, timelines for delivery of documents, mechanisms for technical assistance, links between Institutes and ESCs and other operational functions. Matters of an educational nature relating to curriculum (content, currency, relevancy, the classroom) are not addressed. This issue is taken up further in Section 3.5 and in Chapter Seven.
In this respect, it is of particular interest to note that the Report refers to curriculum as "all practices and processes necessary to support planned learning experiences in learning context" (op. cit., p.17). It is hard, indeed impossible to see how the gap between the planned and experienced curriculum in the "learning context" will be filled by internal service agreements which have an emphasis on mechanisms and operational arrangements.

There is no one model of TAFE NSW curriculum development processes which is followed within the TAFE NSW system. Models outlined above represent a personal approach, an official TAFE NSW documentation of curriculum steps and curriculum mechanisms, or, as with the Task Force model, a discussion paper to provide a basis for further investigation. There is an attempt to depict the complex TAFE NSW curriculum processes but there is no conceptual model providing a comprehensive basis for understanding these processes; this is particularly so in relation to the classroom arena and student/teacher interaction. The TAFE NSW approach to curriculum development is summed up by Broderick (1982) who, in a major investigation into curriculum development processes in TAFE Australia, found that TAFE NSW was not bound by a specific curriculum approach or model:

the New South Wales Department of TAFE, although highly centralised in its approach to curriculum development, does not restrict curriculum developers to an obligatory systems approach. There is no specific curriculum model as such and the curriculum development officers have a measure of freedom to select the most appropriate and effective curriculum development processes to effect the syllabus for each particular new course or revision. (Broderick, 1982:71)
The above review of models reveals that broadly speaking TAFE curriculum development is represented from within TAFE as an objectives driven, sequenced and linear process. The Curriculum Task Force (1982) comes closest to portraying the complexities and diversities of TAFE curriculum processes by identifying a link between curriculum and instruction but their model, while acknowledging the complexity of processes, stops short of showing how this happens and indeed separates the two aspects. The recent *Curriculum Mechanisms in TAFE Project Team Report* (1996) provides an important focus on more efficient organisational structure with changes, for example, to the Training Division System (by setting up ESCs) providing curriculum support in the Institutes, assisting teachers and streamlining accreditation and registration processes. But it does not address the curriculum itself, its educational content nor what happens to the curriculum in the classroom.

### 3.4 (ii) “External” Literature

In the following review reference is made to curriculum writers outside TAFE who have examined curriculum development processes in TAFE.

Reporting on her investigation into Curriculum Decision Making in TAFE for the TAFE National Centre for Research and Development, McBeath (1986), points to a dearth of published TAFE curriculum literature and the difficulty of assessing TAFE’s processes:
Much has been written (however) under the heading of curriculum which strictly belongs to the field of instructional strategy ... Another difficulty lies in summarising TAFE curriculum literature, in that very little of it consists of published research. Many of the references given are internal memos, based on preliminary investigations, policy directions, and descriptions of curriculum procedures. Curriculum in TAFE is a relatively new field and one of developing concepts. (McBeath, 1986:v) (Emphasis in original)

Five years later in a revised edition although McBeath commented that “the last five years have seen a widening interest in and awareness of the importance of curriculum development in the Technical and Further Education (TAFE) sector in Australia” (McBeath, 1991:iii) she still found that

There is a paucity of work on the process of translating occupational, and other, data into curriculum and on the philosophy of developing training curricula. There has not been a published literature on vocational curriculum equivalent to that on the schools. (McBeath, 1991:6)

The previous section confirms this remains largely the case. The report is specific to TAFE curriculum development and while it examines (via case studies) the content and decision-making stage of design and development it does not attempt to construct a curriculum development model; McBeath defines,

“in the broadest possible terms”, the curriculum process as “consisting of four, not necessarily linear stages: needs assessment, design and development, implementation and evaluation”. (McBeath, 1986:39)
Reference is made in the report to "gaps in the curriculum process" (1986:9; 1991:12) whereby McBeath identifies assumptions being made at the outset of a curriculum development process (analysis of occupational data/needs analysis) and the ensuing vocational course. She refers to a very thorough and detailed document on curriculum development procedures used in one TAFE department and finds that the objectives at the outset are not necessarily setting up a foundation for valid curriculum decision making because of these gaps. There is not:

the benefit of a clear set of guidelines on which to base decision making. All decisions (on the curriculum making process) presumably emanate from "professional judgement" of the members of the various committees and panels. (McBeath, 1991:12)

In further reference to these "gaps", McBeath points to educational decisions being made purely from the analysis of occupational data. She comments "that many writers believe the analysis of occupational data is sufficient to point the way to making sound decisions about educationally valued vocational courses" (McBeath, 1991:13). The progression from data analysis to properly defined objectives requires very carefully supported decision making. She comments that:

... either enormous intuitive leaps are being made by curriculum developers - professional judgement based on knowledge and experience rather than conclusions based empirically on the data - or else some very important questions are not being dealt with in our otherwise tightly defined procedure. (McBeath, 1986:10; 1991:14)
This point is also referred to in the TAFE Curriculum Task Force Report (1982) (referred to in Section 3.4.1 above):

In the TAFE context ... data gathered from industrial surveys and occupational/job analysis will tell us part of what students will need to be able to do at the end of the course ... but will not tell us what we need to know to decide how to structure a course, how to divide it into subjects or units, how to teach the course, or how to assess the students. (TAFE Curriculum Task Force, 1982:19)

Fifteen years later the same can be said of the CBT approach.

While McBeath does not present a curriculum model her comments on the process aspects of curriculum development are most helpful, because the approach is a classical one based on case studies and refers to curriculum decisions in real situations. She defines curriculum as a process not a product as others do, for example, in the above section. Curriculum for McBeath is

a process of individuals or groups making decisions about the selection and organisation of educational aims, objectives, content, instructional strategies, evaluation procedures and learning materials. The curriculum process consists of making decisions. All curriculum documents and curriculum materials are the products of this decision making process. (McBeath, 1991:11) (Emphasis in original).

Her process approach thus emphasises decision making by individuals or groups with the role of the teacher and curriculum developer in particular being the key decision makers. The approach is more
concerned with the process of managing TAFE's curriculum development process than with the curriculum itself and how it is grounded and experienced.

Blachford (1986) in a report for the Victorian TAFE Board (Hawthorn Institute of Education) *Orientations to Curriculum in TAFE* sets out a basis for a curriculum model as follows:

**FIGURE 3.8**

**BLACHFORD: BASIS FOR A CURRICULUM MODEL**

![Diagram of Blachford's Curriculum Model](image)

Blachford, 1986:10

He describes curriculum development in TAFE as:

The process of making a course from scratch through to its operation and validation in practice. This process includes evaluative judgements and decisions at every stage. (Blachford, 1986:11)
He argues that in the TAFE system "curriculum" tends to be used differently from the way it is used in schools since there are differences associated with TAFE courses and students. He describes the differences as follows:

TAFE students generally undertake specific courses rather than a set of different subjects and ... courses are selected from a large number of possibilities ... students in TAFE tend to be adults with ... clear personal goals in mind and have a breadth of life experiences and self awareness that influences the learning style (Blachford, 1986:11)

Blachford claims that:

Given this (the differences aspect) and the heterogeneity of courses in TAFE, there is a prima facie case for the acceptance of a considerable variety of course development models in TAFE. (Blachford, 1986:11)

He bases a framework for a curriculum model on a systems evaluation-decision making approach "which may be applied to any one or more levels of educational or other organisations" (1986:29). It is essentially a systems model (inputs, processes and outputs) as against a conceptual model and in fact does not take the special features of TAFE into account although he recognises that there are these features as the quote above shows. His model is depicted as follows:
Blachford caters for variations in his model by including four major orientations described as "styles of curriculum thinking" (1986:40). These orientations are:

Curriculum as a Technology
Curriculum as Cognitive Processes
Curriculum as Humanism
Curriculum as Social Relevance Reconstruction.

(Blachford, 1986:40)
Curriculum development may be a mixture of orientations such that:

the curriculum as a technology orientation is often used for training situations i.e. the repetition of mechanical behaviours; the curriculum as cognitive processes orientation is often used for situations requiring the development of rational thinking, scientific skills and understanding; curriculum as humanism is often used for integrated personal development and creativity; and the curriculum as social relevance-reconstruction orientation is often used for developing social and democratic participatory concepts and skills and for considering social issues or matters of justice and “access”. (Blachford, 1986:103)

He goes on to note that a curriculum development model for a particular TAFE area may be a combination of the above orientations

Within the following discussion, it is not argued that there is an absolutely right or wrong way to develop curriculum, but rather that any curriculum development model is likely to reflect greater or lesser influence of one or more of four major orientations to curriculum. Each orientation may give rise to many different models, and in combinations to many more models. (Blachford, 1986:37)

Blachford’s model is an eclectic mix of orientations each depending on contextual factors (e.g. subject to be taught; finance) and on the values of decision makers. His approach is essentially a systems one based on job analysis and formulation of objectives and the systematic development of curriculum. The curriculum as technology is identified as that mostly used for training institutions such as TAFE.
In a further study Blachford (1987) examines Curriculum Development Practices in TAFE and refers to assumptions in which the development of courses are grounded. These assumptions are the nature of desirable goals; the nature of learners; the nature of learning; the nature of knowledge; the role of the teacher; the nature of teaching and the role of TAFE (Blachford, 1987:16). He claims that course developers need to be more aware of these assumptions. In the assumptions about the role of the teacher, for example, he states:

> All curriculum involves beliefs about the role of the teacher which may vary from being described as manager, facilitator, motivator, counsellor, organiser, role model or all of these and more. (Blachford, 1987:10)

In regard to assumptions about teaching he comments that:

> All curriculum involves beliefs about teaching or teaching methods and different curricula may refer to drill, problem-based learning, discovery, instruction, simulation or very many other methods. (Blachford, 1987:10)

Blachford refers to models of curriculum in TAFE as "simplifications of reality" (Blachford, 1987:60) which should nevertheless offer real help to the practitioner:

> there is no point to having a model of curriculum unless it can be translated into action, that is, into the practical realities of course development and classroom events. (loc. cit.)
Bone and Guthrie (1990) in a study commissioned by TAFE NSW state that in any curriculum development approach there are five basic steps or phases: analysis of need, design, development implementation and review (1990:9). They further comment that the way these elements are connected (depending on the circumstances) can give rise to different curriculum approaches.

The relative emphases given to each (element), the key players in each, the methods adopted to achieve each and the mechanisms used to connect and provide feedback between them, that create different approaches to the curriculum development process that may, or may not, be appropriate for a given system at a given time. (Bone and Guthrie, 1990:9)

Bone and Guthrie propose a model of curriculum development process which is based on the model by Brady (1990) discussed in TAFE literature above, with the addition of decision making points. The authors claim that a failure of models is not to include reference to decision making.

All fail to indicate, however, what is a critical factor when considering curriculum development for a specific organisation (particularly in a time of major changes to the organisation) and that is where the key decision-making points are located. (Bone and Guthrie, 1990:12) (Emphasis in original)

They support their model by reference to three stages of curriculum: "formation", "determination" and "implementation". The implementation stage is described as the site of executive and managerial processes and includes marketing the program, employing staff, selecting students and running the course in the classroom. In
their own model, though, the authors place little emphasis on the phase of implementation and there is no reference to the classroom as a place where curriculum decisions are made. In the whole complex process depicted by their model the only reference to classroom is “run courses” at the implementation stage (refer Appendix 7). They refer to implementation issues commenting that “the design and developmental stages can be influenced by implementation issues” (Bone and Guthrie, 1990:15). These implementation issues relate though to resource areas such as availability of qualified staff, adequacy of suitable buildings and consumers and not to classroom teacher-student processes and decision making.

Stevenson (1989) makes an important specific reference to the classroom in discussing the role of TAFE providing curriculum relevant to the needs of industry and individuals. He posits that increased credit transfers and the use of modern technology to deliver courses will lead to more openness of education and result in a decrease of classroom interaction thus requiring greater expertise in instructional design (Stevenson, 1989:43). He claims that “The currently used sequential process of syllabus design, instructional design and evaluation will be inadequate” (Stevenson, 1989:43). To remedy this he argues that in the very early syllabus design stage there should be more focus on learning.

... consideration will need to be given to the instructional process to ensure choice of appropriate learning experiences. ... there will need to be increasing attention given to the task of instructional design to support the learning of processes as well as products. (Stevenson, 1989:43)
He seeks a shift away from an emphasis in curriculum on procedures and documentation such as accreditation processing and places a greater concentration on curriculum design such that "the focus be more on analysis of skills, instructional design and delivery techniques" (Stevenson, 1989:45) thus developing more relevant curriculum.

Laird and Stevenson (1993) offer a framework for curriculum development in VET, which has specific reference for TAFE, arguing for a centrality of values in the curriculum development process. They argue that there are four essential elements in a curriculum development framework: "values, appraisal of concerns, formulation of intent and deliberation about practice" (Laird and Stevenson, 1993:74). The issue of values is an important one and is returned to in Chapter Five (Section 5.2.2).

They view these four elements as mutually interactive and claim that the educational intent of curriculum development unfolds right through the whole curriculum process. They believe that the use of their framework will integrate curriculum design and implementation and thus "overcome the discontinuities which characterise the separation of curriculum design from implementation in contemporary vocational education curriculum development practice" (Laird and Stevenson, 1993:71). This is an important issue, central to the concerns of this thesis. Essentially their strategy for bridging this gap is to have teachers involved at the "formulation of intent" phase (objectives) where their expectations can be considered (they suggest staff development should support this) and at the "deliberation about practice" phase (to reflect on curriculum content, for example). Their
argument for teacher involvement is pertinent and forceful. They make specific reference to the impact that teachers have on curriculum:

The extent to which teachers' deliberations influence the curriculum in practice is, as suggested above, dependent upon the extent to which the curriculum is centrally devised and a programmed approach to implementation is adopted. However, whatever the degree of centralisation of curriculum planning, it is clear that all teachers do exercise influence, to some degree, over the curriculum which they teach. (Laird and Stevenson, 1993:88)

In discussing a role for the TAFE teacher in curriculum development Kennedy (1985) argues that teachers should have a greater role in curriculum development particularly "as policy implementer" (Kennedy, 1985:55) and that "the demands currently being placed on TAFE have significant implications for TAFE teachers and curriculum development" (Kennedy, 1985:56).

He also claims that different models of curriculum development are required for meeting these demands such as:

... the in situ product-driven model for coping with technological change, the multi-skilling model for preparing a workforce to deal with occupational mobility, the policy-driven model to cater for special categories of student needs and a collaborative model to deal with the secondary school interface. (Kennedy, 1985:56)

Kennedy then raises the question as to whether teachers will be able to cope with these models.
In a further study by Kennedy et al. (1987) on Factors Affecting the Implementation of Innovation in Vocational Education: An Australian Perspective it is noted that existing models do little more than produce curriculum documents which then have to be interpreted by users (1987:29). They call for a more holistic approach to curriculum development:

A realistic approach to curriculum design will therefore take into consideration possible user reactions and attempt to cater for them. ... It involves viewing curriculum development as an holistic process involving both design and implementation. The lesson learnt from curriculum implementation must inform the design process otherwise design takes place in a vacuum and barriers to successful implementation can be created from the beginning. (Kennedy, et al, 1987:29)

The above review of TAFE curriculum writers outside the TAFE system indicates that from this external perspective a variety of approaches have been proposed. In fact three of the writers (Blachford, Bone and Guthrie and Kennedy) suggest that there is need for a variety of models appropriate to varying circumstances.

Kennedy's reference to viewing curriculum development as a holistic process incorporating design and implementation is important as is the observation by Laird and Stevenson that there are discontinuities between curriculum design and implementation in the present VET curriculum process.
The role of the teacher and student in the curriculum process is largely neglected with the exception of Stevenson, Laird and Stevenson and Kennedy. Stevenson is concerned with classroom curriculum delivery and he points out that there should be more focus on learning in the early curriculum design stage and on process overall. Laird and Stevenson and Kennedy make specific reference to the importance of the teacher's role in implementing curriculum.

All these important points will be returned to in Chapters Five where a conceptual framework is constructed in support of a holistic thesis model which integrates curriculum planning and implementation.

3.5 VOCATIONAL EDUCATION AND TRAINING: RECENT CURRICULUM DEVELOPMENTS

This section reviews recent developments of vocational education and training at the national and state (in particular NSW) levels in Australia and considers the significance of the National Training Reform Agenda, with the introduction of a competency-based approach to curriculum, for curriculum development in TAFE. Firstly, the context of competency-based training (CBT) in Australia - also referred to in VET curriculum literature as competency-based education and training (CBET) (i.e. emphasising that VET curriculum is not only about training but importantly, about education) - is briefly reviewed, followed by an examination of the central concepts underpinning the competency-based approach to curriculum. Next, accreditation procedures and the mandated curriculum process as prescribed by national and state (NSW) guidelines are considered and illustrated with two TAFE NSW examples. The section includes
comments on the implications of the CBT approach for TAFE and how it will be reflected in the thesis model. It is to be noted that the national vocational education and training system (NVETS) is an evolving and continually changing one – the following review addresses the situation up to December 1996, the cut-off point for this thesis.

3.5.1 Competency-Based Curriculum: National Policies

Context

There is presently a national debate over the advantages of a competency-based approach to TAFE Curriculum. Whatever the merits and demerits of this approach, and this will be taken up below, clearly the thrust is towards the competency-based approach strongly driven by Federal government policy and attendant resources. These policies are similar to those being implemented in other countries, for example the United Kingdom. In fact the approach in Australia has features which are very similar to the United Kingdom's National Vocational Qualifications (NVQs) – NVQs, for example, align within a national framework and conform to a common set of criteria – with a central focus on outcomes, employment led standards, elements of competence, associated performance criteria and a range of applications to which the element of competence applies. Jessop (1991) provides a comprehensive account of these issues in the United Kingdom. Indeed a reading of Jessop's work provides an excellent background for the understanding of developments in Australia.
The impetus for a national system of vocational education and training in Australia springs from a national economic imperative that Australia's industries be more efficient and competitive on international markets and that the economic future depends on expanding the manufacturing sector (with less reliance of the primary sector) and developing a highly-skilled workforce. For the economy to move and grow in new directions a more responsive, well educated and flexible workforce is required. This demands changes in the vocational education system. A number of reports in the past few years have given direction to these changes and identified a strong role for TAFE (Chapter 1, Section 1.1). The publication of Skills for Australia (Dawkins and Holding, 1987) and the ensuing 'skill formation' concept along with the Deveson Report on Training Costs of Award Restructuring (Deveson, 1990), which pointed to workplace reform and restructuring, are foundation documents which provided the initial impetus for a series of major changes in the vocational education and training system especially the move to a competency-based training curriculum.

The new National Vocational Education and Training System (NVETS) formally commenced on January 1 1992 with the establishment of the Australian National Training Authority (ANTA). The Authority is run by an industry-based Board which advises and is responsible to a Ministerial Council (see Appendix 8) made up of Commonwealth, State and Territory Ministers. The National VET system features two important new elements which form the cornerstone of the National Reform Agenda: a nationally consistent approach to vocational education and training, and, the progressive introduction of a competency-based approach to training. Organisation
of the training reform around these two aspects has been driven by a co-operative partnership of government, industry and trade unions and supported by vocational education and training providers. To support the national system each state has a training agency – in NSW this is the Board of Vocational Education and Training (BVET) established in 1994 under the 1992 ANTA Act.

Significant organisational reforms were already well under way in 1990 with the establishment of the National Training Board (NTB), which facilitated the development and endorsement of national competency standards for occupations and classifications in industry awards and agreements. The NTB developed an Australian Standards Framework (ASF) (presently under review) for eight levels of competence to which national industry competency standards are aligned and upon which VET curriculum is based. The Australian Standards Framework level descriptors are as follows:

**FIGURE 3.10**

**AUSTRALIAN STANDARDS FRAMEWORK**

<table>
<thead>
<tr>
<th>Level</th>
<th>Competency Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Competent senior professional or manager</td>
</tr>
<tr>
<td>7</td>
<td>Competent professional or manager</td>
</tr>
<tr>
<td>6</td>
<td>Competent senior administrator, specialist, technologist or paraprofessional</td>
</tr>
<tr>
<td>5</td>
<td>Competent administrator, specialist, technician or paraprofessional</td>
</tr>
<tr>
<td>4</td>
<td>Competent advanced skilled autonomous worker</td>
</tr>
<tr>
<td>3</td>
<td>Competent skilled autonomous worker</td>
</tr>
<tr>
<td>2</td>
<td>Advanced operative or service sector worker</td>
</tr>
<tr>
<td>1</td>
<td>Competent operative or service sector worker</td>
</tr>
</tbody>
</table>

National Training Board, 1991:12-14
In mid-1995 the Standards and Curriculum Council (SCC) was established and absorbed the roles of NTB and ACTRAC. The Standards and Curriculum Council is responsible for competency standards, curriculum, the national recognition of training, assessment, quality assurance and the Australian Qualifications Framework as it relates to vocational education and training (its role is currently under review).

The National Training Board emphasised the importance of competency levels for curriculum development:

> These standards, based on industry’s current and future needs, will be the benchmark for curriculum development, assessment including the recognition of prior learning, training delivery, course/program accreditation, credit transfer and individual certification. (National Training Board, 1991:1 (Addendum))

The Australian Qualifications Framework (AQF) was introduced in January 1995. It is a comprehensive, nationally consistent, flexible framework for all qualifications for post-compulsory VET and links to the ASF (ANTA, 1994 (b):13) and the needs of industry. Existing courses and their curriculum must convert to the framework by 31 December 1999. The ASF and AQF are linked in that the learning outcomes of accredited courses are consistent with and lead to the achievement of a package of competencies at a particular ASF level. For example the learning outcomes of a Certificate level three curriculum (see below) should lead to the achievement of competencies at an ASF level three, shown above. The AQF is as shown in Figure 3.11:
FIGURE 3.11
AUSTRALIAN QUALIFICATIONS FRAMEWORK

<table>
<thead>
<tr>
<th>Secondary Schools Sector</th>
<th>Vocational Education &amp; Training Sector</th>
<th>Higher Education Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Advanced Diploma</td>
<td>Doctoral Degree</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>Masters Degree</td>
</tr>
<tr>
<td></td>
<td>Certificate IV</td>
<td>Graduate Diploma</td>
</tr>
<tr>
<td></td>
<td>Certificate III</td>
<td>Graduate Certificate</td>
</tr>
<tr>
<td>Senior Secondary</td>
<td>Certificate II</td>
<td>Bachelor Degree</td>
</tr>
<tr>
<td>Certificates of Education</td>
<td>Certificate I</td>
<td>Advanced Diploma</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diploma</td>
</tr>
</tbody>
</table>


The National Training Reform Agenda has been informed and supported by four major reports concerning VET needs in Australia: Deveson (1990), Finn (1991), Mayer (1992) and Carmichael (1992).

The Deveson Report (1990) clearly identified a continuing major role for TAFE in VET and recommended:

- increase TAFE’s role and establish consistent accreditation and recognition for programs and individuals;

- increase the proportion of TAFE activities undertaken as commercial activities (full cost recovery);

- increase public funding for TAFE; and

- provide more programs for improvement of literacy and numeracy.

(Deveson, 1990:Ch. 5)
The Finn (1991) and the Mayer (1992 (a), 1992 (b)) Reports developed and defined key competencies which are to be incorporated in all post-compulsory education and training. These are:

- collecting, analysing and organising ideas and information
- communicating ideas and information
- planning and organising activities
- working with others in teams
- using mathematical ideas and techniques
- solving problems
- using technology.

(Mayer Report, 1992:8)

These key competencies described as “general descriptions which are essential for effective participation in work and other social settings ... focus on the capacity to apply knowledge and skills in an integrated way in work situations” (Mayer, 1992:8). The competencies are set out in terms of intended behavioural outcomes at three different performance levels for each of the seven competency strands (e.g. in “using technology” strand performance level one is Reproduce or present a basic product or service and level three Design or tailor products or services (Mayer, 1992:42).

In New South Wales the Recognition Authority (VETAB) (Section 3.5.3) incorporates these key competencies in the Accreditation and Registration Process with the addition of an eighth area: using cultural understandings (the capacity to apply understanding of diversity across groups, organisations).
The Carmichael Report (1992) argued for a new unified and coherent entry-level vocational education and training system in Australia, the Australian Vocational Certificate Training System (AVCTS), which combines work and training to achieve specific vocational skills. The system aims to:

extend training to all those people who do not at present have the opportunity to participate, and, to ensure that Australia has a more educated, skilled and productive workforce in an internationally competitive Australian economy. (Carmichael, 1992:1)

A central recommendation of the Report is that AVC training, assessment and certification be competency-based and replace the present time-served approach:

the implementation of competency-based training should be accelerated, so that competency based training replaces time-based systems in vocational certificate training in all industry sectors and almost all enterprises by 1995. (Carmichael, 1992:2)

The Report summarises the benefits of competency-based training and draws comparisons with the 'traditional' approach in an attached Schedule (Appendix 9). AVCTS, subsequently referred to as the Australian Vocational Training System (AVTS), has been extended upon and replaced very recently (September 1996) by the Modern Australian Apprenticeship and Traineeship Scheme (MAATS). MAATS maintains a competency-based approach to training but with competency standards more broadly framed and flexible so as to be more useful for employers (Kemp, 1996:9).
The above review of the organisational context of competency-based curriculum provides only a brief outline of a large and complicated system. In fact the National Training Reform Agenda and its constituent elements is a complex process with many parties involved and under constant change. In all there are over twenty different bodies or committees spread across national, state and territory boundaries with a complicated array of interrelationships and connections (Appendix 8 provides a recent overview by ANTA (1996) of key relationships). It is an evolving process with further changes following a recent review of training reforms (ANTA, 1994) and subsequent changes during 1995 and 1996.

The reformed system has many implications for TAFE curriculum. For example, the four key themes of responsiveness, quality, accessibility and efficiency set up by ANTA (1996:9) as priorities for achievements of the national strategy for VET management all impact upon TAFE’s curriculum. These relate to TAFE’s curriculum as follows:

**Responsiveness:**
- advice from industry e.g. ITABS national and state; TAFE’s Educational Services Consortia;
- industry membership on TAFE’s and ANTA’s Boards;
- flexible delivery e.g. Open Training and Education Network in TAFE – “distance” learning which offers mixed-mode delivery of courses;
- provision of courses via satellite transmission to country areas;
- competition with other providers e.g. TAFE tendering for courses on a ‘competitive’ basis.

**Quality:**
- meeting best practice requirements for quality improvement e.g. TAFE’s Quality Improvement Matrix which specifies, for example, educational delivery and leadership as particularly important;
- developing curriculum within national frameworks e.g. competency
standards, meeting NFROT guidelines, abiding by accreditation guidelines, providing relevant VET courses.

**Accessibility:** training and education for specific groups e.g. access and equity provision for women, aboriginal and Torres Strait Islanders, people with disabilities, people with a non-english speaking background; provision of entry-level VET courses for apprenticeships (AVTS - now MAATS); support for people living in rural and remote areas e.g. TAFE courses in horticulture delivered flexibly (block release).

**Efficiency:** meeting performance requirements e.g. measuring outcomes and outputs – student completion and employment placement in TAFE; measuring student satisfaction through student surveys.

The introduction of competency-based curriculum clearly has implications for TAFE. An integral part of the national task of training reform CBT now underpins the approach to curriculum development by TAFE. As part of its objective to develop curriculum which will reflect and respond to State and Commonwealth priorities, the most recent TAFE NSW Corporate Plan (1993-1995) states, for example, that the priorities in TAFE NSW curriculum development are to:

Make significant progress in implementing competency-based training within National Training Board Standards.

Review curriculums to reflect employment-related key competencies.

Establish frameworks for incorporating credit transfer and recognition of prior learning arrangements into curriculums.
Review our current course profile so that the range of programs meets entry-level, broad based and specialist training requirements. (TAFE NSW, 1992:16)

In the 1994 NSW TAFE Commission Management Plan a major objective is to:

Support and guide the establishment and implementation of the national vocational and training system. (TAFE NSW - Management, 1994:8, Objective 2)

and, the strategy in support of the national framework for curriculum policies is to progressively introduce competency-based training into TAFE courses via revision of existing courses so they meet competency standards (TAFE NSW - Management, 1994:15).

3.5.2 Central Concepts Underpinning VET Curriculum

The above section provided a brief overview of the national context of competency-based curriculum. Central to the national VET system and TAFE's curriculum development are the concepts competency, competency-based training, competency standards, skill formation and work-based learning. These are now examined.

Competency and Competency-Based Training

The concepts competency and competency-based are clearly critical curriculum elements in the new VET system. In the context of the
NTRA they have been closely linked to education and training reform along with an economic focus on industry restructure, international competitiveness and an enhanced skill base for the workforce.

The National Framework for the Recognition of Training Agreement (NFROT), which came into effect on 1 August 1992, mandates a competency-based training (CBT) system in which curriculum for education and training will be aligned to national competencies established by industry and endorsed by the then National Training Board (NTB). In fact in this mandated VET curriculum system all VET curriculum must adhere to the national framework (NTROT) to be accredited. Principle 3 of the NFROT Agreement reinforces this:

All courses must focus on competencies. Courses must include national competencies endorsed by the National Training Board, where they exist. (VETAB, 1995:Appendix 1; NFROT, 1992:10)

Competency-based training is defined by the National Training Board, as:

... training concerned with the attainment and demonstration of specified skills, knowledge and their application to meet industry standards rather with an individual’s achievement relative to that of others in a group. It is “criterion referenced” rather than “norm referenced” (National Training Board, 1992:57),

and underpins the new national curriculum development and delivery approach. The Veetac CBT Working Party report, in a section headed Curriculum Development and Delivery, specifies the delivery characteristics of a competency-based curriculum as ensuring that
learners "acquire the competencies specified for their industry, occupation or profession" (Veetac 1993 (b):12) and states that while there is no prescriptive process for CBT delivery, the delivery methods should:

- aim to achieve the NTB endorsed competency standards
- meet individual learner's requirements
- make use of materials and techniques relevant to industry
- take place in settings relevant to industry
- be in keeping with NFROT
- be flexible.

(Veetac, 1993 (b):12).

The competency concept places an emphasis on performance and assessment (Geurin, 1993). Thus the move to competencies (guided by the Australian Standards Framework) involves detailed analysis of the performance required in the workplace at a national level; VETAB states that elements of competency "describe in output terms, the things that an employee who works in a particular area is able to do, i.e.: an action or outcome which is demonstrated and assessable" (VETAB, 1995, Glossary). The National Training Board took a broad view of competence in the development of standards stating that the concept "focuses on what is expected of an employee in the workplace" (1992:29) and includes all aspects of work performance, not only narrow tasks. It encompasses:
• the requirement to perform individual tasks (task skills)

• the requirement to manage a number of different tasks within the job task (management skills)

• the requirement to respond to irregularities and breakdowns in routine (contingency management skills)

• the requirement to deal with the responsibilities and expectations of work environment (job/role environment skills), including working with others.

(National Training Board, 1992:29)

CBT also implies a move to a criterion referenced approach to assessment which:

measures a person’s performance or identifies their achievement in relation to criteria and not in relation to the performance of other learners or trainers. (Veetac, 1993 (b):13)

The definition of competency in relation to the curriculum adopted by the Australian Committee for Training Curriculum (ACTRAC) is:

Competency comprises the specification of knowledge and skill and the application of that knowledge and skill within an occupation or industry level to the standard of performance required in employment. (ACTRAC, 1992:5.8)

It is important to note that this view of competency is contested in the literature – alternative views are discussed below.
The concept of a competency-based approach to curriculum is not a new one: discussion and debate on the merits of the approach have existed since the modern foundations of curriculum. As noted in Section (3.2 (i)) Bobbitt (1924) advocated a very similar approach to school curriculum in putting forward his 160 behavioural performance-based educational objectives. Tanner and Tanner (1975, 1980) in the rather different context of the "back to basics" movement in the mid-1970's comment that "essentialists see competency-based education as being concentrated on the fundamental skills". (Tanner and Tanner, 1980:112)

Reference is also made by Tanner and Tanner to a counter-argument at the time that:

To develop a total competency-based curriculum would result in the neglect of some of the most profound learnings ... the role of the teacher, supervisor and curriculum co-ordinator in curriculum development would be reduced to more routine, mechanical functions. (Tanner and Tanner, 1980:151)

In discussing the implementation of competency-based education and training in TAFE, at a conference on competency based assessment in 1992, the then Managing Director of NSW TAFE Commission raised the question of CBT's status:

The fundamental question ... is whether CBT is new wine in old bottles or old wine in new bottles. Is it a genuinely new approach? As you will see my assessment is that it is something of both. (Ramsey, 1992:1)
The concept is certainly not a new one to TAFE NSW. A history of TAFE NSW reveals that the Technical Education Board’s courses became increasingly practical in the years 1883-1889 and by 1886 courses included such areas as boilermaking, fitting and turning, plumbing and carriage-building in which certificates of competence were issued (Information Services TAFE NSW, 1983:21). Battye (1993) a senior TAFE officer in South Australia and member of ACTRAC comments that “TAFE has always been concerned with competency... in the 1880’s certificates of competency were issued by the Board of Technical Education” (Battye, 1993:1). Indeed it was shown in Chapter Two, Sections 2.1 and 2.3 that by the 1890’s in TAFE NSW there was already an emerging concept of competence. In the Technical Gazette of 1930, a publication by the Technical Education Branch of the Department of Education (NSW), the Superintendent of Technical Education makes the following reference to competency:

there are two kinds of certificates earned by the Branch Department of Technical Education in New South Wales. These certificates are a certificate of trade competency, and a diploma for the higher courses. The certificate of trade competency which, is gained on the completion of the lower and higher trades courses, and on the satisfactory completion of apprenticeship, is recognised throughout the Commonwealth as a symbol of satisfactory standard of craftsmanship in the particular trade for which it is issued. (Nangle, 1930:3)

The Department of Technical Education’s Handbook (NSW) in 1950 refers to various areas in which a Certificate of Competence is issued; an example is Steam Engine Operation, as follows:
STEAM ENGINE OPERATION: The syllabus is arranged to meet the requirements of candidates for the Certificates of Competency issued by the Department of Mines, and the Department of Labour and Industry, New South Wales. Students entering this course should have completed the Steam Boiler Attendants' course. (Department of Technical Education NSW, 1950:72)

Clearly this course was aligned to what would now be described as industry-based competency standards, i.e. it refers to specific skills on the job.

In Technical Education: Preparing for Tomorrow an influential publication by New South Wales Department of Technical Education in 1974, under the heading Purposes of TAFE, the following reference to competencies is made:

Technical Colleges seek to equip their students with competencies which are currently valuable in their vocational field and to prepare them for foreseeable development. (Department of Technical Education NSW, 1974:7)

Some years later, the Corporate Plan for TAFE NSW (1983) in its definition of TAFE refers to "vocational competencies":

It (TAFE) incorporates a wide range of educational programs and activities offering individual citizens opportunities to pursue interests, develop talents, establish vocational competencies, advance careers ...

(TAFE NSW, 1983:3)
In the discussion of TAFE Curriculum Literature, Section 3.4 above, reference is made to two TAFE NSW curriculum theorists, Svirskis (1980) and Ellis (1983). It is of interest to note that both authors (employees of TAFE NSW Curriculum Services at that time) make reference to competency. Svirskis observes that “TAFE’s role is to prepare students for competency in some field” and talks of appropriate curriculum and teaching methods being drawn from tasks which “have been analysed with skills and competencies” (1980:141). Ellis refers to syllabus performance objectives from which teachers derive lesson aims and objectives (1983:4). In further discussing the major industry and appropriate structuring of a syllabus, Ellis comments that the “performance objective should state precisely what standard or performance is required” (1983:6). This is derived from the needs of industry based on an occupational analysis which he defines as “the analysis of the duties and tasks which make up a job type found by carrying out an occupational survey” (1983:2).

At the conference on competency-based assessment referred to above, Dr Ramsey also noted the change in meaning attached to competency:

TAFE curriculum has evolved from several different views of competency and approaches to designing curriculum ... Notions of what competence as a curriculum organising principle means have changed. (Ramsey, 1992:4)

The present competency-based approach to curriculum appears to be an extension and development of the concept which has been used within TAFE NSW for over a hundred years; both past and present reference to “competency” relate to skills, knowledge, abilities and ‘standards’ of an individual to perform a certain task or tasks. The present reference
The competency-based curriculum has added structure and rigour to the concept for TAFE by relating competencies to a national standards framework (ASF) and requiring curriculum to be formatted under a national code of principles and procedures (NFROT); the competency-based concepts such as "criterion reference testing", "modular approach", "learning outcomes" and "assessment criteria" are not all new to TAFE NSW. Indeed, the skills-based, work-related, employment-driven CBT curriculum approach is generally in sympathy with TAFE NSW's traditional curriculum approach of providing applied, practical and occupationally relevant courses as shown in Chapter Two above. The "new" competency-based approach endeavours to add a stronger vocational emphasis to existing TAFE approaches and forge closer links between TAFE courses and the workplace as TAFE further pursues a work-based learning approach linking employee's learning to competency standards and their work role. The "new" competency-based approach in curriculum is more structured, precise, rigorously set out and closely mandated. Battye (1993) notes that:

What is different (to the traditional TAFE competencies approach) is the structured approach based on competency standards now required in designing, developing and implementing curriculum in vocational education and training courses and training programs. (Battye, 1993:2)

This new conception of competence clearly has strong support at the political level. In a policy statement on the future of education, training and employment in New South Wales the Minister for
Education and Youth Affairs and Employment and Training, in discussing TAFE NSW's role, commented on the importance of CBT as follows:

This Government will improve access and equity in training and employment by removing barriers and promoting new skills development and skills recognition programs with an increasing focus on competency-based training. The need for reform through the introduction of competency-based training is widely recognised. ... It is without doubt the way of the future... (Minister of Education and Youth Affairs, 1992:23, 24)

It is also supported in official statements from TAFE NSW. The 1993-1994 Annual Report, for example, states that TAFE NSW is committed to competency-based curriculum and "to advancing training reform, particularly the shift to competency-based training and assessment ... our core responsibility is to design, develop and deliver quality curriculum based on competency standards" (TAFE NSW, 1994 (a):21).

Whilst TAFE NSW official policy supports the competency-based curriculum approach, the move is not without some debate within TAFE NSW as to its costs and benefits. Butterworth (1992) (then a senior TAFE executive and now Assistant Director General, DTEC) has expressed concerns about competency goals not being founded on accurate knowledge of future needs; he also questions the educational benefits of CBT claiming that there is a

... fundamental lack of any 'hard' research evidence that points conclusively to their generating significant educational benefits ... (it) has rested on anecdotal and hearsay evidence and 'hunch-based' judgement ... (Butterworth, 1992:22)
Lancaster (1992) of TAFE Western Australia raises concerns that the approach "can be dehumanising, it deliberately ignores the uniqueness of the individual" (1992:24) and further that there are practical difficulties of some industries agreeing on standards, claiming that at this stage "only a few industries have been covered and many never will be" (Lancaster, loc. cit.). The previous Managing Director of NSW TAFE Commission has stated that while "the benefit of CBT is that it can produce a curriculum which is tied directly to the needs of industry ... and readily support the achievement of national students" (Ramsey, 1992:6), the approach may have some shortcomings.

What it cannot do so readily is to support the needs of learners and this is an issue of particular significance both for TAFE and for the school systems. TAFE has had an historic mission to provide foundation learnings for those adults who have not acquired them elsewhere.

The approach also emphasises training content which is derived from particular workplaces. It is specific focus training and may not prove to be consistent with our need to build a more broadly and flexibly skilled workforce with a predisposition to learning.

Another issue with respect to content is that because it is derived from an audit that takes place at a particular time, it is not future oriented and may not be able to keep pace with technological change in industry. (Ramsey, 1992:6)

These CBT concerns are important and will be returned to in Chapters Six and Seven.
There are a number of other issues surrounding CBT such as the costs of developing curriculum (Ramsey, 1992; Lancaster, 1992) and providing training through staff development, but, not withstanding these costs and the above concerns, the national focus for curriculum development is firmly fixed on the CBT approach and it is now well established that TAFE is committed to the new CBT system despite these concerns. Similarly, the approach continues to have strong support at a national VET policy level despite acknowledgment of concerns. For example, recently the Employment and Skills Council of the National Board of Employment, Education and Training rejected the criticism that "in principle, competency-based training is flawed because it is based on behavioural principles and outcomes rather than processes and because it is a market driven concept" (ESC/NBEET, 1996:11) and commented that the competency concept had become distorted and "in some cases was being inappropriately interpreted, structured and presented" (loc. cit.). It further commented that there is a large intellectual and financial commitment to and investment in competency-based training and it is important that this commitment is carried through (ESC/NBEET, 1996:12).

But there are fundamental issues regarding personal characteristics, understanding, experience and competency. Ducker (1993) refers to the notion of competency as an evolving one in which "developments such as the true competencies and industry standards are pushing the visions of competency beyond the narrow and restricted versions which have dominated thinking in times past" (1993:5). Hager and Gonczi (1993) also support a broader, richer concept of competency and favour an approach which goes beyond tasks where there is a link between "abilities or capabilities of people and the satisfactory
completion of appropriate task(s)” (1993:37) and thus integrates attributes and key tasks. This broader approach places much greater emphasis on understanding (not just on workplace skills), flexibility and attitude. Hager and Gonczi (1993), for example, stress the attributes possessed by individuals which enable them to act intelligently in a variety of (work) situations. It is an integrated approach which seeks to establish the relation between knowledge, skills, attitudes and tasks. (Hager and Gonczi, 1993:36)

Stevenson (1992) prefers the term attributes as used by Hager et al. (1990) rather than the terms skills or competence “because competent workers are those who possess the attributes necessary for job performance to appropriate standards” and thus:

differentiate the possession of necessary attributes from the demonstration of that possession in observable performance. (Stevenson, 1992:234) (Emphasis in original)

He points to this distinction because “adaptation derives from high order cognitive structures, rather than from specific skills” (Stevenson loc. cit.). But Stevenson (1994) believes that the broader attributes approach such as that of Hager et al. (1990) and the “softer” Mayer approach need to go further because they “fail to overcome the presentism and technicist orientation of competency-based training” (1994:88).

An important additional point made by Hager (1993) is that the richer conception of competence integrates vocational and general education by:
bringing together attributes such as knowledge and skills (e.g. analytical reasoning) which are traditionally the concern of general education, with appropriate tasks, which are the (supposedly) quite different concern of vocational education/training. (Hager, 1993:178)

This is important in the present national training system where there is concern for integration and articulation of VET training across schools and TAFE.

Harris et al. (1995) make the point that the role of experience and competency are closely linked commenting that "it is through a range of experiences that competence is acquired, maintained and enhanced" (1995:99) and that "a plethora of experience and circumstances will help individuals initially acquire the attributes they need to build towards an appropriate level of competence" (loc. cit.).

Winning (1994) raises the issue of CBT strategy, driven by "a belief in accountability, measurement and external control" (1994:110) for economic productivity where "young people will be treated as human capital and that institutions of education are perceived simply as extensions of the corporate world" (1994:112).

These are significant criticisms of a system solely based on job-related performance.

The thesis model incorporates the broader, richer CBT approach as part of its contextual influences and classroom looping processes – Chapters Six and Seven.
Competency Standards

National competency standards, linked to the competency levels listed in the above ASF schedule and to the award levels of the AQF, are the cornerstone of the new vocational and education training system. They are defined by DTEC/TAFE as:

... statements of expected work competencies and performance levels in particular industry sectors developed by the relevant industry and endorsed by the Standards and Curriculum Council (SCC) and other regulatory bodies ... (DTEC/TAFE NSW, 1995:122)

They are standards developed by industry specifying the competencies required by workers across all sectors of the workforce and are the first step towards competency-based training (BVET, 1994:6). The standards provide the foundation for curriculum development, accreditation and certification of vocational education courses. In essence competency standards contain information about workplace performance and industry requirements upon which curricula are based (National Training Board, 1992:29; 42). As part of a move to devolve authority for elements of the reform agenda it was recently announced that the SCC is establishing procedures for streamlining the approval and adoption of standards by devolving these tasks to competency standards bodies (ANTA, 1996:15).

Whilst the standards form the basis of the curriculum and the relationship between competency standards and curriculum is critical since they inform curriculum developers of industries' needs, the role of standards must be separated from the curriculum itself and as Quirk
(1994:10) points out it is important to establish clearly the place of competency standards in curriculum. Ramsey (1993) explains the relationship between the two as follows:

Competency standards are descriptions of what a competent person does in the workplace, while the curriculum is the learning program which assists students to eventually reach those standards or to make some progress towards meeting the standards. (Ramsey, 1993 (a):2)

In fact Hager (1994) goes further and comments that competency standards "can hinder course development if the standards are confused with a curriculum document" (1994:3). He points out that curriculum describes a developmental process whereby certain outcomes will be achieved at the end whereas competency standards describe the outcomes without specifying how they will be learnt. As an example of how curriculum can be hindered, Hager notes that a course based on many task-based competency standards can be run by teaching a whole series of discrete tasks (and with a large amount of time being spent on testing the many tasks) resulting in a "trivial and superficial representation of the occupational and other problems" (Hager, 1994:3). Of particular importance to TAFE's curriculum development, then, is the relationship between performance outcomes as indicators of learning of the competency standards on the one hand and the learning outcomes of the curriculum which can incorporate the broader aspects of knowledge and understanding on the other. This particular issue is addressed by the thesis model, Chapter Six.
Battye (1993), makes a similar point in discussing how competencies are integrated into TAFE's curriculum noting that a curriculum is made up of a number of components one of which is competency standards, the others being structured learning process and assessment (Battye, 1993:1). She points out that the definition of curriculum, adopted by the National Training Board (1992), encompasses the total learning process:

A curriculum is a plan incorporating a structured series of intended learning outcomes and associated learning experiences (i.e. the objective, structure, content, assessment and sequencing of what has been learned, generally organised as a related combination or series of units/modules/elements). (National Training Board, 1992:58)

The process of linking competency standards to curriculum is an evolving one and a number of issues still have to be resolved especially in relation to the competencies themselves. Butterworth (1992) (now Assistant Director General, DTEC), for example, questions the high-level of dependence on industry for these standards (1992:22). He is concerned about whether industry can clearly identify the competencies required, commenting that research shows that small-to-medium-sized firms have difficulty in identifying their basic training needs let alone for the whole industry. Further, most Australian industry consists of small firms which generally have short 'planning horizons' (Butterworth, 1992:23). The Deputy Managing Director of TAFE NSW even raised the question of how adequate existing competency standards are when they tend to be generic and don't adequately describe the work process or the job the employees are doing (Woodburne, 1995).
Thus, there are issues relating to linking competency standards to curriculum and of competency standards reflecting workplace competency (see Figure 3.12). But there is a fundamental problem for TAFE NSW curriculum of linking *workplace competency* to curriculum – which indeed the national training system is trying to bridge. This 'gap' is depicted in the following 'CBT-Gap' model (Figure 3.12) – prepared by the TAFE NSW Curriculum Strategy Unit for staff training in CBT.

This 'CBT-Gap' problem is addressed in the thesis model by the incorporation of the classroom as central to the curriculum development process. The classroom provides a vital link by bringing workplace competency and the curriculum together through teacher and student interaction. As will be seen in the TAFE NSW classroom research (Chapter Four) the interaction between teacher and student as the curriculum is experienced influences the curriculum content in terms of, for example, relevancy and currency. This will be returned to in Chapter Six (Section 6.3) and Chapter Seven.
FIGURE 3.12
‘CBT-GAP MODEL’

Curriculum Strategy Unit (1994), Section 4.2. TAFE NSW.
Skill Formation and Work-Based Learning

Underlying this competency-based, industry standards approach to VET is the concept of skill formation. Skills, developed through education, training and experience, include not only specific work skills but also the Mayer key competencies such as problem solving and communication (ESFC/NBEET, 1991:14) and "should be developed as broadly as possible to help people prepare for, re-enter and participate actively in work" (ESFC/NBEET, loc. cit.). The foundation document *Skills for Australia*, circulated by the Federal Ministers Dawkins and Holding in 1987, addressing a number of issues relating to skills formation, commented on the significance of the concept as follows: “skills and skill formation policies are of central importance to the task of structural adjustment facing Australia to-day” (Dawkins and Holding, 1987:3). For TAFE NSW’s curriculum skill formation is critical because future learning will be closely related to “the needs of individual work places and the people who work in them” (ESFC/NBEET, loc. cit.). But as with the concept of “competency” discussed above, the application of this concept is the subject of some debate in VET literature.

A number of writers advocate that the skills formation policy should not be interpreted too narrowly. Stevenson and McKavanagh (1992), for example, argue for a broad approach to skill formation maintaining that despite

... the government’s goals and its recognition of the need for wider aspects of competence, as defined, its main emphasis for industrial training seems to be on its narrower concept of skill, especially those pre-specified measurable skills which enable the prescription of 'competency
standards' and 'competency-based training'... (Stevenson and McKavanagh, 1992:74, Dawkins. 1988 (a):29 is cited)

Stevenson and McKavanagh advocate a broader, more comprehensive, holistic concept of skills and skills formation which should include propositional knowledge (facts, information), specific procedural knowledge and higher order knowledge (for example, existing skills transferred to unfamiliar situations). In a further comment some time later Stevenson (1994) posits that skills formation is linked to outdated economic goals and that the government's view on education and knowledge is "technological or technicist which serves to prescript learners" (1994:99) and thus raises questions as to the nature and purpose of the national training system. This broader approach relates to the critical theorist's notion that curriculum is negotiated and given meaning by the participants – earlier it was argued (Section 3.2) that TAFE NSW's curriculum is concerned with a broad range of skills, not just 'technical'. Cornford (1996) in looking at implications for learners and teachers of 'skill' and 'skilled performance' calls for "longer duration of skill development" (1996:22) and further, that greater attention be given to the time that it takes "to develop sophisticated competency skills" (loc. cit.) for both the learners and facilitators of that learning. These are important points and have implications for the thesis model, namely that the model must go beyond 'the technological' and incorporate a more comprehensive, 'sophisticated', broader approach to competency skills and skill formation. This will be returned to in Chapters Six and Seven.
A further significant feature of the process of developing vocational education and training systems is achieving an appropriate mix of on- and off-the-job training as part of work-based learning (WBL). Work-based learning can be broadly defined as:

A structured and integrated learning approach which incorporates both on- and off-the-job learning to meet both organisational and individual employee goals. (State Training Board Victoria, 1992:1)

On-the-job and off-the-job training refers to forms of learning which can be provided individually or combined in varying sequences such as, for example, apprenticeships (trade training) and traineeships (non-trade training) (Veetac, 1992). Industry is closely involved in on-the-job training which can be a mixture of formal settings (industry training centres or skill centres) or informal where skills are learned and transferred via skilled operators, coaches or skills supervisors and actual work is carried out at work sites such as a building site, printing factory or food processing (Geurin, 1993:64). Off-the-job training is offered in off-site locations such as schools, colleges or other learning centres. Practical skills can be learned in workshops or under conditions which simulate work settings such as, for example, in TAFE colleges offering typing, receptionist and book-keeping courses (Geurin, 1993:65).

The trend towards work-based learning has implications for TAFE’s curriculum. Two key issues of “access to training and the importance of ensuring that the design and delivery of training must be learner-centred within the industry context” are noted by TAFE NSW Planning and Evaluation Unit (1992:4) along with an
acknowledgement of the need for TAFE to change its delivery system. As observed by the Victorian State Training Board, and cited by TAFE NSW, work-based learning puts:

strong pressure on external providers, and especially TAFE, to extend and broaden its role through a significant expansion of flexible modes of operation and to boost the assistance it can give to promoting modern learning systems and practical learning innovation at the workplace and enterprise levels. (State Training Board Victoria, 1992:9; TAFE NSW Planning and Evaluation Unit, 1992:5)

There are also implications for curriculum development in TAFE NSW. As shown in Chapter Two (Section 2.1.1) there has been a long-standing tradition of workplace learning (e.g. worksite visits; field placements) being part of TAFE NSW's curriculum delivery. In the present context as Carmichael (1994) points out: industry and/or enterprise competency standards based on workplace performance provide an important foundation for educational curriculum (1994:11) and that these “standards inform and shape curriculum and provide the outcomes upon which it is founded” (Carmichael, 1994:11)

3.5.3 The Mandated Curriculum Accreditation Process

The following two sub-sections review government mandated curriculum accreditation processes at national and state levels. In the first section the national “framework” is examined, along with two
TAFE NSW examples of the mandated curriculum process and the second section reviews the recently implemented state (New South Wales) curriculum "arrangements".

(i) The National Level

The mandated VET competency-based curriculum model, set out in the ACTRAC Users Guide (1992; 1994) and supported by NFROT principles (both now subsumed by the Standards and Curriculum Council (SCC) formed in 1995), is effecting change in TAFE by requiring a particular curriculum competency-based format for accreditation in which curriculum development clearly links the curriculum to the relevant (industry) competency standards.

A critical element of ANTA's national "framework" for enhanced quality of VET curriculum are the NFROT principles. To gain accreditation in the national VET system curriculum must be designed, developed and delivered in accordance with the NFROT principles listed later in this section (which incorporate the CBT format). In its recent Annual Report, ANTA re-enforced the importance of NFROT commenting that "NFROT is a critical element in the efficiency of a national framework for vocational education and training" (ANTA, 1996:17) and "seeks to ensure consistency across the nation in the recognition of training, credit transfer and accreditation of training courses" (ANTA, 1996:16).

In New South Wales, the VETAB Accreditation and Registration Manual (see following section) sets out details of a mandated curriculum process for course development which is used primarily to shape the curriculum document for accreditation. In setting up the
nationally mandated curriculum process ACTRAC stated that "sound management practices for the development of curriculum typically involves three stages: development the concept, preparing the proposal and producing the curriculum document" (ACTRAC, 1994:1.4). The guide set out details of achieving this "sound management" and Stage 3 (the curriculum document) is supported by a nationally agreed template referred to below setting out the requirements for the mandated competency-based modular curriculum approach. It also noted that as the VET system is under continual reform parts of the guide may not over time reflect current policies. The curriculum template in Section 3 of the document (1994 edition) sets out a format which has subsequently become standardised across each state (VETAB in NSW) under a number of headings which include the following details:

**Curriculum Template**

**General Information**
Information required includes: Address, Type of Submission, Accreditation

**Course Information**
Information required includes: Course Name, Qualification, AQF and ASF Levels, Course Outcomes, Competency Standards, Course Structure, Recognition of Prior Learning, Articulation

**Module Information**
Information required includes: Module Purpose, Relationship to Competency Standards, Assessment Strategy, Resource Requirements, Prerequisites.

*Extracted from: ACTRAC, 1994, Section 3 and VETAB Manual, 1995, Section 2*

(Note: The two TAFE examples below follow this general format.)
The Mandated Curriculum Process: Two TAFE Examples

The following two current TAFE NSW examples provide a specific guide to how the template is used in practice. They also offer an opportunity to analyse the approach. Curriculum development processes in TAFE are being moulded by this CBT approach as TAFE Industry Training Divisions in NSW develop syllabus material for courses and subjects which adhere to the accreditation guidelines administered by the NSW Vocational Education and Training Board (VETAB) via NFROT principles.

Example One: Certificate in Team Leadership (Course C/N 7394)

Details extracted from the TAFE NSW Business Services Training Division, Management and Small Business Specialist Area, Accreditation Document, 6 March 1996. The next Review Date is 14 December 1999.

Certificate in Team Leadership (C/N 7394) is a current Certificate Level IV Course (AQF) of 216 hours listed in the 1997 TAFE NSW Handbook (Page 360). The subject or module Managing and Developing Teams (8767NC) is offered as a core subject of 40 hours in this course.

The module information for Managing and Developing Teams (8767NC) is set out under the following headings as a curriculum document for teachers - examples of the information under the headings (taken from the document) are as follows:

(a) Module Information: Managing and Developing Teams (8767NC)
   (Note: details are provided under 8 headings)
   1. Subject/Module Details:
      e.g. name, duration, codes.
   2. Module Purpose:
      e.g. This module is for people to provide competency-based training to develop skills in managing and developing teams, with the emphasis on work teams. (Details are then given regarding the module’s suitability for the participants).
   3. Prerequisites:
      e.g. nil.
   4. Relationship to Competency Standards:
      e.g. Related to Small Business Management Competency Standards Unit 4.
5. Content:

   e.g. Knowledge –  Group Dynamics and Processes
                  Leader/Follower Behaviour
                  Motivation
                  Communication Models
                  Goal Setting
                  Etc.

   Skills –  Listening
            Planning
            Identifying needs, goals and wants of others
            Negotiation
            Time Management

   Attributes –  Consistent
                Self Aware
                Supportive
                Initiative

   Relationships to learning outcomes

   e.g. Learning Outcomes Content Suggested Duration

   1 Characteristics of Effective Teams 2 hrs
   1, 2 Group Processes 4 hrs
   etc.

6. Assessment Strategy:

   e.g. nil additional.

7. Learning Outcome Details:

   e.g. Learning Outcome 1: (two listed)
   Plan and present strategies to improve teams and their performance.
   Assessment Criteria: (six listed)
   Describe the characteristics of an effective team.
   Conditions under which Learning and Assessment are to take place
   Select the appropriate learning and assessment conditions from the following: Classroom (theory); audio-visual room; small group workshop.
   Assessment Methods
   Assessment is by simulation through case study or written report.

8. Delivery

   e.g. Delivery can be on a part-time or full-time basis or by distance education. This module is on the TAFE NSW satellite system. This module may be customised to suit particular target groups. For Small Business the size and nature of the students' individual businesses should determine the strategies which are appropriate in delivery of this module.
(b) **Implementation Requirements TAFE NSW** (Details provided under 9 headings)

1. This module was previously approved as:
   e.g. not applicable.
2. Equivalent Subjects/Modules:
   e.g. nil.
3. Standard Exemptions:
   e.g. nil.
4. Recognition of Prior Learning:
   e.g. This will be available as required, in general, through the provision of a portfolio.
5. Module included in the following Courses:
   e.g. 5800 Version 1 Mining, Small Scale Rural and Mining Training Division
6. Assessment:
   e.g. Student Records requires a class mark only.
7. Assessment Events:
   e.g. Written report testing outcome 1 – weighting 50%
8. Student Assessment Information:
   e.g. Appropriate case study to be supplied by teacher.
9. Minimum Essential Resources:
   e.g. Teacher's qualifications and/or experience: Degree/Diploma in Management or a Business Discipline or equivalent, plus 3 years industrial/commercial experience.

**Example Two: Clothing Production (Course C/N 5971)**

Details extracted from the TAFE NSW Manufacturing Training Division, Textile, Clothing and Footwear Specialist Area, Accreditation Document, 19 June 1995. The next Review Date is 18 August 1999.

**Clothing Production 5971, Certificate I AQF**

An elective subject: **Sewing Machine Operations 1 Module No: 5971A.**

The subject is worth 40 points of a total 170 for the course.

The module information for **Sewing Machine Operations 1 Module No: 5971A** is set out under the following headings as a curriculum document for teachers – examples of the information under the headings (taken from the document) are as follows:

(a) **Module Information: Sewing Machine Operations 1 Module No: 5971A.**

(Note there are 8 headings)

1. Subject/Module Name:
   e.g. name, duration, codes.
2. Module Purpose:
   e.g. The purpose of this module is to provide training in workstation preparation and sewing machine operation at a basic level.
It is designed for learners to develop workplace ready skills in basic sewing machine operations.
On completion, learners will be able to prepare workstation, organise workflow and operate the machine to perform basic tasks.

3. Prerequisites:
e.g. Occupational Health & Safety 1. 5971P

4. Relationship to Competency Standards:
e.g. This module relates to ASF Level 1 Units from the National Clothing Competency Standards

5. Content:
e.g. Safety Procedures (Topic 1)
Ergonomics
Safe work practices
Work station preparation

Machines (Topic 2)
Plain sewer or overlocker or cycle-controlled machine eg bar tacker
Basic parts
Threading
Adjustments and basic maintenance
Safety features

6. Assessment Strategy:
e.g. This package will assist in assessing whether learning has taken place to bring the learner to a workplace ready standard. The assessment is for training purposes only to ensure the learner has achieved the module purpose.

7. Learning Outcome Details
e.g. Learning Outcome 1
Prepare work station according to ergonomic and safety procedures in readiness for commencement of operations.

e.g. Assessment Criteria
Clean work station area of remnants, threads, lint, dust and rubbish.

Conditions Under Which Learning and Assessment Are To Take Place

e.g. At least one type of machine that involves positioning work using guiding devices or uncomplicated feeding of work.

Assessment Methods

e.g. Choose one or more appropriate methods for the learner and/or the workplace situation.

8. Delivery
This module may be taught on or off the job, on-site (in-house) or off-site (externally) or by a combination of both using a variety of delivery techniques.

(b) TAFE NSW Implementation Requirements
(Details provided under 10 headings)
1. This module previously approved as:
e.g. Not applicable.
2. Equivalent Subject/Modules:
e.g. Nil.

3. Standard Exemptions:
e.g. Non-TAFE Subject Number: CSW01

4. Recognition of Prior Learning:
e.g. Learners who consider that they have the skills and knowledge in this module, described by the module purpose and learning outcomes, may seek recognition of their prior learning.

5. Module Included in the following Courses:
e.g. Work Opportunities for Women (WOW) Foundation Studies Training Division

6. Assessment:
e.g. This is equivalent to the old Grade Code 03 & Category D.

7. Assessment Events:
e.g. No. 1 Observation Weighting: 10%.

8. Student Assessment Information:
e.g. Module Purpose: The purpose of this module is to provide training in workstation preparation and sewing machine operation at a basic level.

9. Minimum Essential Resources
   e.g. Teachers Qualifications and/or Experience: Relevant industrial experience in addition to demonstrated skills and expertise in the learning outcomes defined for this module.

10. Additional Information:
e.g. Nil.

Comments
As seen in the above two TAFE NSW examples the guidelines are very general and much is left to the TAFE teacher as their responsibility to work out details of content and delivery. A very significant point for TAFE is that the official documents relating to guidelines, procedures and practices for setting up competency-based curriculum are silent on some important educational matters. The guidelines are concerned with procedural implementation of curriculum (e.g. following the NFROT Principles) and curriculum outcomes but do not make reference to or comment upon such educational areas as student learning, classroom curriculum delivery or teaching methods and skills. The educational process at the classroom level with student and
teacher interaction (where the curriculum is experienced) is regarded by Competency-Based Training (CBT) documents as beyond the documentation and development stage of the course: the first ACTRAC curriculum guideline (1992) states, for example, that “good practice in curriculum projects commonlyinclude ... the concept, the proposal and the course document (which contains the information necessary for teaching/training staff to use in preparing learning materials ...)”. (ACTRAC, 1992:1.1) and that stage 3, the course document,

represents the end point of the process. This document is necessary for final approval and accreditation of the proposed course. (ACTRAC, 1992:1.3)

This is evidenced in both the CBT curriculums described above. In Example 1, for instance, the Course Approval for Team Leadership (Certificate Level 4) which includes the module Managing and Developing Teams outlined above, received accreditation (through VETAB) with a 22 page document which makes reference to such areas as course development, course outcomes, competency standards, course structure and delivery mode but makes no specific reference to the teachers or students except for such general references as:

* these modules are action and output orientated (page 11)

* the course is designed for people who are employed, or about to be employed as Team Leaders (page 9)

* each module contains the recommended resources or conditions that will aid in the successful acquisition of learning outcomes (page 13)
Content is very briefly listed under a number of words and phrases for the module, as follows:

* Knowledge: motivation, communication models, goal setting, planning, role theory, negotiation, politicking ...

* Skills: listening, time management, planning, group facilitation, analysis ...

* Attributes: consistent, self-aware, trusting, loyal, adaptable ... (Business Services Training Division (Accreditation), 1996:13)

No mention is made at all of student learning – except for the comment, for example:

the course has been designed to be offered on a part-time basis... future mixed mode delivery resources will be developed progressively as funding becomes available. (Business Services Training Division (Accreditation), 1996:13)

A very similar approach is taken in Example Two (Clothing Production – Sewing Machine Operation 1 (5971A).

Thus, in nationally mandated curriculum terms the curriculum is developed to *descriptor* level which represents the minimum data that has to be submitted to the state recognition authority (VETAB) for the purposes of accreditation. Descriptor is defined as: “In curriculum terms the descriptor is the brief description of the purpose, learning outcomes, assessment criteria and conditions of a course or module”
(DTEC/TAFE, 1995:120). This is an incomplete curriculum document and does not include methods, processes and interactions which literature shows are central to the concept of curriculum (Chapter Three).

The VETAB Accreditation and Registration Manual (1995) sets out principles to guide the design and development of vocational curriculum in Australia based on the National Framework for the Recognition of Training (NFROT Principles). The NFROT Principles ratified in June 1995 are listed in the VETAB Manual as follows:

**National Framework for the Recognition of Training Principles (Accreditation)**

Principle 1: Identified industry training need/market needs  
Principle 2: Course standards appropriate to the requirements of the particular credential  
Principle 3: Competency based training  
Principle 4: Multiple entry and exit  
Principle 5: Flexible learning  
Principle 6: Articulation  
Principle 7: Customisation of courses  
Principle 8: Promote access and participation  
Principle 9: Appropriate assessment  
Principle 10: Ongoing monitoring and evaluation.

**National Framework for the Recognition of Training Principles (Registration)**

Principle 1: Providers of recognised training shall be registered.  
Principle 2: Registered providers shall deliver training with personnel who meet minimum competency standards, as advised by the National Training Board, in the area of training to be provided, and in delivery, including assessment.
Principle 3: Registered providers shall deliver training in an environment which is adequate for the training aims and which satisfies statutory requirements and industrial awards.

Principle 4: Registered providers shall be responsible and ethical in their student relations.


These principles underpinning national curriculum for VET further confirm that the national VET system is about curriculum format, design, procedures and principles and not concerned specifically with processes of teaching and learning.

Recognition of Prior Learning (RPL) and Flexible Delivery

Two important elements of the national mandated curriculum accreditation process for TAFE NSW's curriculum development, referred to in the above NFROT principles, are Recognition of Prior Learning (RPL) and Flexible Delivery. These are briefly outlined below.

Recognition of Prior Learning (RPL)

Under the NFROT provision must be made for RPL, which is to be based on the five principles of competence, commitment, access, fairness and support (NFROT, 1992:11, 12). RPL refers to competencies obtained by an individual through prior formal training, work experience and/or life experiences which can entitle the individual to advanced standing within a course or program of studies. RPL is defined as "a process through which people can gain entry to, or credit in, recognised courses based on competencies gained. The
competencies may have been gained through experience in the workplace, in voluntary work, in social or domestic activities or through informal, or formal training” (AVETMISS, 1996:101). The curriculum accreditation process in NSW provides the following instruction for RPL to be built into the process.

Accredited courses must recognise prior learning and enable learners to enter and exit the course at various points. (VETAB, 1995:59. Principle 4)

Benefits of RPL accrue for the individual, training providers, the employer, the community and government, migrants and the Australian economy (Veetac, 1993 (a)). The concept is not a new one to TAFE but according to Veetac (citing Goode, 1991:5) the system in TAFE is student initiated, crude, adversarial, slow and bureaucratic and usually recognised on the basis of written credentials. Thus the formal inclusion of RPL in the curriculum process via the SCC will be of benefit to the student in facilitating and broadening the scope of RPL. It is included in both the TAFE modules above and incorporated in the thesis model – as part of national VET influences (Chapter Six, Section 6.1).

Flexible Delivery
Flexible delivery refers to the ability to deliver education and training using different methods (e.g. students accessing courses through distance learning via a mixture of media – radio, television, personal computers, audio visual tapes; mixed mode delivery – classroom attendance combined with self-paced learning packages for use at home or the workplace). It is defined by the Flexible Delivery Working Party as an approach to VET:
which allows for the adoption of a range of learning strategies in a variety of learning environments to cater for differences in learning styles, learning interests and needs, and variations in learning opportunities. (Flexible Delivery Working Party, 1992:5)

Flexible delivery is clearly linked to competency-based education and training which recognises that people learn at different rates and in different ways and that some skills and knowledge take longer to acquire than others. A flexible approach caters for the needs of individual learners (Veetac, 1993 (b):3). An important implication for TAFE curriculum is that its design and development should take into consideration the most effective methods and appropriate context for delivery. It is required under the NFROT principles to underpin all national curriculum for VET as follows:

Learning may take place in a variety of different environments. Alternative delivery modes must be indicated. (VETAB, 1995:59. NFROT Principle 5)

(ii) The State (NSW) Level

The above section has reviewed the national mandated curriculum accreditation national “framework” – this section reviews the recently implemented state level (NSW) curriculum “arrangements”.

In NSW the Vocational Education and Training Accreditation Board (VETAB) is responsible for the recognition of courses, training providers and qualification by way of course accreditation and training provider registration. VETAB is responsible for issuing certificates of accreditation and registration and maintaining the state and national
 registers. Its primary clients are providers and consumers of vocational courses. These include commercial, industry, community and public providers and local or overseas students. All courses submitted to VETAB for accreditation are assessed against the Principles of the National Framework for the Recognition of Training (NFROT). Accreditation is granted for a period of up to 5 years. In essence this involves the assessment of applications by "panels of experts assessing how organisations or courses meet NFROT principles and other statutory requirements" (DTEC(Q) Quality Framework, 1996:33).

In relation to the development of curriculum itself the NSW Department of Training and Education Co-ordination (DTEC) is presently implementing a new model for all VET curriculum arrangements in NSW – within the principles of the nationally mandated curriculum framework. Described in the Report *Adding Value to the VET System* as "a strategic framework for priority setting and resource allocation for curriculum development and maintenance in NSW" (DTEC Change Management Team, 1996:(i)) the new system will come into effect early 1997. The new curriculum procedures are aimed at making curriculum more accessible to all VET stakeholders through pricing and distribution arrangements for NSW Crown copyright curriculum. Some key features are that there will be a *Curriculum Advisory Committee* to advise on curriculum policies, strategies, priorities and resourcing matters, a *Curriculum Resourcing Unit* in DTEC to prepare an annual VET curriculum plan, evaluate priorities and prepare project briefs and the establishment of a *Register of Curriculum Developers*, which will open up curriculum development to a tendering system (DTEC (b), 1996:4).
In the documentation supporting the *Application To Register As A Curriculum Developer*, curriculum developers are instructed to meet the following quality assurance (administrative) requirements.

Curriculum Developers should ensure that:

1. NFROT principles and AQF requirements are incorporated in curriculum design and development.

2. All relevant stakeholders (e.g. Industry bodies, ITABs, enterprises, community organisations, etc.) support and participate in curriculum design, development and review.

3. All curriculum design, development and review activities and responsibilities are assigned to appropriately qualified and experienced staff.

4. Curriculum documentation is presented in a consistent format that meets the needs of those delivering the module/course.

5. Curriculum design, development and review processes and procedures are systematically reviewed and improved.

6. The completed curriculum product meets the project specifications.

7. All processes and procedures undertaken in the development of the curriculum product meet VETAB requirements for accreditation purposes.

(DTEC (C), 1996:6)

Margaret Ryan, DTEC's Director of Strategic Planning and Resource Management – which incorporates the abovementioned Curriculum Resources Unit, comments on the new curriculum arrangements and their *strategic* importance as follows:
The alignment of the curriculum arrangements within the wider strategic planning framework will enhance the model's capacity to respond to national and state initiatives and will play an important role in the State's strategic directions for vocational education and training. (Ryan, 1996:24)

In essence, this is an organisational, administrative framework for curriculum and operates within the national guidelines of NFROT and AQF and the state Quality Framework for VET in New South Wales (released December 1996). The strategy is described by the Director of the Strategic Planning and Resource Management Unit of DTEC as having the following administrative and management emphasis:

The new model establishes a strategic framework for VET curriculum activity and a single priority-setting and resource allocation point for VET curriculum development and maintenance ... (and) ... represents an important step towards a partnership with industry and the community in the identification of curriculum development priorities and the allocation of resources in the VET sector. (Ryan, 1996:23)

Clearly this mandated curriculum ANTA national "framework" under the guidelines of the SCC (through NFROT) for the national training system, supported through DTEC and VETAB "arrangements" at the state level is primarily concerned with procedures, principles and management. In curriculum terms, the model is an objectives-based one in the Tyler and Bobbitt tradition similar to the curriculum tradition established in TAFE in that it represents a rational, orderly, somewhat inflexible approach to curriculum which formulates objectives for expected student outcomes in advance with the rest of the curriculum elements to follow (content, topic sequencing and
assessment, for example). In this VET curriculum model competencies become the objectives (linked to standards) and the competencies drive the rest of the process in the same sense as the classical objectives model is rigidly driven by detailed needs analysis (as in Tyler's model).

It is of particular interest to note that in the recent Quality Framework for VET in NSW (1996) produced by DTEC NSW (DTEC(Q) 1996) reference is made to meeting customer needs through quality process, product and services as part of applying a quality framework for VET providers in NSW. The approach adopted for developing curriculum is a needs analysis, objectives-based one with the factors making up the process listed as follows:

**QUALITY OF PROCESS PRODUCT & SERVICES**

- Design and innovation
- Supplier relations
- Management and improvement of processes
- Quality of products and services
  - Carry out needs analysis
  - Plan courses profile
  - Develop/revise/acquire curriculum
  - Ensure appropriate site, facilities, equipment, materials, teachers, support staff
  - Market courses/provide course information
  - Enrol students
  - Deliver and assess modules/courses
  - Provide access to student support
  - Provide results
  - Issue certificates/testamurs
  - Review/evaluate/improve provision

(Extracted from DTEC Quality Framework, 1996:20)

Among the implications for TAFE NSW and for the thesis model of a curriculum approach – which does not go beyond an objective-based model as in this narrow approach – are that classroom processes are
not taken into account (teacher-student interaction, for example) nor are the broader, richer facets of curriculum such as knowledge, understanding and student development. In addition the mandated competency-based model focuses on principles, procedures and format and is silent on teaching and learning. Much is therefore left to the teacher in the classroom as is shown in the two TAFE examples. It takes the setting of competencies (behavioural objectives) and their assessment to be unproblematic. Stevenson, Hager and Gonczi (above) show these conceptions to be inadequate. Other models have much to offer TAFE.

The central aspects of this mandated curriculum process will be returned to in the conceptual framework (Chapter Five) for subsequent inclusion in the thesis model and in Chapter Seven.

3.6 CURRICULUM DEVELOPMENT IN THE TAFE NSW CLASSROOM

Most curriculum writers see the classroom as merely the site of curriculum implementation. Others see the curriculum as what actually happens in the classroom. Blachford (1986), for example, writing about TAFE makes the comment that “a curriculum does not exist unless it exists in classroom practice” (1986:23) and Stenhouse (1975) posits that “curriculum study should be grounded in the study of classrooms” (1975:45). Sockett (1976) in discussing the design of curriculum comments that what is of importance is “the transactions that take place between teachers and pupils in classrooms” (Sockett, 1976:87). Elliott (1991) in referring to curriculum reform and reflective
pedagogy comments that "curriculum is always in the process of becoming" and that "it is developed in and through the pedagogical process" (Elliott, 1991:11).

The classroom interaction component of curriculum development refers to the delivery and implementation of the curriculum as it moves beyond the design and documentation stage into the classroom where the teacher and students engage in teaching and learning activities. This teacher-student interaction process in the classroom, with attendant planned and unplanned outcomes, is referred to in this study as the “curriculum as experienced”.

The teaching and learning environment at the point of implementation is a critical element of the overall curriculum process and, following Miller and Seller, is not sufficiently acknowledged in curriculum theory:

Implementation, a major component in the curriculum process, has been neglected by curriculum theorists. In some cases, implementation has been identified with instruction, but this view ignores the multidimensional and complex impact of change as a factor in curriculum implementation. (Miller and Seller, 1985:13)

The curriculum unfolds with the interaction of teacher and students and as Miller and Seller suggest “there is interaction between the teacher and the curriculum worker ... that will lead to mutual adaptation of the program.” (Miller and Seller, 1985:14).
Skilbeck (see Section 3.2 (ii)) refers to the importance of curriculum in the classroom and adds that the "hidden" curriculum is the "real" curriculum: "the one that carries social messages, of status, dominance, valued or not valued knowledge ..." (Skilbeck, 1984:22) He links "effective curriculum" to what the student "takes" from the learning situation and,

that in order to understand what is effective in the curriculum so far as student learning is concerned, we must go beneath the plans, intentions and aspirations and examine the curriculum as experienced. (Skilbeck, 1984:22)

Pursuing a similar line, Stenhouse (see Section 3.2 (ii)) assigns a key role to the "teacher as researcher" (Stenhouse, 1975:142) in the delivery of curriculum and comments that:

all well founded curriculum research and development, whether the work of an individual teacher, of a school... is based on the study of classrooms. (Stenhouse, 1975:143)

Although Skilbeck and Stenhouse emphasise the influence of the classroom on the curriculum development process it is not widely acknowledged.

The aim of this present section is to assess the degree of importance of the classroom site to curriculum development as perceived by writers in the curriculum field. This is done by examining literature reviewed in Sections 3.2, 3.3, 3.4 and 3.5 above and then considering the views of a number of other writers including reference to hidden or unplanned curriculum. In addition to focusing on the curriculum interaction
process, the section will also consider the related area of the teachers' classroom management of curriculum which was found so relevant in adult curriculum literature (Section 3.3).

3.6.1 The Classroom and Curriculum Implementation

It was noted in Chapter Two (Section 2.1) that students in TAFE NSW tend to be mature age, attend in their own time, bring a depth of experience (both life and work), are vocationally orientated and mostly attend part-time (a significant number at night). Teachers are drawn from the work place and generally possess a minimum of five years relevant 'work' experience, skills and knowledge. Courses are vocational in nature with an applied and practical emphasis. These "characteristics" of the TAFE NSW system which differentiate it from school processes (and other post-compulsory educational institutions) are relevant background to the following review and analysis.

General Curriculum Literature Field

In Section 3.2 above it is clear that while curriculum theorists generally recognise the classroom as crucial in the implementation of curriculum, there is considerable variation in the extent to which the classroom is formally acknowledged as part of curriculum development. However, a number of writers do emphasise the role that teachers and students play in the curriculum development process. Goodlad (1979), Stenhouse (1975), Skilbeck (1972, 1976, 1984), Huberman (1983) and Lovat and Smith (1991; 1995) from the general field of curriculum, for example, all make specific reference to the affect that teachers and students have on the curriculum's development – referred to in this thesis as shaping the curriculum.
In Section 3.2 (ii) it was noted that Skilbeck (1972, 1976, 1984) commences his situational analysis approach which emphasises the context – with particular reference to the learning situation. Skilbeck (1972, 1976, 1984) commences his situational analysis approach which emphasises the context stating that "the best place for designing the curriculum is where the teacher and learner meet" (Reynolds and Skilbeck, 1976:99). An important part of this approach is to analyse the learning context and develop curriculum around this context. Huberman (1983) also has a strong interest in teachers and their roles in the curriculum process and holds that teachers as curriculum planners are influenced by school, classroom and their own motives in selecting knowledge for a classroom.

TAFE Curriculum Literature
In the review of TAFE curriculum literature it was shown that the role of the teacher, student and classroom in the curriculum development process was largely neglected. Of the works reviewed within the TAFE NSW system those with some relevant and supportive emphasis were the TAFE NSW Task Force on Procedures and Practices in Curriculum Development (1982), Svirskis (1980), Ellis (1983) and Brady et al. (1990). The TAFE NSW theorists focus on curriculum development procedures rather than classroom processes and are supportive of the means-end, objectives approach generally associated with TAFE NSW. TAFE NSW in fact has been very concerned with processes but has largely left the processes 'to work themselves' out with the teachers' participation. The classroom has been considered in some considerable depth from a teaching perspective (that is, how the curriculum document is delivered) but not as part of a larger curriculum development process. As will be seen in Chapter Four, classroom
interaction between the teacher and students is critical to the curriculum process. Curriculum development in TAFE NSW has been almost exclusively concerned with the planning and design stages rather than the curriculum as experienced in the classroom (Section 3.4 (i)). This is also evident in the recent *Curriculum Mechanisms in TAFE Project* (1996) outlined and discussed in Section 3.4 above.

Several works of curriculum writers external to TAFE NSW who had examined curriculum development processes in TAFE were reviewed in Section 3.4 (ii) and of those, Blachford (1986; 1987), Bone and Guthrie (1990) and Kennedy (1985; 1987) make reference to the classroom in TAFE curriculum development. For example, Blachford in describing curriculum development in TAFE comments that the process includes judgments and decisions at every stage of his curriculum model which includes an implementation stage (1986:11). He further refers to assumptions underlying curriculum development including the role of the teacher as manager, facilitator and organiser of curriculum (1987:10). In discussing models of curriculum in TAFE he makes reference to classrooms in his comment that there is no point in having a model of curriculum unless 'it can be translated into action – that is practical realities of course development and classroom events' (1987:60). Largely, though, he sees the classroom as no more than the site of implementation.

Bone and Guthrie (1990) refer to the implementation stage of curriculum as the site of executive and managerial processes (1990:iv) which can be interpreted as placing a strong emphasis on the
importance of the classroom. But they do not explore this implementation stage any further. Again the reference appears to be on the teacher just ‘doing’.

Kennedy (1985) in discussing the role of the TAFE teacher in curriculum development argues that teachers should have a greater role in curriculum development “as policy implementor” (1985:55) and in another comment refers to users of curriculum (teachers and perhaps students) saying that existing models do little more than produce curriculum documents which then have to be interpreted by users (1987:29). This reference to interpreting gives a greater importance to classroom interaction in the curriculum development process than does the role as implementer. But overall there is very little indication of the possibility of the classroom as a site for curriculum development.

On the other hand Laird and Stevenson (1993) offer a curriculum model for the VET sector, which has specific application to TAFE, arguing for greater involvement of teachers in the curriculum development process – they refer to the impact that teachers have on the curriculum they teach. They point to the gap between curriculum design and development and clearly view teacher involvement as central to closing this gap. Although they recognise the value of the teacher to curriculum development the classroom remains no more than a site of curriculum implementation.

Competency-Based Training and the Mandated Curriculum

The present curriculum emphasis in the National Training Reform Agenda is on documentation, formatting and the underlying rationale
and framework supporting the implementation of CBT but the criterion referenced, competencies based, work-based learning aspects of CBT will all impact at the classroom level of curriculum development in TAFE NSW. The mandated NVETS competency-based model addressed above (Section 3.5.3) leaves much to the teacher. As shown in the two TAFE examples, Managing and Developing Teams 8767NC and Sewing Machine Operations I 5971A, unless supplied with detailed curriculum resources the teacher has to spend a considerable amount of time and effort preparing the curriculum for the classroom. In fact, the development of teacher resources is a point of some concern within TAFE NSW and is now being focused upon by a system of Educational Services Consortia (Section 3.4) and Institute Curriculum Support Units. This is further discussed in Chapter Seven. The CBT approach will impose more structure and standardisation on TAFE curriculum processes and practices generally but at this early stage there is little reference to classroom curriculum processes.

3.6.2 The Classroom and Curriculum as Experienced

In his study of teacher, student interaction in the classroom (curriculum as experienced) Jackson (1968) not only drew attention to the importance of Life in Classrooms for curriculum but identified both a "hidden" and an "official" curriculum (1968:33, 34). Jackson refers to
... the crowds, the praise, and the power that combine to give a distinctive flavour to classroom life collectively form(ing) a hidden curriculum which each student (and teacher) must master ... (Jackson, 1968:33).

He also comments that the two curriculums are related to each other in several ways and that "the demands of classroom life ... pose problems for teachers and students alike" (Jackson, 1968:37).

Synder (1970) in referring to hidden curriculum in higher education claims that it is the hidden curriculum more than the formal one "that influences the adaptation of students and faculty" and that

though each curriculum has characteristics that are special to the particular setting, the presence of these hidden curricula importantly affects the process of all education (Synder, 1970:xiii).

Jenkins and Shipman (1976) comment that "no curriculum is received passively" (1976:16) and that:

This hidden curriculum consists of pressures arising from proximity with other learners, the formal and informal influence of teachers ... (1976:17).

In referring to the learning situation Warwick (1975) comments that:

Instruction is far less potent than influence, and influence lies at the heart of the hidden curriculum (Warwick, 1975:25).
Saylor et al. in relating the hidden curriculum to instruction and students believe:

that students develop for themselves results from both the planned curriculum and from an unstudied, yet very real curriculum (Saylor, 1981:309).

For Skilbeck, the "hidden" curriculum is the "real" curriculum: "the one that carries social messages, of status, dominance, valued and not valued knowledge, proper and improper ways of behaving etc" (1984:22); "effective curriculum" is what the student "takes" from the learning situation and the connection between the "hidden" and the "effective" curriculum is this:

that in order to understand what is effective in the curriculum so far as student learning is concerned, we must go beneath the plans, intentions and aspirations and examine the curriculum as experiences. (Skilbeck, 1984:22).

Clearly these writers not only acknowledge the importance of classroom interaction to the curriculum development process but perceive a further unplanned dimension of curriculum as experienced.

A number of other writers have contributed to our understanding of the significance of classroom situations. For example, Bloomer (1982) comments "that if teachers set out to teach to a planned curriculum without firstly engaging the interest of students then the quality of learning will suffer (1982:132) and that:
once teachers act upon the belief that students should share with them a commitment to the curriculum, negotiation will follow naturally, whether the set curriculum is traditional or progressive ... (Bloomer, 1982:132).

He refers to teachers negotiating a curriculum with students in an *interaction* process by:

> deliberately planning to invite students to contribute to, and to modify, the educational program so that they will have a real investment both in the learning journey and in outcomes (Bloomer, 1982:132).

This gives a strategic, reshaping emphasis to the teacher-student classroom interaction.

Weiss (1980) in discussing the realities of curriculum at the classroom level comments that although teachers may not have a significant role in overall curriculum development and decision making “they actually wield enormous influence on day-to-day curriculum decision making” (1980:176). Weiss refers to a framework for understanding the nature of teachers’ curriculum development activities which relates to the time the teacher spends with the students, the number of hours spent on subjects and the fostering of literacy and comments that:

> they help to define the world of the classroom, the agenda both hidden and otherwise. (Weiss, 1980:177).

Hughes (1973) in discussing the teachers’ role in curriculum states that the classroom is very much a part of the curriculum:
... the curriculum itself is what takes place in the classroom or school or externally as a result of planning. Curriculum design must thus take account of the realities of the school and class as an essential part of its process rather than as a receiver of its product. (Hughes, 1973:vii)

Furthermore, Hughes comments that teachers should not only play a greater role in the curriculum design process but be more aware of their role "as agents who affect its final form and outcomes" (Hughes, 1973:viii).

Cornbleth (1984) in looking "beyond the hidden curriculum" refers to a mediation process in the classroom. By mediation Cornbleth means an "interpretive process by which people make sense of or create meaning from experience" (1984:32). She points to mediation occurring in the classroom as teachers and students address "implicit curricula" in an interpretive way:

Mediation is an intervening and linking process between messages on the one hand and meanings and actions on the other. (1984:32)

Hyman (1973) refers to teachers taking a curriculum focus for the classroom which is described as "the combination of direction (purpose), selection, and organisation of subject matter" (1973:5). Commenting firstly that curriculum is a "reflection at what people think, feel, believe, and, do" and given that teachers have their own perspectives of subject matter and different curriculum directions, Hyman refers to the curriculum taking shape – via a focus and a setting.
The determination of a focus is also obviously influenced by the critical events of the times and thus there is a time and location setting within which each curriculum takes shape. (Hyman, 1973:5)

Cornbleth takes the setting idea further "stating that curriculum is contextually shaped: "Context both situates and shapes the curriculum" (Cornbleth, 1990:26).

She makes particular reference to classroom interaction and the shaping of curriculum by teachers and students commenting that:

Curriculum construction is an ongoing social activity that is shaped by various contextual influences within and beyond the classroom and accomplished interactively, primarily by teachers and students. (Cornbleth, 1990:24)

These views of Bloomer, Weiss, Hughes, Cornbleth and Hyman relate closely to the TAFE classroom teacher-student experiences examined in the following Chapter.

What emerged from this review is that in the classroom a curriculum ‘shaping’ and ‘reshaping’ process takes place – this is further examined in the TAFE context in Chapter Four.
3.6.3 Classroom Management of Curriculum

A conventional view of managing the curriculum in the classroom refers to decisions, for example, about delivery, content, resources and assessment.

In describing teachers' professional practice Calderhead 'separates two major and apparently separate tasks' – those of instruction and classroom management' (Calderhead, 1984:21). Effective management, he posits,

involves teachers in decisions both in the preactive phase of designing appropriate activities and in the interactive phase of implementing and maintaining them. (Calderhead, 1984:23)

Calderhead draws upon the terms preactive and interactive decision making from Jackson (1968) who referred to the preactive phase as outside the classroom in time of planning and evaluation (and reflection) and an interaction phase when teachers are face-to-face in the classroom making decisions.

It was shown in Chapter Two that TAFE is strongly identified as an adult education provider. A review of adult curriculum literature in Section 3.3 above revealed that a central focus of writers is the management of teaching and learning in the classroom. Indeed adult learners respond positively to a classroom situation, for example, which encourages self-direction, effective use of time and negotiated learning, all of which require carefully directed classroom
management. Amos (1967) in discussing the Teacher as a Manager comments "a well-managed classroom is a pleasant yet business-like environment for working and learning" (Amos, 1967:41).

Although much has been written about the role of teachers as decision makers (Shavelson 1976; Borko, Lone, Russo and Shavelson 1979; Parker 1984, for example) and as Killen (1990) points out considerable time is devoted to the development of decision-making skills of TAFE teachers through teacher training courses and staff development (1990:31), there is little reference to curriculum decision making. Harnack, though, describes the role of the teacher as decision maker and curriculum planner in a book for curriculum workers (and others) in 1968 emphasising "the fact that teachers are professional workers who want to make choices about the best teaching-learning situation for pupils" (Harnack, 1968:v).

In their role of managing the delivery of curriculum in the classroom teachers are making decisions on a variety of curriculum matters. Harnack in fact recommends greater involvement of teachers in the curriculum planning process and he makes the point that "the level of teacher sophistication in decision making will be related to the understanding the teacher has of influential curriculum factors" (Harnack, 1968:19).

English (1987) takes a management approach with an emphasis on the operational aspects of curriculum stating that:
Curriculum is the tool that ensures that work performed conforms to the purpose for which the work is required.

(and) ... curriculum is always a means to an end, not an end in itself. (English, 1987:11)

He maintains that the function of curriculum is to input work and that the purpose of curriculum is: "to guide and focus the efforts of teachers in classrooms" (1987:28).

In the interaction phase curriculum requires management at the point of delivery and the teacher in TAFE NSW, as is seen in Chapter Four, manages the delivery of curriculum into the classroom starting with the preparation of lessons, organising appropriate resources (handouts and overhead transparencies, for example) and attending to curriculum requirements such as field visits and guest speakers. Inside the classroom the teacher manages the curriculum’s delivery to the students with the presentation and communication of syllabus context over a required number of lessons and organises assessment of students as per curriculum guidelines. Decisions are required not only about routine matters such as monitoring attendance records or arranging suitable accommodation but higher order management decisions concern covering the curriculum itself (for example, maintaining content relevance and currency, achieving learning outcomes within specified time frames, ensuring that students achieve the appropriate level of competencies (as per the ASF Descriptor) and meeting student needs).
The teachers in TAFE NSW as part of their work role manage the curriculum through the classroom in accordance with the requirements set down by the educational institution. The management function of teachers is paramount to TAFE’s curriculum because at the point of delivery the curriculum has to be managed to meet student needs. There are professional decisions which have to be made about how the curriculum content is to be processed in the classroom and there is a curriculum responsibility for the material to be relevant, current and customer focused. The teacher then becomes accountable to the students (on behalf of TAFE) for the curriculum’s delivery. This aspect was found to be particularly important in the review of adult curriculum literature, Section 3.3 above.

In referring to classroom management of curriculum development the words used by the above writers to describe the classroom curriculum process such as implementing, arranging into sequence, decision-making skills, making choices, translating and conforming are thus all pertinent to classroom delivery of TAFE NSW curriculum.

The view taken by the writer is that there are higher order decisions being made by the TAFE NSW teacher in the carriage of the curriculum into and through the classroom. This involves, for example, decisions related to aims and objectives of the curriculum and responding to student needs. This goes beyond what is perceived as the teachers’ normal role.
3.6.4 Teacher Curriculum Management and Management Theory

The management process can be defined as "the process of planning, organising, leading and controlling the utilisation of resources to accomplish the organisation's purpose" (Schermerhorn, 1993:21). These four activities are engaged in by teachers as they manage the curriculum plan into and inside the TAFE classroom. Of particular importance are classroom management skills such as guiding students through content, facilitating interpersonal communication and developing motivation. These skills can be more closely equated with aspects of leadership than the other three activities. According to Schermerhorn, for example, to succeed in leadership a manager must "be good at dealing with all aspects of motivation, communication, interpersonal skills, teamwork and group dynamics" (Schermerhorn, 1993:408). For a TAFE NSW teacher to successfully manage the curriculum in the classroom a range of skills and flexibility of approach is required since, for example, TAFE NSW classrooms vary in composition (age, experience, gender balance) for the same subject being taught across different classes (Chapter Two).

One approach to leadership in the field of Management study is the contingency or situational approach which holds that group effectiveness depends on a successful match between leadership and the demands or contingency of the situation facing the leader. This approach posits that there is no single "best" leadership style appropriate to all situations (Owens, 1987:157). The match between style and situation is emphasised by the TAFE teacher seeking a balance between structure, control and student participation as the curriculum
is delivered in the classroom but the teacher as manager is not only managing the classroom delivery of the curriculum but, importantly, is managing the curriculum's classroom development by making higher order management decisions (such as indicated above) as the curriculum is experienced by the students in the classroom (the real curriculum). Clearly different classroom environments (different mixes of student experiences and backgrounds, for example) could require another style of leadership for curriculum delivery.

3.6.5 Summary and Concluding Comments

The main aim of this section on the classroom site is to assess the importance of classroom teacher, student interaction to curriculum development as perceived by curriculum writers. Firstly, in the review of curriculum literature drawn from Chapter Three it was shown that curriculum theorists from the general field and from both within and external to TAFE considered the classroom an important part of the curriculum process. It was found, though, that the extent of importance of the classroom to the curriculum development process given by writers ranged from it being regarded simply as a site of implementation through to those who perceived it as an important and vital part of the process. The strongest emphasis from the general curriculum field: (Goodlad (1979), Stenhouse (1975), Skilbeck (1972, 1976, 1984), Huberman (1983) and Smith and Lovat (1991)). It was also shown that the CBT approach to curriculum will have important implications for teachers in the curriculum development process at the classroom interface but at this early stage the process aspect of curriculum is largely ignored.
The section then considered the views of a number of other curriculum writers. These writers not only acknowledged the importance of classroom interaction in the implementation process but drew attention to both a planned and unplanned aspect of curriculum activity in the classroom as the curriculum is experienced. Reference was also made by these writers to classroom interaction and areas such as negotiating the curriculum, curriculum decision-making, teachers as agents of change, mediation processes, curriculum focus and the shaping of curriculum by contextual influences.

Classroom management of curriculum was examined by reference to several writers where it was shown that the teachers' management role of curriculum in (and outside) the classroom is most important. Finally, the role of the teacher as classroom curriculum manager was described, in management theory terms, as a situational or contingency management approach.

The above review together with the classroom research in Chapter Four shows that the classroom site and its teacher-student interaction and management process is considered an important element of curriculum development in TAFE NSW. The importance of teacher, student classroom interaction in fact support the possibility for the reshaping of curriculum in TAFE NSW classrooms as student needs, experience and expectations interact in the teaching environment.
3.7 CONCLUDING COMMENTS

A major purpose of this chapter is to examine curriculum literature across a broad spectrum making particular reference to curriculum development in TAFE NSW and to determine how relevant this literature is in helping to understand TAFE NSW curriculum processes.

The review of curriculum literature from the curriculum field generally (Section Two) reveals that this literature does have relevance and application to curriculum development in TAFE NSW. A difficulty, however, is that the writers primarily focus their theories and models on the school system, not TAFE. As Chapter Two shows, there are distinguishing features and characteristics in the TAFE NSW system which clearly set it apart from the school system (and other post-compulsory education institutions) and which affect curriculum processes.

An examination of TAFE curriculum literature (Section Four) shows that within TAFE NSW there is no one curriculum model, though there are a number of views and statements which are helpful. Similarly, TAFE curriculum writers from outside the TAFE system do not provide a model which is adequate as a guide to TAFE NSW curriculum processes. Although the competency-based model is mandated for use in the national VET system (Section Five) it is not adequate either. The CBT curriculum model is a narrowly focused one in the mould of a classic objectives-based approach. It has only limited relevance to present day TAFE NSW curriculum processes though because it does not encompass the broad knowledge and understanding
process aspects of TAFE NSW's curriculum. The emphasis in CBT is on competencies (objectives) and assessment; it overlooks curriculum teaching and learning processes and other approaches to and aspects of curriculum development.

A related aim of the chapter was to explore the extent to which curriculum literature viewed the classroom as a significant site of curriculum development. All curriculum writers recognised the classroom as crucial in implementation and classroom aspects but most do not see it as a significant site of curriculum development. From the curriculum field generally (Section Two), for example, Stenhouse, Skilbeck, Huberman and Lovat and Smith provide the most focus on the classroom while writers from the TAFE curriculum area (Section Four) tended to provide less attention and some neglected the area altogether. In the CBT approach, at this early stage, the classroom is largely excluded from formal documents (Section Five).

A review of writers from a broad cross-section of curriculum literature (Section Two) reveals that the classroom is generally considered an important site for curriculum development and some writers drew attention to the planned and unplanned aspects of curriculum. It is shown that both interaction of teachers and students and the teachers' classroom management affects curriculum development even to the extent of reshaping the curriculum. The survey of adult curriculum literature (Section Three) reinforced this view. In fact this literature tends to focus on the teaching and learning aspects of curriculum and the importance of designing and delivering of curriculum to meet, for example, the self-directed, reflective needs of adult students. A
relevant point for TAFE NSW's curriculum is that teachers, in responding to these needs, may negotiate the curriculum and collaborate with students on curriculum outcomes. This would be difficult if the curriculum process is tightly structured around modularised competency-based training units with fixed outcomes as proposed in the national vocational training system.

This curriculum review is useful in helping to understand TAFE NSW curriculum processes and offers relevant detail for the conceptual framework to be developed in Chapter Five, towards a model which will more adequately depict TAFE NSW curriculum processes. Before proceeding with the framework the following chapter seeks evidence in further support of the notion that the TAFE NSW classroom is an important curriculum development site.
A CURRICULUM DEVELOPMENT MODEL FOR TAFE NSW:
linking the planned and experienced curriculum

A thesis submitted in fulfilment of the requirements for the award of the degree of

Doctor of Philosophy

from

The University of Wollongong

by

Antony Noel Ball,
B.A., Dip. Ed. (Syd.), M.Ed. (Hons)

Faculty of Education
1997
Chapter Four

Classroom Research
INTRODUCTION

This Chapter focuses on the role of the TAFE NSW classroom where the curriculum is implemented and experienced by the teacher and students. The idea that the classroom makes a significant contribution to the curriculum development process was introduced in Chapter Two (Section 2.4) and further examined in Chapter Three (Section 3.6). Some literature suggests that the classroom is a site for curriculum development not just implementation. This may well be the case for TAFE NSW, given the distinguishing features and characteristics of TAFE NSW identified in Chapter Two: the background, age and maturity of students, type of courses offered, the relevant, useful, practical and applied nature of teaching and the background of teachers. This led the writer to hold a ‘search conference’ and interviews with TAFE NSW teachers to investigate the nature of the TAFE NSW classroom as a possible site for curriculum development. The Chapter opens with details of this search conference.

A brief account is then given of the broad perspectives which informed the ensuing classroom research. The following two sections present evidence relating to the nature of the curriculum (reshaping) process in the TAFE NSW classroom. First, a case study is presented. The background, rationale and methodology of the study are outlined, then the evidence is examined and analysed. Following this, reference is made to a number of other classroom observations by the writer. The Chapter finishes with a summary of findings and makes concluding comments regarding the central question of classroom situational factors which contribute to curriculum development and classroom curriculum processes.
4.1 SEARCH CONFERENCE AND INTERVIEWS

A 'search conference' and follow-up interviews with TAFE NSW teachers was effected by the writer whilst a part-time lecturer at the Institute of Technical and Adult Teacher Education (ITATE) in 1988. The main purpose of this study was to examine how teachers perceived their role in curriculum at the classroom interface. The study was carried out with the permission of the Institute over a three week period with twenty-eight full-time TAFE NSW teachers from a broad cross-section of teaching areas and colleges. The teachers, 5 female and 23 male, were from eleven different sections spread across sixteen colleges in the Sydney Metropolitan and Country areas as detailed below (Figure 4.1)

FIGURE 4.1

TAFE NSW TEACHER PARTICIPANTS
SEARCH CONFERENCE AND SURVEY

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Sections</th>
<th>Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Art and Design</td>
<td>Liverpool</td>
</tr>
<tr>
<td>7</td>
<td>Applied Electricity</td>
<td>Lithgow, North Sydney, Randwick, Sydney, Wollongong</td>
</tr>
<tr>
<td>6</td>
<td>Building</td>
<td>Brookvale, Granville, Miller, Randwick</td>
</tr>
<tr>
<td>3</td>
<td>Business Services</td>
<td>Bankstown, Dover Heights, St George</td>
</tr>
<tr>
<td>2</td>
<td>Home Science</td>
<td>East Sydney, Wetherill Park</td>
</tr>
<tr>
<td></td>
<td>(Tourism and Hospitality)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Navigation</td>
<td>Brookvale</td>
</tr>
<tr>
<td>1</td>
<td>Food</td>
<td>Goulburn</td>
</tr>
<tr>
<td>2</td>
<td>Plumbing</td>
<td>Bankstown, Wollongong</td>
</tr>
<tr>
<td>2</td>
<td>Office Administration</td>
<td>Liverpool, Wollongong</td>
</tr>
<tr>
<td>1</td>
<td>Engineering Trades</td>
<td>Liverpool</td>
</tr>
<tr>
<td>2</td>
<td>Vehicle Trades</td>
<td>Granville</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>Bankstown, Liverpool</td>
</tr>
<tr>
<td>Totals 28</td>
<td>11</td>
<td>16</td>
</tr>
</tbody>
</table>
The teachers were all enrolled in year two of the Diploma of Teaching attending ITATE one day a week and teaching at their college for the remainder of the week. This is not a representative sample of TAFE NSW teachers – they have less teaching experience than most of their colleagues. Although the teachers tended to be less experienced they had already been teaching for one year full-time and a majority of them were experienced part-time TAFE NSW teachers prior to taking up a full-time teaching position. Broadly what follows is the perspective of a group of TAFE NSW teachers relatively early in their careers.

4.1.1 ‘Search Conference’

The first part of the study, the ‘search conference’, comprised a two hour session of the twenty-eight participants held at ITATE premises Sydney facilitated by the writer to address the question: how important is the role that TAFE teachers play in curriculum delivery? The term curriculum delivery was taken to refer to those parts of the curriculum process in which the teacher prepares class notes from the curriculum document and then engages in delivery at the classroom interface with the students.

The concept for the ‘conference’ derived from the search conference idea used:

... widely both overseas and in Australia in the government and private sectors as a tool to achieve participatory problem solving or planning. (Anderson and Jones, 1986:30)
The approach used in the study fell within the aims and methodology usually employed for a search conference. Anderson and Jones (1986) describe the aims of a search conference as:

- to generate co-operative group activity aimed at:
  - finding solutions to practical problems, contributing to the body of knowledge on the area under focus, being a learning process for the participants. (Anderson and Jones, 1986:31) (Emphasis added)

The group was briefed one week prior to the conference on the rationale and aim of the ‘search conference’ which was entitled: the Teacher’s Role in the Curriculum Delivery Process – Present and Future. The students were currently studying the subject Curriculum Development in TAFE with the writer (as two groups) and as part of the course the students were to reconvene as a group to follow-up future direction issues in two weeks time. For the purpose of this study students were to be individually ‘surveyed’ by interviews with the writer during the ensuing two weeks to illicit individual perceptions.

In the ‘search conference’ responses were sought through the techniques of brainstorming and buzz groups after commencing with an introductory plenary session. The writer/researcher’s role was that of a facilitator – to illicit responses in a neutral way by asking general, open questions and not “guiding” the participants. The stimulus questions used were similar to those used in the teacher interviews (refer Appendix 10). The material generated in these sessions was recorded on butcher’s paper which provided raw material for the final plenary session and the following findings.
The session produced a consensus of opinion that the curriculum document was a guideline or framework and that the teacher's role in the classroom preparation stage was to focus the content on classroom needs and to "shape the curriculum to the needs of the students" (Research Notes, 3/11/1988, p. 1). This was perceived to be a 'focussing process' as the teacher became more familiar with the background, work experience, motivation and maturity of students and ability to articulate and communicate through classroom interaction (Research Notes, 3/11/1988, p. 2). Through this preparation and focussing process further reshaping took place and as the curriculum unfolded in the classroom arena over time, there was a perceived curriculum 'developmental process' between teacher and students. It was pointed out, further, that syllabus documents were often out of date and this required even more input from the teacher (Research Notes, 3/11/88, p. 2).

4.1.2 Interviews

Following the 'search conference' the twenty-eight participants were individually interviewed by the writer in personal interviews over the following two weeks. The teachers' perceptions were recorded in response to the following five areas:

1. The guidance a curriculum document gives to teaching.
2. The importance of the curriculum document to classroom delivery.
4. The teachers' most important curriculum aim.
5. Whether the teacher would change the curriculum to meet student needs.

(Refer Appendix 10 for details of questions).
Teacher perceptions across these five areas are summarised from their responses as follows (Research Notes 3/11/88, 10/11/88, 17/11/88).

Area 1. The majority of teachers indicated that the curriculum document was the main guide to their teaching and the starting point for classroom preparation and delivery. Other documents such as textbooks, workbooks and teaching guides were also important in most cases.

Area 2. The curriculum document was seen as the teachers' primary source for lesson preparation and delivery and thus perceived as most important.

Area 3. The curriculum document provided the teacher with topic and basic content objectives from which headings, core content, main areas of emphasis and possible content sequencing could be worked out in the preparation of lesson notes for subsequent classroom delivery.

Area 4. The teachers' main aim was to meet the vocational needs of the students through teaching relevant content in a professional manner. The teachers were also keen to cover all the material in the curriculum, both theoretical and practical aspects.

Area 5. Respondents generally indicated they would definitely change the emphasis and content of the curriculum to accommodate student needs. The main reason for this was to be more vocationally applied and useful and
would include updating material. The teachers perceived that an important part of their professional teaching role was to ensure relevance and currency of content for their students. If this meant changing the curriculum content they would do so. Two respondents indicated they would not have to "change" the emphasis and content because the curriculum was very open and flexible.

Responses to the survey questions reinforced the findings of the 'search conference' that the curriculum document was perceived as a guideline or framework from which the teacher focused and reshaped the content to meet student needs. Clearly teachers perceived their role in curriculum delivery as 'focussing' and 'reshaping' the curriculum document.

This provided further reason for examining in detail the role of the TAFE classroom in the curriculum development process – the following case study and classroom observations were subsequently undertaken. Firstly, there is a brief account of the broad perspectives which informed the classroom research.

4.2 RESEARCH PERSPECTIVE

The purpose of the research reported in the following sections is to explore the nature of the TAFE classroom in relation to curriculum implementation and development.
Research Aims and Question

The study was carried out at Wollongong College of TAFE during 1989 and 1990 in a classroom situation with the following specific aims.

The central research questions were:

To what extent does classroom interaction contribute to the curriculum development process?

How does it make this contribution?

The study sought:

1. To examine the nature of the curriculum reshaping process in the classroom.
2. To explore how this process takes place between teacher and students.

This study of curriculum in the classroom is guided by Reid's view of curriculum research that:

... all the problems arising in implementation, whether relating to student, to teacher or to context need to be taken into account as part of the notion of curriculum. (Reid, 1973:91) (Emphasis added)

This indicates that what happens in the classroom to curriculum is important and needs to be investigated.

The choice of a qualitative paradigm arose from the belief that "the problem under investigation properly dictates the methods of investigation" (Trow, 1957:33). Given the nature of the research questions listed above and the focus on a classroom situation of teacher and students interacting in a dynamic learning environment in which a
number of factors such as perceptions, beliefs, expectations and motivations are at play, the mode of research inquiry employed in this chapter study is within a naturalistic paradigm.

The researcher gathered data using a variety of methods largely in the naturalistic qualitative tradition. Within this tradition

the observer purposely controls or manipulates nothing, and in fact works very hard at not affecting the observed situation in any way. (Gay, 1992:590)

The theoretical position adopted in this classroom research is in broad terms an interactionist one in which:

human action is not seen as fully determined by social, cultural, or psychological forces, and these forces are seen to be mediated in their impact by processes of social interaction. The outcome of any interpretive or interactional process is never entirely predictable, as it emerges from and is conditional upon the interplay of interpretations and actions. (Hammersley and Woods, 1977:3)

The study is concerned with seeking understanding and insight into the interactive educational processes of curriculum delivery. The type of research strategy chosen to do this can be described as illuminative (Parlett and Hamilton, 1977) and aims to:

take into account the wider contexts in which educational programs function. Its primary concern is with description and interpretation rather than measurement and prediction. (Parlett and Hamilton, 1977:13) (Emphasis added)
An important facet of this strategy is for the researcher to enter the learning milieu (in this case the TAFE classroom) and observe the complex interaction of cultural, social and personal variables as the curriculum is delivered.

These (variables) interact in complicated ways to produce, in each class or course, a unique pattern of circumstances ... which suffuse the teaching and learning that occur there. (Parlett and Hamilton, 1977:11)

Further, the work was guided by the principle of methodological triangulation (Denzin, 1970) and a concern for triangulating observations (Denzin, 1971:58). The approach taken by the researcher follows the basic principle underlying the idea of triangulation explained by Elliott (1991) as "collecting observations/accounts of a situation (or some aspects of it) from a variety of angles or perspectives, and then comparing and contrasting them" (Elliott, 1991:82). These accounts aim to be 'coherent': "that is, to comprehend and account for insights and evidence within a consistent framework" (Candy, 1989:5). The process of triangulation in relation to the classroom observations involved data on the perceptions of teacher, students and researcher.

The main purpose of the following Sections (4.3 and 4.4) is to report observations of curriculum as experienced and examine the importance of the affects that teacher and student interaction in a TAFE classroom situation have on the curriculum process. Firstly, in Section 4.3 a case study of a TAFE classroom site is presented.
4.3  A CLASSROOM CASE STUDY

4.3.1 The Case Study Approach

The term 'case study' is used in a number of ways and is subject to a variety of interpretations (Kenny and Grotelueshen, 1984). Early proponents of a case study approach in educational research, MacDonald and Walker (1975) and Shaw (1978), pointed to this method as one way of finding answers to questions where experimental methods and numerical analysis were not appropriate:

Such questions are directed at the experience of the participants, and at the nature and variety of transactions which characterise the learning milieu of the programme. (MacDonald and Walker, 1975:1)

They (case studies) relate more clearly to daily experience than the results of experimental and survey methods; they tend to have a more human face ... The case study enables manageable facets of this activity to be held down and examined. (Shaw, 1978:2)

The case study chosen was a particular TAFE NSW classroom. This is not a comprehensive, large scale study – it is a particular instance. The evidence taken from this slice of reality of a curriculum in action is not intended to be perceived as a representative sample but as one detailed instance of what actually happens as a curriculum is experienced in the TAFE NSW classroom.

The aim of the study is to closely observe a specific TAFE NSW classroom setting with a teacher and students in action and examine the influence that the classroom teacher and student interaction may have on
curriculum development in the classroom itself. The study sought to do this by entering a TAFE NSW classroom and observing a capsule or slice of reality in the illuminative research mode.

Skilbeck (1983), in discussing the contribution made by Stenhouse to research methodology, makes the following comment pertinent to the illuminative case study approach adopted by this study:

Essentially he (Stenhouse) wanted ... cases of classrooms or school practice selected by experienced and insightful educators for their potential value in illuminating educational decisions ... The case must be such that it captures 'the texture of reality' ... is not heavily theory-dependent, but lends itself to comprehensive study. (Skilbeck, 1983:16) (Emphasis added)

In essence this study will be used as a platform for understanding curriculum at the reality of the delivery point. Kemmis comments that the authority of case study work,

like the authority of all science, does not derive from theoretical or logical eloquence: it derives from the purchase it gives us on the real world of action and experience. (Kemmis, 1980:106) (Emphasis added)

In this case-study the researcher draws on considerable background and personal experience of TAFE NSW. While this provides a very valuable basis for understanding TAFE NSW curriculum development processes, the writer is aware of the need to avoid possible assumptions and biases that this knowledge may bring to the research. As Simons insists:
The case-study must not only be authentic and detailed ... it must also be rigorously accurate and impartial. The purpose of the case study is to make the experience of innovation accessible to public and professional judgment, and not to provide a vehicle for the biases or personal judgments of the evaluator. (Simons, 1987:67)

So the data is presented in such a way that the reader can make their own assessment of its meaning and significance.

The teacher/researcher, prior to joining TAFE NSW in the mid-eighties, was employed in the commercial field for a number of years. He brought several years of senior professional management experience from the banking industry to the classroom along with management qualifications and a teaching diploma.

### 4.3.2 Collection of Data

**Organising Collection**

The first critical steps in this study were to organise access to a classroom and to establish the researcher's role in the collection of data. Hitchcock and Hughes state that "All social research is governed by questions of access to people, information, and settings" (Hitchcock and Hughes, 1989:58).

The researcher's teaching background in TAFE NSW was with Business Services Industry Training Division (refer Chapter Two, Section 2.2) and familiarity with this area along with the ability to gain classroom access were reasons for focusing the classroom case study on a subject within
this Training Division. A difficulty faced by the researcher, who then held a senior administrative position at Wollongong TAFE, was to access and enter a classroom in the College for observation without posing a 'threat' to staff and students. The researcher was Vice-Principal of the College and to enter a classroom and study teacher, student processes was a sensitive area and may have evoked serious industrial problems (e.g. with the Teachers' Federation). The approach taken to effect classroom access for this study was to enter into a collaborative study with a teacher in the Business Services area at the College who was interested in being part of the research. The teacher/researcher was one of a number of colleagues with whom the researcher had discussed the case-study in broad terms (to examine interaction in a classroom) and who had shown an interest in taking part. This "teacher as classroom researcher" idea has strong foundations in Stenhouse (1975) referred to in Chapter Three, Section 3.2. By collaborating in this study the teacher/researcher saw potential professional benefits through a greater understanding of his role in the classroom curriculum processes and interactions.

The study was organised on the basis that the teacher/researcher would select a course subject for observation and in consultation with the students tape-record the classroom curriculum process. Anderson (1982) argues that teachers have more access to classroom data than researchers have and that producing tape recordings of their lessons and episodes of classroom interaction offers records of data independent of memory or theorising (1982:130, 131).

The plan of action and procedures both for access to the classroom and taping of classes in progress were worked out by the researcher and teacher/researcher in collaboration as follows. Ownership of the taped
material was vested in the teacher/researcher, held in strict confidence, and to be played back to the researcher only at the teacher’s discretion. The arrangements for taping in the classroom were to be discussed by the teacher/researcher with the students who could consult with the researcher if necessary. Some students already knew the researcher from other college activities. It was agreed upon by the researcher and the teacher that the researcher could enter the classroom for discussion with the students at a time determined by the teacher; a concern here was not to raise any unnecessary anxiety in the students (that they were being “observed” or “watched”). Also the researcher did not want to infringe on class time given that the subject chosen was considered a difficult one and that part of the assessment was by an external examination (that is, set by an examiner outside the College on a state-wide basis).

All these arrangements were discussed in the weeks prior to the subject commencing and the teacher formally discussed the matter with the students at the first class in July 1989. The researcher and teacher/researcher believed it was essential that students understood the basic reason for the research – essentially that of advancing educational understanding of TAFE NSW classroom curriculum activities – without misleading them and at the same time not ‘cueing’ them on central issues (e.g. curriculum reshaping). The students had to feel comfortable with the research process, particularly the tape recording – this was handled as a matter of trust between them and the teacher/researcher.

A further meeting between the researcher and the teacher/researcher finalised procedures to commence following the students’ agreement. It was agreed that the teacher as collaborative teacher/researcher would report back after the first tape recording session and ongoing discussion
and feedback would then commence with the purpose of examining interaction in the classroom as the curriculum was delivered. The teacher’s teaching notes would be used as a guide to follow the content of the classes in the playback sessions and in addition the teacher would indicate in note form and make accompanying comment on any examples of classroom interaction which influenced classroom activities. The researcher and the teacher/researcher met on several occasions for playback sessions and discussions. Notes were kept of these meetings by the researcher.

**The Subject, the Curriculum, Teacher and the Students**

*Operations Management* 3519M (8722G) a core subject in the long standing Management Advanced Certificate course (refer Chapter Two, Section 2.2.2 and Appendix 11 – course details) was chosen in close consultation with the teacher for the case study. This subject, in Year Two of the three year course, is taught for 3 hours per week over 18 weeks (54 hours) and on this occasion was delivered in Semester II 1989 one night per week for eighteen weeks – it consisted of seventeen topics (refer Appendix 12 - subject details). The subject is described as being about:

> the integration of the entire organisational variables into a variety of models and procedures in order to improve decision making alternatives under the high degree of uncertainty that faces all organisations in their constantly changing market place. (Teacher and Student Guide, 1989:1)

Just over one third (twenty hours) of the total classroom interaction, spread over five of the seventeen topics (listed in Appendix 12) chosen by the teacher/researcher, was taped, transcribed and discussed with the teacher/researcher and notes kept by the researcher of all discussions
held. In all there were 21 meetings. After the subject was completed and 
assessment concluded the researcher was invited to join the students and 
the teacher/researcher for discussion and comment at a special classroom 
session early in 1990.

The curriculum which the teacher/researcher worked from in this case 
was a list of topics (Appendix 12) together with *Teacher and Student 
Guidance Notes* which included:

(a) the rationale for teaching the subject (one paragraph)  
(b) the textbook, software and references  
(c) general comments  
(d) assessment guide  
(e) student guide.

The list of topics (Appendix 12) provided only an extremely brief guide to 
curriculum content and it thus fell to the teacher to develop a set of 
teaching notes for classroom delivery using the textbook for reference. 
Usually there is a longer form syllabus which in this case was not used 
because it was “well out of date” (Research Notes (1) 10/8/89, page 2) but 
while the longer form syllabus provided more information similar 
preparation was required for classroom presentation.

The students in the class being observed were mature age and held 
supervisory or management positions in the work place. Twenty-one 
students were in the group (nineteen male and two female) bringing a 
wide range of work and life experiences into the classroom. Several were 
in the 30 to 40 year age bracket, three were older than this and held senior
positions in the private or public sector. Students attended this subject one night per week (6 pm to 9 pm) in their own time (and attended another subject on one further night).

The course is described in practical terms as being designed:

to assist the individual's advancement to the position of manager of a profit centre in a small or medium size corporation, or in the division or branch of a large scale organisation. It aims to develop his or her ability to function effectively in one specialist area, such as sales management, understand the work performed in other functional areas, such as the finance, marketing, production and personnel departments, and direct the managerial functions of planning, organising, directing and controlling. (TAFE NSW, 1989)

**Classroom Data**

In all seven three hour tapes which comprised a total of twenty classes (i.e. a total of twenty class hours) were listened to by the researcher and teacher/researcher together. This was effected by the teacher/researcher playing back each recorded class for the five topic areas (the tapes were in possession of the teacher/researcher) in the private setting chosen by the teacher/researcher. During the playback sessions the researcher took notes of discussion with the teacher/researcher as each class was examined for examples of classroom reshaping. Thirty one instances of student contributions were identified as reshaping by the researchers and notes taken for reference. It was agreed that about one third of these instances offered very pertinent evidence of classroom interaction and reshaping – these are now discussed and analysed in this and the following sub-section.
The instances provide examples of the curriculum being shaped and negotiated between teacher and students at the point of delivery. The teacher proceeded to the classroom having prepared a set of class notes from the curriculum guidelines (Appendix 12) and the students brought to the curriculum knowledge and experience of the workplace and a desire for relevance and practical application of classroom content. This was evidenced as the students interacted with the teacher, sought understanding, asked for workplace examples, provided their own examples and questioned curriculum content.

Instances One and Two illustrate how students' workplace experiences and motivation for relevance extended the teacher beyond the teacher's planned curriculum.

Instance One: In topic 3 on Forecasting in a discussion on a definition of forecasting by the teacher (judging the future by what has happened in the past) a student raised a problem which had recently arisen in their workplace of 'pegging the future to the past and the assumption of accuracy of data' (Research Notes (1) Tape 1, Side A) which led the teacher to address difficult problems in workplace forecasting and in the teacher's words to the researcher:

Required me to raise or confirm other points relating to forecasting problems – things not in the syllabus. (Research Notes (1) 28/9/89, page 1)
In this instance the students, on the basis of issues raised by a student’s workplace experience brought questioning, interaction and analytical skills to the subject matter which took the teacher well beyond his classroom curriculum preparation.

**Instance Two:** A further point raised by a student in this context referred to an example of a product where there was no past to refer back to (example of lead-free petrol and muffler sales exceeding supplier’s expectation) – and that forecasting would be difficult where there is no relevant past or criteria to base it on. The teacher agreed with the difficulty here, referred to qualitative methods, and commented that aspect was not in the syllabus “and we’ll get on to that in a minute too, then” (Research Notes (1) Tape 1, Side A) – despite the fact that this was not in the original lesson plan. The teacher commented to the researcher later that this question:

> compelled me to answer another problem of methods not specifically mentioned in the syllabus.
(Research Notes 28/9/89, Page 1)

The students in **Instance Two** drew on an example from workplace experience and extended the teacher’s knowledge beyond the classroom and the teacher allowed the curriculum to be reshaped in this way.

**Instance Three** further illustrates how important workplace experience can be to curriculum reshaping as students seek application and understanding. The students raised questions of accuracy and relevance of content and required the teacher to justify and explain beyond the curriculum content.
**Instance Three:** At a later point on quantitative statistical method a student argued the accuracy of the method and another student commented that "it was not representative of the real world – having just done one at work" (Research Notes (1), Tape 2, Side B). The teacher responded with explanation and discussion (giving examples) and commented later to the researcher that:

> this required unexpected lengthy *justification* of least squares method as to its relevance or accuracy as a forecasting method. (Research Notes (1) 28/9/89, Page 2)

In a further comment regarding instances on tape, where these mature, well-informed and experienced students interact and require the teacher to justify and extend his account of the topic, the teacher makes the following comment:

> These examples of course are not written into a curriculum, nor into my interpretation of the curriculum. (Research Notes (1) 28/9/89, Page 2)

Relevance and accuracy are further raised in **Instance Four** and extend the teacher to review his own understanding of the subject matter as the students challenged the teacher's approach illustrating how student insistence on accuracy and a capacity to articulate with confidence can be confronting to the teaching as the curriculum is reshaped.

**Instance Four:** In the Topic *Guessing Theory* students supported the theory by use of median or mode as a measure and in doing so questioned the teacher's use of the median.
This topic is a fairly complex and theoretical one in its application to the workplace but students were able to draw on their own workplace knowledge and experience and question the teacher’s knowledge and the relevance of curriculum content. A student commented here that “changing to modal average over a period of time would give you a more accurate idea” (Research Notes (1) Tape 3, Side B). The teacher agreed but was not able to demonstrate with an immediate example since, as he commented to the researcher:

“This was something not in the syllabus, or text or in my notes.” (Research Notes (1) 28/9/93, Page 3)

In seeking a more complete understanding of theory in the same topic Guessing Theory students sought examples from the teacher in Instance Five. The students were not prepared to accept theory that they could not understand in a workplace context and demonstrated a particular desire to understand and relate content to the workplace.

**Instance Five:** The students extended the content from what was planned by the teacher by requiring and discussing workplace examples of Guessing Theory (Research Notes (1) Tape 4, Side A). The teacher commented later that here

“the students were trying to relate theory to example (sic) which they could understand”. (Research Notes (1) 28/9/93, Page 3)
In **Instance Six** a workplace example is brought into the classroom by students which was beyond the scope of the curriculum. This meant that the teacher had to change his lesson plan and further illustrated the importance of students' practical knowledge and broader understanding beyond the classroom.

**Instance Six:** In the topic *Product and Process Strategies* reference is made by a student to a microwave landing system in research and development (which was not included in the syllabus) as an example of lack of research in Australia (Research Notes (1) Tape 4, Side B). The teacher commented later that this was

"an example of how curriculum can be diverted but how students made the issue relevant." (Research Notes (1) 28/9/93, Page 4)

In **Instance Seven** a student's first hand knowledge of the car industry required the teacher to reconsider a statement and in **Instance Eight** a student challenged the validity of the theory from his experiences at work. These instances illustrated how the students' concern for relevance and application, in particular, required the teacher to respond to students' input.

**Instance Seven:** In the topic *Procurements/Just in Time* an example given by the teacher of lack of standardisation in the car industry was refuted by a student who cites examples of standardisation in the industry (locks, door handles, steering column, seat belts etc.) and the teacher concedes the point to the class saying
"I stand corrected there is a certain amount of standardisation in the car industry" (Research Notes (1) Tape 6, Side A).

The teacher later commented to the researcher that

"this was an example of knowledge in the classroom which was accurate and up-to-date". (Research Notes (1) 28/11/89, Page 1)

Instance Eight: In the topic Project Management in discussion on GANTT and PERT charts a student commented that GANTT charts he uses at work provide the same information as PERT chart, which was described by the teacher as contrary to the theory in the topic (Research Notes (1) Tape 7, Side A). Another student raised a problem of different managers working on the same problem arriving at different scheduling programs and asked:

"is there any one right way of doing it – say a group of managers – could they come up with different PERT charts – could they do the job another way?" (Research Notes (1) Tape 7, Side A).

The teacher agreed this could be the case and answered the question with examples. The teacher commented later to the researcher that

"this was not a concept I had planned to discuss, nor had I planned to discuss GANTT in this depth". (Research Notes (1) 31/10/89, Page 1)
4.3.3 Reshaping the Operations Management Curriculum

There are two curriculum elements which this analysis addresses. Firstly, the role that the teacher and students played in the overall curriculum delivery process of this subject and secondly, the possible influence classroom interaction between teacher and students had on the curriculum and its reshaping.

As observed, the teacher worked from a set of brief topic guidelines and prepared material for curriculum delivery from personal knowledge, information from teaching notes and reference to a textbook. The teacher's preparation of curriculum material for the classroom was a critical element in the curriculum process. The textbook and accompanying work-book helped standardise the material in the syllabus across the State (the Management Advanced Certificate is offered across a number of TAFE Colleges in New South Wales) and the teacher and student guides state that the book is a "good guide and will prove to be a great assistance both in the course and throughout the student's future career" (Business Services Student Guide, 1989:2). The text is complementary to the course with the teacher planning and setting up the structure, the content emphasis and the examples to assist with curriculum delivery. In this case the text was not available to students until five weeks into the course. The teacher guided the curriculum into the classroom from a document which provided only a broad framework and delivery was effected in the hands of the teacher who interpreted the content for entry into the classroom.
Clearly the teacher plays an important role in getting the curriculum into the classroom by organising appropriate content, preparing examples for teaching and shaping the topics for delivery. It is at this point before classroom entry that the reshaping process of curriculum commences. An important implication for the curriculum process is that the teacher plays a central role in interpreting and shaping curriculum content before it reaches the classroom. In a recorded discussion with the teacher on this point he commented that in the process of preparing material for the classroom, he was very conscious of the students in the classroom arena for whom he was preparing delivery. (Research Notes (1) 3/8/89; 10/8/89)

The curriculum's reshaping began with the teacher planning classroom delivery and then, as the curriculum unfolded topic by topic under the influence of the dynamics of the classroom, the reshaping process continued. As observed in the above classroom instances, the curriculum is further shaped and moulded as it is experienced in the classroom arena with the teacher and students actively engaged in the process.

From the teacher's perspective the experience in the classroom may be seen as challenging and even threatening as students raise issues from a work experience base which the teacher may not share and for which the teacher may not be prepared. The teacher may see his reaction to this situation as an attempt to defend his credibility in front of the students. From the researcher's viewpoint a willingness to make curriculum changes and meet the challenges of student demands can be interpreted as a negotiated reshaping of the curriculum to make it more relevant and meaningful for the students. This may have implications for TAFE teachers and in particular for TAFE teacher education. TAFE teachers
need to be able to perceive "Instances" such as those described in this Chapter as opportunities for meaningful classroom based curriculum development rather than as threats to their professional standing. In all, the writer's expectations of classroom reshaping were strongly supported by the findings.

**The Students**

The above eight examples of classroom interaction demonstrate the pressure exerted by the students on the teacher. Students are bringing knowledge into the classroom from the workplace and are able to relate their experiences to subject matter as the curriculum unfolds. Students, through questioning a concept on the basis of their work experience such as in *instance one* and *two*, required the teacher to extend beyond presented material and to further explain or, in the case of *instance three* further justify a concept. In *instances seven* and *eight* students related their classroom activities to work based experiences and this knowledge not only extended discussion on the topics *Forecasting* and *Project Management* but required the teacher to address the topic in more depth and beyond planned curriculum activities as is evidenced in the teacher's comments to the researcher.

The students, as joint stakeholders, thus entered into a curriculum reshaping process with the teacher. This interaction had important implications for the curriculum's delivery as the students drew on current work practices and challenged the teacher. In some instances there was negotiation between teacher and students regarding accuracy of content. While the teacher worked to a course structure and was guided by the recommended content sequence and topic organisation, there was flexibility in content scope and emphasis as the students interacted with
the teacher. In another **Instance**, for example, the teacher and students entered into lengthy discussion on microwave landing systems raised in reference to Research and Development in the Topic *Product and Process Strategies* (Research Notes (1) Tape 4, Side B). This example of Research and Development, raised by a student, was later commented upon by the teacher to the researcher as "not included but was an example of how students made a relevant contribution" (Research Notes (1) 28/9/89, page 4).

In an additional **Instance**, in the topic *Procurement and Just in Time* (Research Notes (1) Tape 6, Side B), a student raised the question of security for workers in reference to the human impact of the 'Just in Time' (JIT) concept and the teacher's comment in discussion with the researcher was that this was an "example of students thinking laterally and the syllabus does not really allow for this". (Research Notes (1) 28/11/89, page 2) A further **Instance** is in the same topic where a student raised the question of legal contracts in JIT because of a problem in their workplace – the teacher commented to the researcher that:

> Legal contracts are not in the syllabus but the student is right, they're important – so we covered them briefly. (Research Notes (1) 28/11/89, page 2)

A perspective was sought from the students. This was effected in collaboration with the teacher who had discussed the idea of the researcher visiting the class and entering into discussion with them on case study data. The class expressed keen interest and arrangements were made by the teacher for the discussion to take place early 1990 after the
assessment for the subject had concluded. In this discussion, the students commented that a major reason for them being in the course was that it offered useful application and relevant subject matter and that:

there should be more influence generally on the relevance of classroom content by the students given their experience. (Research Notes (1) 5/4/90, page 1)

This raised an issue of the students' concern to be involved in making curriculum relevant to their needs – an opportunity not usually offered to them.

On the degree and extent of contribution through interaction the students indicated that there was greater potential for influential interaction if:

(i) students knew each other, were friendly and less barriers existed between them;

(ii) they understood the system more, and

(iii) were encouraged by the teacher to constructively participate in class (e.g. with current workplace examples).

Further, they expressed a view that discussion helps understanding and that students learnt more by interaction from the teacher and each other. They also commented to the researcher that they believed their input in the classroom was very important and suggested also that there should be more contribution by students at the early stages of curriculum (before reaching the classroom) to assist with its relevance. (Research Notes (1) 5/4/90, pages 1 and 2)
Interaction and the Curriculum

In discussions with the teacher/researcher relating to student interaction generally, he made the following additional comments:

Students have an important input to the curriculum process ... and the amount of discussion around the topic will depend on student knowledge and awareness of content in the topic ... the amount of interest is important ... this relates back to the students' work influence and the need for the students to have the knowledge. (Research Notes (1) 28/9/89, page 1).

Further, regarding student group interaction and the relevance of content in the curriculum documentation:

Students have an input in respect of relevance and application ... curriculum can be successful despite any limitations of curriculum documentation. (Research Notes (1) 28/11/89, page 1)

Concluding Comments

Following discussion and analysis it was agreed that four main categories of student interaction could be identified and summarised as follows:

Students,

1. demand knowledge and skills not in the curriculum,
2. question relevance of curriculum content,
3. offer and/or request examples which extend curriculum, and
4. bring alternative knowledge, approaches, skills to curriculum.
These student initiatives generally arise from student workplace experiences, motivation and maturity. Drawing on their experience students bring knowledge and skills into the classroom and challenge the teacher by seeking new and up-to-date applications of theory, providing additions and extensions to content, requiring different examples and even corrections to content. Students' motivation is also an important factor in their desire for relevance and practical application. Maturity is significant in the classroom manifested in articulate and confident communication. There is pressure on the teacher to deliver content which is accurate, relevant, helpful and practical. Part of the pressure on the teacher is that TAFE operates in a competitive market place – if the students are not satisfied with the course they can 'vote with their feet' and enrol elsewhere. The teacher's credibility is thus under scrutiny by the students who are keen to use class time effectively by gaining practical knowledge and relating subject matter to work experience. Teacher awareness of student needs, their work situation and expectations of applied, useful content promotes reshaping in preparation for classes towards more relevant and current content.

The study showed that in this classroom learning environment there was a mixture of planned and unplanned activities as the students interacted with the teacher. Unplanned activities are evidenced in a number of the above instances where student interest and interaction took the teacher beyond or outside the classroom delivery plan. The teacher's statements to the researcher contained in the above Instances one, three, seven and eight all indicate the nature of unplanned activities. As observed, the students pursued content areas for more relevance, application or
justification and the teacher responded. The teacher managed the
delivery of the curriculum with sufficient flexibility to enable student
input and participation.

Clearly unplanned activities in the classroom arena were an important
contribution to the curriculum process and the nature of the classroom
reshaping interaction process required the teacher at times to enter into
unplanned activities in order to be responsive. The teacher’s planned
activities were critical to the curriculum delivery process overall but the
unplanned activities of classroom interaction and the broader aspects
beyond the classroom, such as the practices of the students’ workplace
and the practical requirements of employers, had an impact. In
discussions with the teacher on this aspect he commented that “via the
teaching process the classroom did shape the curriculum”. (Research
Notes (1) 3/8/89)

In response to the research question this case study sought to examine,
there are several points for comment. As the curriculum was experienced
and grounded in the classroom student participation and interaction
clearly made an important contribution to the curriculum process. The
extent of this influence varied across the topics and was mainly related to
students’ workplace experiences and currency of knowledge. Ideas and
examples brought into the classroom by the students helped shape the
curriculum particularly in respect of its relevance and application.
Student interaction contributed to the curriculum in an unplanned,
spontaneous way as the curriculum unfolded in the classroom given the
students’ levels of interest, motivation, understanding and knowledge.
Student contribution was also part of the classroom reshaping since the
teacher, in preparing for delivery, was conscious of student pressure that
would result from interaction in the classroom and that his credibility would be under pressure. The teacher's contribution was important in the interaction given his flexible approach and a desire to meet student needs within the parameters of the syllabus. He supported the rationale of useful, practical and applied knowledge and thus invited and facilitated student interaction and at times moved beyond classroom preparation as a means of achieving relevant curriculum outcomes. Together, then, the students and teacher made an important contribution to the curriculum through the classroom interaction reshaping process.

The evidence from this case study suggests that the unfolding and reshaping processes in the classroom with student input and influences are very important curriculum elements. The classroom site and related teacher preparation thus contribute to the overall curriculum development process. The following two sections offer further evidence in support of this claim.

4.4 OTHER CLASSROOM OBSERVATIONS

In this section reference is made to a number of TAFE classroom observations made by the writer in the years between 1985 and 1994. These observations are spread over a wide cross-section of classroom situations ranging from Trades areas such as Automotive Trade, Hairdressing and Welding through to the paraprofessional areas of Office Administration (Secretarial Studies) and Child Care and the creative area of Art and Design. In all the writer entered fifty seven classrooms across fourteen different sections in ten colleges throughout the Metropolitan Sydney and Illawarra areas. Thirty of these TAFE classroom observations
were made by the writer whilst a part-time lecturer in curriculum development for the Institute of Technical and Adult Teacher Education (now within University of Technology, Sydney) in 1985 and 1986 and the balance were observations of TAFE teachers by the writer as part of an administrative function towards teacher’s assessment for permanency and promotion during the years 1988 to 1994.

The aim of this section is to provide further illuminative examples of the curriculum reshaping process observed from curriculum in action across a number of different TAFE sections and colleges.

**4.4.1 Observations at Institute of Technical and Adult Teacher Education (ITATE)**

During the years 1985 and 1986 the writer observed teachers in TAFE classrooms who were enrolled in Diploma Teaching at ITATE whilst employed as full-time teachers with TAFE. Part of the formal requirement of the Diploma was for teachers to be observed a number of times in class by an ITATE lecturer who provided a written report (Appendix 13) and comment back to the teacher. During this two year period the writer observed thirty classes in nine metropolitan and country colleges across the seven sections: Secretarial Studies, Applied Electricity, Art and Design, Vehicle Trades, Biological Sciences, Hairdressing and Carpentry and Joinery as detailed below (Figure 4.2). Like the teachers in the research conference these teachers were relatively inexperienced but had been teaching in TAFE NSW for one year full-time prior to these class observations and mostly came from a background of part-time teaching with TAFE NSW. Classes observed were a ‘normal’ class and part of the teacher’s regular teaching program.
FIGURE 4.2
TAFE NSW TEACHER OBSERVATIONS – ITATE

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Sections</th>
<th>Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 (Male)</td>
<td>Applied Electricity</td>
<td>Wollongong, Mt Druit, Sydney</td>
</tr>
<tr>
<td>7 (2 Male, 5 Female)</td>
<td>Art and Design</td>
<td>Dapto, East Sydney, Wollongong West</td>
</tr>
<tr>
<td>2 (1 Male, 1 Female)</td>
<td>Biological Sciences</td>
<td>Sydney</td>
</tr>
<tr>
<td>1 (Male)</td>
<td>Carpentry and Joinery</td>
<td>Randwick</td>
</tr>
<tr>
<td>4 (2 Male, 2 Female)</td>
<td>Hairdressing</td>
<td>Meadowbank, Petersham, Sydney</td>
</tr>
<tr>
<td>6 (Female)</td>
<td>Secretarial Studies</td>
<td>Petersham, Wollongong, Meadowbank</td>
</tr>
<tr>
<td>4 (Male)</td>
<td>Vehicle Trades</td>
<td>Wollongong</td>
</tr>
<tr>
<td>30</td>
<td>7</td>
<td>9</td>
</tr>
</tbody>
</table>

The procedure adopted for each observation was for the observer to enter the classroom by prior arrangement with the teacher who provided the observer with a copy of the lesson plan and details of the relationship of the lesson to the curriculum document. This enabled the writer to not only observe the teaching method and style but also the opportunity to observe any examples of curriculum reshaping as the curriculum commenced with the teacher in preparation for the classroom and then proceeded through classroom delivery and student interaction.

Classroom Data

From these observations there were numerous examples of the curriculum being reshaped as it moved into the classroom arena with the teacher and students engaging in teaching and learning activities. All the classes observed were vocationally orientated and comprised students who were mature age, had at least some work experience, were attending in their own time (except for apprentices in the Trades areas) and sought relevant, practical, applied skills and knowledge. With the exception of Art and
Design, which was Associate Diploma level, all were Certificate courses. The following are examples drawn from classrooms observed in six of these sections.

1. **In Secretarial Studies** (now Business Services). Whilst classes in this area (six were observed) were essentially a transfer of skills with little scope for content interaction, there was strong pressure on the teacher to shape the content towards direct work relevance. In word processing the use of relevant software was fundamental to students enrolling: the software had to have commercial application to be useful and thus be work related. It was observed that students entered the classroom with an expectation of relevance, efficiency and application and sought both work related, useful examples and use of current technology. These expectations were raised at the time of enrolment when teachers were in attendance and thus influenced teachers to reshape the curriculum for the classroom. Teachers had to make sure that the computer software, for example, was similar to that being used in the workplace and responded accordingly – or lose student enrolment.

With shorthand the focus was on speed and accuracy required in the workplace. In formatting commercial letters for office practice the emphasis was on work standards and, in the topic telecommunications, the use of Yellow Pages was tied directly to examples of use around the office. Generally, across the areas of word processing, typing format, shorthand and telecommunications the emphasis was on workplace application, quality and efficiency. One teacher labelled part of a topic in shorthand “efficient work habits” (Research Notes (2) 23/10/1986). Another teacher
commented in a typing class that "a good typist uses work such as we will be doing to-day to pick up production rate – which will leave a little extra time for the more complex tasks (Research Notes (2) 25/10/1986). These emphases were not written into the curriculum document. The teachers moved beyond the written document to focus students on the workplace and thus reshape the content to be more than a skills learning exercise. The teacher extended the focus to on-the-job attitudes.

2. In Carpentry and Joinery (one observation) the emphasis was on understanding carpentry principles and practical application to the job. In the class observed, the topic was "steps of stairs" where the students were to learn the terminology, set out and proportion treads of risers and adapt the setting to concrete stair framework. In addition the students were to become generally aware of building regulations (Ordinance 70) for the construction of stairs. Although the curriculum content covered building techniques and regulation the students extended their skills base through questions seeking more knowledge of these regulations in a practical sense for the work situation. The students put pressure on the teacher to emphasise and develop more aspects of the curriculum which related directly to the building requirements of Ordinance 70 for their work. They required more detail of Sections 24 and 25 and how their work would comply in practice. During a class break the teacher obtained Sections 24 and 25 from his office and provided further information to the students.
In the following five examples the curriculum reshaping process is further illustrative of student interaction and influence through experience, motivation and maturity.

3. For **Vehicle Trades** (three classes observed) there was a strong emphasis on technique and quality. In the topic “reinforced plastics” the teacher demonstrated the latest techniques and instructed students in the use of spray guns, resins and product quality as far as possible within the prescribed class time. The students though were keen to achieve industry standards which required more training and practice than classes could allow students individually because of extensive preparation and drying time. The teacher responded to this need by allowing students special project time outside the class whereby students were able to access the equipment and work on their own personal projects in their own time. In this way the teacher “extended” the curriculum delivery process beyond class time and catered for student needs. The teacher commented that quality levels prescribed and allowed for in the curriculum were not sufficient for students in a competitive, high technology industry and thus he allowed his curriculum delivery to be supplemented with additional time and access as negotiated by the students.

4. In **Applied Electricity** (six classes observed) a variety of topics were observed including electrical circuits, industrial electronics and basic digital technology which essentially required knowledge and skill transference in technical areas. It was observed that students sought up to date technical knowledge and this required recent technological resources. This called for the teachers to work closely with manufacturers to access updated information and equipment.
A way of achieving this was to employ part-time teachers from the applied electricity field with access to information and resources. In this way demonstration material could be provided and most importantly, the latest expertise made available. There were also arrangements for full-time teachers to return to industry for brief periods. The students were requiring teachers in this essentially theoretical subject area to transfer knowledge and skills to meet their practical workplace needs. For example, in the topic Electric Currents several students wanted to know how maximum output is achieved on the very latest common base amplifier used at their workplace. The teacher answered the question and moved beyond the circuit diagrams and the syllabus content to a workplace application. Thus curriculum content was continually reviewed to cater for rapidly changing technology in response to specific student demands.

5. The **Art and Design** area has a strong emphases on skills and techniques but because of its artistic nature there is a 'creative' focus as well. The classes observed (a total of seven) represented a cross-section of special areas in ceramics and Fashion design. While teachers catered for student needs in a 'creative' way by encouraging freedom of expression, there were pressures on teachers to be relevant and useful. In the Fashion Design class on Fashion Drawing and Rendering, for example, whilst the content required subjective interpretation there was emphasis on industry requirements. Students were studying the Associate Diploma for vocational reasons and required knowledge and skills in the latest techniques and designs. The teacher helped achieve this by introducing the latest techniques and approaches drawn from overseas films and
journals and the students, in turn, brought in examples from their workplace. In this way the curriculum was given currency as the students questioned the teacher and provided viewpoints of the workplace. The teacher and students renegotiated the curriculum and helped provide a fashion focus otherwise generally lacking and going well beyond the formal curriculum requirement to:

Illustrate a female figure rendered in paints in a wash showing the development of rendering a floral print with colour buildup and shape of design. (Research Notes (2) 11/9/86)

6. **Biological Sciences** is a complex technical area and has a strong focus on precision and measurement. There were two classroom observations, one in Biological Instrumentation (photomicrography) and the other in the Biliary System. In Biological Instrumentation knowledge and skills were transferred with little student 'interaction' but pressure was evident for the teacher to be very well prepared and to use the most up to date equipment. This required the teacher to be aware of the latest laboratory techniques and to use accurate terminology. The students were all working in the field and required relevance and precision. An example of pressure on the teacher and curriculum reshaping was agreement between teacher and students that the teacher would move through the intended content providing handouts and aid students note taking via dictation so that the content could be covered efficiently and quickly allowing extra time to review latest developments in the field so that the curriculum could be extended to include such practical areas as being able to “set up a photomicroscope for colour photomicrography and align it using the manufacturers...
specifications” (Research Notes (2) 28/7/1986). This approach assisted the students’ technical knowledge of the workplace a factor often overlooked in the formal curriculum document and left to the teacher and student.

Concluding Comment

Of special interest in these examples, particularly with the first two, Secretarial Studies and Carpentry and Joinery, is the significant role the teacher played in the curriculum reshaping and focussing process.

The first two examples illustrated how teachers addressed the requirements of the workplace as a priority and thus ensured relevancy and application for the student. There was little student interaction but student expectations were important and acted as a covert student agenda for the teacher to employ appropriate methods and approaches in the classroom. In the Secretarial Studies area the teachers ensured this appropriateness through the use of current computer software, word processing technology and office applications. In Carpentry and Joinery whilst there was an emphasis on the skills required for “steps of stairs” there was significant student pressure for the teacher to draw on workplace knowledge and to impart information not in the curriculum on building rules and regulations in order to meet Council requirements (and licensing laws) and thus move beyond the curriculum documentation to meet student needs. In the other examples there is evidence of the curriculum being “extended”, “re-negotiated” and “reviewed”.

4.4.2 Other TAFE NSW Classroom Observations

In the years 1988 to 1994 the writer carried out a number of other TAFE NSW classroom observations as a senior officer in TAFE NSW for reasons of permanency or promotion of teachers within the TAFE NSW system. Twenty seven classroom observations were made across ten sections in colleges based in the Illawarra. Of these ten sections, seven were in sections not included in ITATE observations: Electrical Engineering, Fitting and Machinery, Child Care, Adult Basic Education, Rural Studies, Tourism and Hospitality and Welding. The procedure for observing these classes was similar to Section 4.4.1 where teachers provided a copy of the lesson plan and an indication of the context in the curriculum. In this case, though, there were two observers forming part of a 'panel' assessment of the work in the classroom. These observations were to provide the opportunity to seek further evidence of the curriculum reshaping process.

The teachers in this case had more experience than those in the other two groups. They were all full-time TAFE NSW teachers who had been teaching for at least two years – about half of them had been teaching for more than four years.

It was found that classes observed in these seven new areas reinforced the evidence outlined in Section 4.4.1 that teacher and students reshaped the curriculum at the classroom interface to cater for personal needs or the workplace. In Adult Basic Education, for example, the curriculum for literacy and numeracy is structured in terms of content but is flexible in terms of delivery, depending on student entry level. The student teacher ratio is small (6:1) to help the curriculum cater for individual needs and
the students and teacher work together at an appropriate pace shaping the curriculum to the students' needs. In **Rural Studies** the topic objectives of the class observed in Urban Horticulture were regarded as most important guidelines but the relevance of the course was enhanced (at the students' request) by moving beyond formal guidelines. Students were transported by bus to local nurseries where marketplace techniques of plant handling and care could be observed first hand. The students (a number were employed in local nurseries) helped put these arrangements in place. Thus the students' input was vital to shaping the curriculum and adding relevance and industry relatedness at the classroom interface.

In **Tourism and Hospitality**, the students were very focussed on practical, 'hands on' knowledge and skills. In the travel class observed, for example, there was an emphasis in the curriculum on meeting industry and award standards (facilities, equipment, health regulations). Students brought in recent publications and updated information from the workplace on destinations (the topic of the observed class) which were passed around the class and put on display in the classroom. The teacher was facilitating a classroom focus on the syllabus topic which enabled a reshaping of the curriculum to meet student needs by the students themselves.

The approach in the **Child Care** class observed was, similarly, to encourage current knowledge and work practices being brought into the classroom. This was partly achieved by placing students (field practice) in child care centres for practical experience. Students were then encouraged to share their experiences with the class and thus help reshape the curriculum in classroom activities.
The above two sections have detailed a number of significant examples across a wide range of fields which provide further evidence of the curriculum reshaping process demonstrated in the classroom study, Section 4.2 of this chapter. Clearly teachers and students have an impact on the curriculum in the TAFE NSW classroom. This impact commences with the teacher at the classroom preparation stage and continues as the teacher and students interact and participate in curriculum activities.

4.5 SUMMARY AND CONCLUSIONS

This chapter has focused on the importance of the TAFE NSW classroom where the curriculum unfolds and is reshaped as teachers and students interact in the curriculum delivery process. The focus for research has been curriculum as experienced at the TAFE NSW teacher-student interface through a classroom case-study, numerous classroom observations and a study of teacher perceptions. The research has been guided by the principle of methodological triangulation. The chapter's research is depicted as follows:
FIGURE 4.3

STUDY OF TAFE NSW TEACHER-STUDENT INTERACTION
CHAPTER FOUR

The findings from these three areas of classroom research provide clear evidence that the teaching and learning activities of the teacher and students in the TAFE NSW curriculum delivery process make an important contribution to curriculum development. TAFE NSW classroom situational factors with their particular characteristics and features enhanced and assisted in shaping and reshaping curriculum outcomes. In the 'search conference' (Section 4.1) teachers perceived that the curriculum document was a guideline or framework which was moulded and reshaped in response to student needs at the classroom site.
The evidence from the classroom case study (Section 4.3) showed that this process commenced at the classroom preparation stage as teachers perceived the needs of the students and continued into the classroom with teacher, student interaction and both planned and unplanned activities were found critical to the curriculum delivery process. Both teacher and students contributed to a curriculum reshaping process. These aspects were supported by numerous instances of interaction across a variety of classes over several years (Section 4.4) as students were observed influencing the curriculum by virtue of their work experience, motivation and maturity.

It was also clear that the focusing and reshaping of curriculum via teacher-student interaction ensured the curriculum was relevant and practical, consistent with a strong TAFE NSW curriculum tradition.

What has emerged from this classroom research is that the TAFE NSW classroom is no mere site of implementation – it is a critical site of curriculum development. There is clear evidence from the nature of classroom interaction identified above that reshaping is widespread across TAFE classrooms.
Chapter Five
Conceptual Framework
The aim of Chapter Five is to identify and develop a number of factors (contextual forces and curriculum principles) for a curriculum development conceptual framework which can be used as a basis for the thesis model in Chapter Six.

In Chapter Three it was shown that there is no universally accepted model across the curriculum field representing the curriculum development process. Further, there is at present no approach that adequately represents TAFE NSW curriculum processes given the special features and characteristics of the TAFE NSW system set out in Chapter Two and in particular the importance of the classroom as a site of curriculum development as demonstrated in Chapter Four. This chapter endeavours to address this latter problem by proposing a conceptual framework comprised of six critical curriculum factors which can accommodate the specific curriculum context and workings of TAFE NSW and which will provide a conceptual basis for constructing a curriculum development model specifically for TAFE NSW in Chapter Six.

The six curriculum factors are identified as three contextual forces - curriculum theory characteristics, TAFE NSW features and characteristics and economic and social context and three areas referred to as curriculum principles - elements, axioms and values.

After commenting upon the need for and purpose of a conceptual framework and briefly reviewing the context of TAFE's curriculum the chapter is organised as follows: firstly it considers the three contextual forces commencing with curriculum theory characteristics - next the
relevance to TAFE of curriculum writers reviewed in Chapter Three is considered. How this literature assists in understanding TAFE NSW curriculum theoretical processes is extended upon (from Chapter Three), assessed and a summary of curriculum characteristics is offered to form part of the conceptual framework. Then, drawing on Chapters Two and Four, TAFE NSW's context and the crucial role that the TAFE NSW classroom plays in curriculum development, is reviewed. An outline of the third contextual force – the importance of the economic and social context and national VET needs – concludes the section.

The following section then considers three curriculum principles – curriculum elements, axioms and values which are seen as critical to guiding TAFE NSW's curriculum development. The final section presents a schedule summarising the curriculum development concepts, components and relationships identified throughout the chapter and concludes with a diagrammatic overview of the framework.

5.1 A CONCEPTUAL FRAMEWORK: NEED AND PURPOSE

In 1966 Goodlad claimed that: "Nowhere in education is there greater need for conceptual systems to guide theory-building, research, and planning than in the field of curriculum" (1966 (a):141). More recently Marsh (1988) noted that:

The frustrations for curriculum writers are that, although the conceptualising of curriculum theories still eludes us, their potential uses are very clear. Appropriate curriculum theories (if we had them) could guide the work of teachers, policy makers, administrators, etc. (Marsh, 1988:217).
The framework presented here for TAFE NSW curriculum is constructed in the belief that there is not only a need for TAFE curriculum theory given, that

any enterprise as complex as curriculum development requires some kind of theoretical or conceptual framework to guide it. (Taba, 1962:413)

but that this theory should be a practitioner’s theory (Schwab, 1969; Jenkins and Shipman, 1976) of the TAFE curriculum process. Goodlad (1979) comments on the link as follows:

It has been my belief that the prime criterion to be satisfied by any reasonably adequate conceptual system in the field of curriculum is that it would both provide perspective for the practitioner and portray practice for the theorist. (Goodlad, 1979:19)

Taba (1962) refers to a conceptual system for curriculum or theory of curriculum as a relationship of many interacting and related elements:

(it is) a way of organising thinking about all matters that are important to curriculum development: what the curriculum consists of, what its important elements are, how these are chosen and organised, what the sources of curriculum decisions are, and how the information and criteria from these sources are translated into curriculum decisions. (Taba, 1962:420)

Laird and Stevenson (1993) also make reference to the significance of the relationships between curriculum elements: “a curriculum framework is often portrayed in terms of a set of elements which are interrelated” (Laird and Stevenson, 1993:76).
Tyler (1975) refers to curriculum development as a practical exercise endeavouring to achieve an educational end "not primarily attempting to explain an existential phenomenon" (1975:221) and that:

an essential early step in curriculum development is to examine and analyse significant conditions that influence the construction and operation of the curriculum. (Tyler, 1975:221)

Goodlad (1979; 1966(b)) refers to the purpose of a conceptual system in curriculum as:

... a carefully engineered framework designed to identify and reveal relationships among complex, related, interacting phenomena; in effect to reveal the whole where wholeness might not be thought to exist. (Goodlad, 1979:19)

These comments on the need, approach and function of a conceptual framework for curriculum development provide a rationale for the framework of conceptual ideas constructed in this chapter.

5.2 TAFE NSW CURRICULUM CONTEXTUAL FORCES AND CURRICULUM PRINCIPLES

The following two sections (contextual forces and curriculum principles) outline the six curriculum factors which form the basis of the conceptual framework.
5.2.1 TAFE NSW Curriculum Contextual Forces

In building a model for curriculum development in TAFE NSW it is crucial to recognise the context in which it is developed. Discussing curriculum theorising and context Gough, for example, comments that context is critical to any curriculum: “Curriculum decision-makers shape, and are shaped by, their social contexts” (Gough, 1984:65).

Indeed Cornbleth (1990) posits that curriculum as practice (what actually happens in the classroom):

\[
\text{cannot be understood adequately or changed substantially without attention to its setting or context. Curriculum is contextually shaped. (Cornbleth, 1990:6)}
\]

The literature review in Chapter Three shows that the situational context both internal and external is particularly important to curriculum. Chapters Two and Four show what this means for TAFE NSW.

The situational context influencing TAFE NSW is made up of three broad factors – curriculum theory characteristics, TAFE NSW characteristics and features and economic and social context – as follows.

It is important to note that “context” is a very broad concept made up of these three individually important forces. These contextual forces interrelate and are not easily separated from each other – furthermore they are continually changing. Together they form a very powerful influence (Chapter Six, Section 6.1 takes this further).
(i) Curriculum Theory Characteristics

This section addresses a central question of the thesis: the extent of the relevance of curriculum theory to TAFE NSW curriculum development processes given the special features and characteristics of TAFE NSW (Chapters One and Two; Sub-Section 5.2.1 (ii) over). The review of curriculum literature in Chapter Three focused firstly on the curriculum field generally (Section 3.2) and examined curriculum literature from the objectives-based tradition, process approaches, practical theorists and critical theory. This review showed that although the focus of the literature is on the school system it had relevance and application to curriculum development in TAFE NSW. Indeed it was shown that TAFE NSW needs a strong eclectic theoretical curriculum base – drawing on a mixture of all these approaches (Chapters Six and Seven take this further).

The review of TAFE curriculum literature written from within and outside the NSW TAFE system (Section 3.4) showed that there is clearly no one curriculum development model which fully depicts the TAFE curriculum process although an objective-based approach has dominated TAFE curriculum theory and practice. In the field of adult education (Section 3.3) the main concern for TAFE NSW which emerged from the review of the literature related to teaching and learning aspects of curriculum in the classroom rather than to the planning of curriculum.

While some curriculum theorists reviewed in Chapter Three offer ideas clearly relevant to and supportive of TAFE, others may initially appear less relevant. However it will be argued here that a number of the latter reveal significant and perhaps unexpected relevance in the TAFE context.
In the following commentary specific curriculum development characteristics relevant to TAFE NSW have been drawn from curriculum theorists across the curriculum field examined in Chapter Three. The curriculum characteristics may be summarised by claiming that curriculum development should be:

- **Context Driven**
- **Needs Based, Objectives Driven**
- **Teacher and Student Generated and Process Focused**
- **Approached With "Common Sense" and Pragmatism**
- **Focused on Teaching and Learning**

In showing how and why these ideas are relevant to TAFE NSW reference is made to Chapters Two, Three and Four. The approach taken is not to attempt to adopt a particular established model for TAFE NSW but to draw from each what is most relevant in order to build an eclectic model appropriate to the TAFE NSW context.

**Curriculum Should be Context Driven**

Skilbeck (1972, 1976, 1984) stresses what he calls "situational analysis" as a crucial step for curriculum development (Chapter Three, Section 3.2). Any account of curriculum development must take account of the context in which it is placed – both external and internal factors. External factors refer, for example, to changes and trends in society, expectations and requirements of employees, changing nature of subject disciplines, changes and developments in ideas for curriculum practice, flow of funding and resources in support of curriculum. Internal factors refer to teachers' and students' attitudes, skills, knowledge, experience, existing resources – plant and equipment, organisational support (e.g. administrative staff). Skilbeck (1984) sums up situational analysis with
the comment that “in short, the question we must ask is what are our curriculum problems and needs and how can we meet them” (Skilbeck, 1984:234). This is seen by many curriculum writers as an essential preliminary step in the process of curriculum planning. A number of TAFE curriculum theorists within and outside TAFE view this step as a very important initial one (Chapter Three, Section 3.4). In relation to the particular context of TAFE NSW, the TAFE Curriculum Task Force (1982), for example, makes specific reference to some widely recognised essential elements of the TAFE context in its model of a curriculum plan which responds to client needs (industry, community, students), government policy (social, political) and other major forces (state of the economy, social change, technological change) Quirk (1994), a staff member of TAFE NSW, commented recently that “through situational analysis curriculum developers make themselves aware of the factors operating in the context into which the curriculum will be introduced” (Quirk, 1994:68).

In TAFE NSW it is critical that the curriculum be driven by its external social, political and economic context so that it remains relevant and responsive to meeting the vocational and educational needs of industry and the community (Chapter Two, Section 2.1), a major stated aim of its Corporate and Management Plans (Chapter Three, Section 3.5). The present TAFE NSW Corporate Plan (1993-1995) lists its first major objective as to “provide for the effective participation of industry and the community in educational planning” (TAFE NSW, 1992:12).

Meeting the needs of industry and the community requires detailed understanding of contemporary workplace developments, trends, needs and contexts. TAFE NSW courses should have specific application to
these needs as part of the skill formation and work-based learning approach of the NTRA (Chapter Three, Section 3.5). TAFE NSW has traditionally effected this application by involving the community and industry in external course advisory groups as part of designing curriculum (to include the most relevant and useful content) and researching the needs of industry and community through structured committees and surveys (Chapter Two; Chapter Three, Section 3.4). More recently, under the new national training system, there are Industry Training Advisory Boards, community reference groups, a National Qualifications Framework (and Standards Framework), Competency Standards and a competency-based training approach to curriculum (Chapter Three, Section 3.5) to help ensure that training providers are industry and community driven.

TAFE NSW curriculum should not only closely relate to the external situation but also to its internal environment of teachers, students, physical and financial resources and organisational structures because these factors are critical to the planning and delivery of curriculum. Skilbeck (1972, 1984) refers to the importance of these internal factors (Chapter Three, Section 3.2) which relate to the immediate institutional environment. In TAFE NSW, for example, there is a critical need for teachers to have up-to-date knowledge, skills and the latest technology (e.g. current software and hardware for word processing; latest machinery for automotive engineering) to support the content of curriculum. In TAFE NSW the internal environment should be under constant review as the organisation endeavours to respond in the most relevant and effective way to industry and community VET needs (Chapter Two) within the guidelines of ANTA
and BVET (Chapter Three, Section 3.5). The question of internal "situational analysis" is taken up and further discussed in Section 5.2.1 (iii).

The context in which TAFE NSW's curriculum is developed is thus a critical element for inclusion in the thesis model. It was established in Chapter One that TAFE as a public VET educational provider is under continuous and close scrutiny which requires it to be flexible and relevant. This essentially means being responsive to industry and community needs and responsive to government (National and State) policy.

**Curriculum Development Should be Needs Based, Objectives Driven**

The very beginning of modern curriculum theorising was most relevant to TAFE with the work of Bobbitt (1918, 1924) focusing on vocational educational in the 1920's. Bobbitt's learner centred approach, stating goals in human behavioural terms and preparing students vocationally have been facets of TAFE NSW's curriculum approach since its foundations over one hundred years ago (Chapter Two). This relevance is reflected in TAFE NSW's curriculum approach aimed at the provision of useful, practical and applied education (Chapter Two). Traditionally, TAFE NSW has based its task, skills orientated approach to its curriculum on specified learning outcomes in terms of behavioural objectives (Chapter Three) which set out achievable tasks whether for general or vocational education. TAFE NSW, because of its education and training links with industry and the community, has had to be skills orientated to meet needs.
An essential element of competency-based curriculum is to start with the requirements or needs of industry and the community and to develop appropriate competencies within a standards framework (Chapter Three, Section 3.5). There is common ground here between early curriculum writers and those of today. The educational objectives proposed by Bobbitt, for example, are similar to the recent Mayer (1992) competencies in that they set out intended learning achievements (objectives, tasks) in terms of observable student behaviour (Chapter Three, Section 3.2). Bobbitt’s task orientation idea for teacher training is not dissimilar to Carmichael’s (1992) approach in the AVTS. Mayer and Carmichael also reflect this objectives based approach with an emphasis on competencies in key areas (in preparation for work) and vocational competencies (specified by industry or enterprises) (Chapter Three, Section 3.2). TAFE, as shown in Chapter Three, has trained students to competency levels set out in terms of clear student behaviours in accordance with industry, albeit less rigorously formulated than the standards of today, for many decades.

It is clearly appropriate for vocational education to base its work on well defined goals in terms of vocational skills and competencies which can be set out in terms of specific objectives that make clear to students and teachers what is to be achieved in job skill terms. This is relevant to TAFE NSW’s mission of preparing individuals with the general and specific skills needed for the workplace. A rational, systematic and orderly curriculum development focus on skills and competencies has been a feature of TAFE NSW’s curriculum approach right through to the present day similar to that proposed by Tyler and Herrick (1947) and indeed will continue into the future with the Competency Based Training approach (and NFROT guidelines) for curriculum in the VET sector. The logical
approach of setting up aims and objectives on a needs basis at the outset of curriculum development and following through the curriculum process with content, method and evaluation along the lines advocated by Tyler (1949) has been a hallmark of TAFE NSW’s approach. This is evidenced by the perceptions of curriculum writers from within TAFE NSW who depicted TAFE NSW’s curriculum development as a linear, rational and sequential process (Chapter Three, Section 3.4). Traditionally TAFE NSW has based its curriculum on industry and community needs and sought curriculum relevance through consultation with course advisory committees and more recently through Industry Training Advisory Boards (under the NTRA). Indeed as shown in Chapter Three (Section 3) TAFE NSW’s curriculum development method has been exemplified as a ‘Tyler Model’.

The clear relevance of needs and objectives to TAFE NSW’s work of training students for specific employment is reflected in TAFE NSW’s prime aim which has been to respond to the needs of industry and the community. This has helped TAFE NSW to be a provider of relevant, useful education and thus meet the needs of its students and the marketplace. In the last three years with the increased focus on the VET sector and national training reform the more standardised and structured the needs based, competency driven, student centred approach to curriculum has reinforced the demand for a needs and objectives based approach and extended what TAFE NSW has been doing for many decades. The needs based, objectives driven approach will be an essential characteristic of TAFE NSW’s curriculum development especially in the newly emerging national training system which is characterised by competency-based training, competency standards and an objectives driven, logical, rational approach (Chapter Three, Section 3.5).
The above two curriculum development characteristics place TAFE NSW's curriculum development as a rational, orderly, logical, rigid and linear process fixed on outputs. However in the following sections it will be argued that the TAFE NSW curriculum process must be sufficiently flexible to allow it to break out of the mould. Evidence supporting this argument is to be found in the classroom observations of the previous chapter where the curriculum in the classroom is often modified or varied by the teacher to make it more relevant or applied. Further, flexibility is to be valued since an important part of TAFE NSW’s curriculum brief is to meet the ongoing and changing needs of students, industry and the community (Chapter Two). In fact it is an accommodating and inclusive process in which teachers, students, the classroom and related processes have a very significant place. Although the emphasis on external needs and on specific behavioural objectives in curriculum development for TAFE NSW may make it appear that student and teacher generated curriculum development would be both irrelevant and impractical, the following curriculum characteristics bring these inputs into focus and indicate the need for more flexible curriculum processes in TAFE NSW.

Curriculum Development Should be Teacher and Student Generated and Process Focused

A number of curriculum writers reviewed in Chapter Three stress the importance of curriculum development being teacher and student generated. For example, Skilbeck’s idea of the learner being actively involved in the implementation of curriculum development is a feature of TAFE NSW (Chapter Four, Classroom Observations). The role of the teacher in the TAFE curriculum process both in the preparation of the curriculum for the classroom, and in its actual delivery is also very important (Chapter Four). Stenhouse’s (1975) concept of the teacher
taking a research stance to their teaching is very relevant here. There is evidence in classroom case study and observations (Chapter Four) that TAFE relies on teacher and student processes to help make the curriculum work at the point of delivery (i.e. being useful, practical, applied).

Goodlad (1966 (b), 1979) points out that students are potential generators of curriculum ends and means and as shown in Chapter Four TAFE NSW students can and do assist in shaping curriculum outcomes through classroom interaction and drawing on personal and work experiences. TAFE NSW brings a considerable depth and variety of experience (work and life) into its classrooms through its students (and teachers). To remain relevant and educationally effective, TAFE NSW has had to be responsive to students' needs and one way of doing this has been to draw on the experiences of the students in the classroom.

Goodlad’s “personal domain” focus and emphasis on personal values in curriculum development is most relevant to TAFE’s approach since it highlights an aspect which has been a feature of TAFE’s curriculum development for many years especially since the Kangan Report (1975). Although TAFE NSW’s curriculum approach is shown to be rational, logical and systematic it has not lost sight of the individual in this process (Chapter Two). While it has been responsive to industry and the community, TAFE NSW’s clients in the classroom should remain its central focus in curriculum development. This is because the personal domain is important to TAFE NSW – the curriculum experiences of students and thus the practice or experience of curriculum are a vital part of the whole curriculum process. Students place curriculum outcomes beyond the classroom into the workplace and community where, as a public institution, TAFE NSW is accountable.
The teaching and learning aspects of curriculum and the contribution of the teacher and student in the classroom is seen by Stenhouse (1975) as a critically important curriculum process. For Stenhouse processes developed through interaction and exchange between teacher and student are what matter. Stenhouse encourages an understanding of the nature of the process by which values, responsibilities, critical thinking and understanding are developed. Most appropriately for TAFE NSW, he believes that curriculum study should be grounded in the classroom (Chapter Three, Section 3.2) with a focus on educational activities and experiences. Importantly, as seen in Chapter Four the teaching and learning process in the classroom arena is indeed a critical part of TAFE NSW’s curriculum development because students experience and contribute to curriculum content and development in this arena. But this is done in the context of TAFE NSW’s structured objectives approach. The process aspect of curriculum development needs to be incorporated into a TAFE NSW curriculum model because the curriculum documentation is, as seen in Chapter Four, only a framework or guideline for content delivery and the delivery focus is left to the skills of the teacher and the interests of the students to generate.

The observations in Chapter Four showed that in TAFE NSW classrooms students have been encouraged to work out the meaning of the curriculum content for themselves. This is consistent with the “critical” stance advocated by Lovat and Smith (Chapter Three, Section 3.2) – that knowledge is socially constructed and meaning is negotiated and content critically evaluated. The curriculum context of Lovat and Smith’s work is social science classrooms in high schools. There are clearly different perspectives, opinions and values in relation to social and cultural issues and therefore a necessity for students through negotiation to build their
own understanding of the issues. As shown in Chapter Four in TAFE classrooms students bring different perceptions and concerns from their workplaces and work with the teacher to come to grips, through negotiation and questioning, with curriculum material and its relevance to their own workplace situation.

Huberman’s (1983) idea that teachers have certain preferences for selection of knowledge that is useful and practical at the classroom interface is also a feature of TAFE NSW, as seen in the classroom case study of Chapter Four, where the teacher was very conscious of students’ expectations and was careful to deliver content which had practical meaning and application for the students. It is important in TAFE NSW that the teacher should take this practical approach to curriculum to maintain its relevance and usefulness. Thus teachers and students have not just been passive participants of curriculum delivery in TAFE NSW.

The Classroom as a site of critical importance to TAFE NSW’s curriculum development is covered in more depth in the following sub-section (5.2.1 (ii)).

Curriculum Development should be approached with “Common Sense” and be Pragmatic

TAFE NSW curriculum development is a complex process and Schwab (1969, 1971), Reid (1978) and Walker (1971) all have particular relevance to TAFE NSW with their reference to the pragmatic. TAFE NSW curriculum processes need to rely on needs-based theory with an emphasis on a pragmatic, common-sense, open-minded, eclectic approach in sorting out its complexity as advocated by Schwab (1969, 1971) and, furthermore, be responsive to concrete, tangible situations involving tasks not just abstract
ideas (Reid, 1978). There is evidence for this in TAFE NSW as shown in Chapters Two and Four where teachers are seen to be pragmatic. Indeed, as demonstrated in the classroom observations of Chapter Four there is an expectation by students that curriculum will be approached in a pragmatic way by finding specific solutions to the immediate problem. Thus while TAFE NSW's curriculum is developed within an objectives based framework there is at the same time a flexible, openminded approach by teachers adjusting to the classroom situation which allows for modification and application to suit the needs of the students at an appropriate time.

For TAFE NSW to remain vocationally relevant as a technical and further education provider in a changing workplace it has continually adopted a pragmatic approach to its curriculum. Although TAFE NSW has followed the Tyler linear approach (Chapter Three) this has not prevented it being flexible and pragmatic – it has been adaptable to changing external demands, meeting specific student needs, industry and community requirements.

TAFE NSW's curriculum development should cater for a very wide range of vocational and general educational areas with a central concern for technical and practical skills. There is a breadth of knowledge required beyond the "technical" and the "practical" and the idea that curriculum should be approached in a critical manner such that the most suitable outcomes can be chosen and assessed in the light of student and teacher experiences is most appropriate to TAFE NSW curriculum processes. Teachers need to be adaptable, pragmatic and flexible in both planning and implementation and curriculum must allow for this. This is borne out
in the classroom observations, Chapter Four with, for example, the students' questioning the relevance and currency of curriculum and demanding workplace application not included in the curriculum.

Curriculum Development Should Be Focused on Teaching and Learning

A review of adult curriculum literature (Chapter Three, Section 3.3) concluded that any model of curriculum development for adults should pay particular attention to teaching and learning aspects. For TAFE NSW this is particularly important because a large majority of its students are adult learners and certain aspects of teaching and learning should be addressed in the curriculum's design and classroom delivery. As evidenced in Chapter Four, and shown in Chapter Three (Section 3.3) TAFE NSW's adult students are self-directed, they want value for time, are capable of reflective analysis, demand respect for their life and work experiences and have a preference for negotiating curriculum. This has implications for the thesis model since its curriculum focus is the learning environment of adults in the classroom.

Under the national training system a major goal is customer focus. The TAFE NSW Annual Report (1993-1994) made the following comment in this context:

Our students are the focus of everything we do. If we are to provide them with skills for work and to meet their lifestyle aspirations, we must provide the right courses... Our overriding commitment is to quality – the continual improvement of our teaching, course curriculum and materials... and services we provide to our customers. (TAFE NSW, 1994 (a):6)
It is imperative that teaching and learning aspects of curriculum should be included in the thesis model because of the impact that the classroom interaction has on the curriculum (Chapter Four). Not only should TAFE NSW be concerned with the processes of curriculum through interaction and management in the classroom (Chapter Three, Section 3.6) but it should be focused on its services to students (clients) in the learning environment so as to meet their educational needs (Chapter Three, Section 3.2) (this is borne out in Chapter Four). This is particularly important in the present changing VET climate with an increased emphasis on opening up the training market to more competition amongst TAFE NSW, private and other institutional providers (Chapter Three, Section 5) and the focus on meeting customer needs. The customer in the classroom is part of the product delivery and should be incorporated in the thesis model because meeting customer needs is an especially important part of the curriculum process both for TAFE NSW and the national training system.

(ii) TAFE NSW Characteristics, Features and Classroom Site
Chapters Two and Four have highlighted internal characteristics of TAFE NSW which shape the nature of its work. In these chapters evidence is offered that for TAFE NSW the background characteristics and features and the classroom site are particularly important aspects of the context for the curriculum’s development.

A conceptual framework for curriculum development in TAFE NSW must recognise that to adequately support the thesis model it is essential to take cognisance of the TAFE NSW identity established in Chapter Two which is in significant respects distinct from the school system and other post-compulsory educational institutions. Features which characterise TAFE
NSW relate to its courses, students and teachers. More specifically these refer to courses being vocational, relevant, practical and applied, teachers entering TAFE NSW with workplace experience and students of mature age, attending part-time and bringing a depth of experience (both work and life) to the classroom. These features are incorporated into the conceptual framework, Section 5.3.

**Classroom and the Experiencing of Curriculum**

The review of curriculum literature in Chapter Three, Section 3.6 relating to the classroom identified that the classroom is an important part of the curriculum process. Chapter Four took this further and offered evidence that TAFE NSW is involved in education and curriculum development within a specific classroom context and with specific purposes. It is argued that to understand and encompass the complexities of curriculum development in TAFE NSW a framework should take account of the curriculum process involved as TAFE NSW responds to the external environment through the delivery stages and that these processes be made an explicit part of the curriculum development process. Curriculum development is seen as a dynamic process and incorporates as a crucial part of that process, the complexities of the teacher and the student engaging in the actualisation of curriculum at the classroom interface. Importantly, this includes meeting student needs – as seen in Chapter Four the students influenced the relevance of the curriculum to the workplace and questioned the teacher’s current knowledge.

(iii) **Economic and Social Context**

There is a whole broad range of economic and social contextual factors such as employment, changing technology, state of the economy,
perceived status of occupations, government policy and market competition which influence and impact upon TAFE NSW. Changes in the economy for example, have a direct influence on courses offered by TAFE NSW, (e.g. the increased range and number of computer courses reflects the growth in the information technology area; the present preparation for the Olympic Games in Sydney generates interest in tourism and hospitality courses).

The TAFE NSW model must incorporate the external social, political and economic context in which TAFE NSW’s curriculum is developed because its VET response has to be contextually relevant to meet required education and training needs. To plan courses effectively and meet industry and community needs there must be close links between TAFE NSW and its external environment. For example, the present request by governments and the community for greater flexible delivery of TAFE NSW curriculum (offering courses at times more suitable to students, supporting country students with distance learning by satellite and block attendance) (Chapter Three, Section 3.5) will require close liaison between colleges and participants in the rural community. Another example is work based learning (Chapter Three) with organisation for on-and-off the job learning between employers and TAFE NSW sections. The process has to be a two-way street in which there is strong participation from industry and the community with TAFE NSW, in turn, servicing customer needs. TAFE NSW must keep in touch with industrial developments, community expectations and values and thus maintain the relevance (and need for change) of its curriculum. Indeed knowledge and awareness of curriculum contextual issues particularly those relating to its external environment has been an essential part of TAFE NSW’s educational mission from its foundations (Chapter Two).
A critical element of this context for the TAFE NSW curriculum at present is VET training needs.

**Vocational Education and Training Needs**

Any proposals for a curriculum model for TAFE NSW must take account of recent significant and far-reaching developments in the vocational education and training in Australia described in Section 3.5, Chapter Three. The National Training Reform Agenda (NTRA) focuses on eight major areas all of which affect TAFE NSW curriculum in some way. Of the eight key components (Competency Standards, Recognition of Training, Curriculum Delivery and Assessment, Competency Based Training, Entry Level Training, Training Market, Access and Equity, Funding Training) the most important areas for curriculum development in TAFE NSW are the competency-based education and training (CBT) approach to curriculum and curriculum delivery and assessment. The CBT approach imposes increased structure, standardisation and regulation on TAFE NSW curriculum processes and practices through the various guidelines and principles set out by the Standards and Curriculum Council (SCC) and the National Framework for the Recognition of Training (NFROT). Curriculum in TAFE NSW is being developed within the broader context of the Australian Vocational Training System (now MAATS) the cornerstone of which is the CBT approach. Curriculum is developed in CBT to:

- achieve specified competencies
- provide for Recognition of Prior Learning
- emphasise what a person can do
- address outcomes achieved rather than time spent
- involve industry and students in determining what will be learned. (VEETAC, 1993 (b))
In respect of delivery CBT curriculum requires:

- flexibility
- competency standards that can be translated into curriculum or used for assessment
- operational links between standards and curriculum development. (VEETAC, 1993 (b); ACTRAC, 1992; 1994)

In curriculum terms for TAFE NSW the logical, ordered NTRA rationale is similar to the objectives based approach with which TAFE NSW has been closely identified and the idea, for example, of specifying competencies for achievement in the NTRA equates closely with a behavioural objectives approach which has been well established in TAFE NSW. The emphasis of the ordered, rational, mandated curriculum process (Chapter Three, Section 3.5.3) adopted by the NTRA is administrative and lacks, at this point, a focus on the implementation of the curriculum in the classroom still less on the curriculum development role of the teacher and student in the classroom. The concept of competency itself is not a new one for TAFE NSW curriculum, as shown in Chapter Three, it goes back many years. It is interesting to note that a TAFE NSW curriculum officer in 1980, referred to in Chapter Three, comments that the "task of TAFE NSW is to prepare students for competency in some field" (Svirskis, 1980:141). Another curriculum officer in 1983 in a TAFE NSW guide on syllabus construction makes detailed reference to performance objectives, the conditions under which they apply and their acceptable standard (Ellis, 1983:5-8) all of which are now incorporated in the NFROT principles (Chapter Three, Section 3.5) curriculum exemplar and principles for VET curriculum.
While the competency-based education and training system as a form of objectives driven curriculum is not new to TAFE NSW, the emphasis in the new national VET system will extend its present approach into a competitive curriculum marketplace with choice between public, private and industry training providers (Chapter One). This will require TAFE NSW curriculum to adhere to a national set of procedures and guidance by regulatory bodies within the context of the National Training Reform Agenda and will place pressure on TAFE NSW teachers and students to meet curriculum guidelines. But this constrains TAFE NSW to a linear, logical curriculum model tied to specified objectives and overlooks the more open, flexible process and pragmatic approach which as argued above (Section 5.2.1) is necessary if TAFE NSW is to optimise its curriculum development process. Competition (and the distribution of funding from the Australian National Training Authority to agencies) will demand of TAFE NSW a stronger focus on the ANTA themes of curriculum quality, responsiveness, accessibility and efficiency (Chapter Three, Section 3.5) and it is essential that these factors be included in the thesis model and thus built into the conceptual framework.

It is clear that TAFE NSW curriculum is significantly constrained by immediate contextual factors such as VET policy as well as by a range of more ‘distant’ contextual forces.

5.2.2 CURRICULUM PRINCIPLES

The purpose of this section is to develop a set of general curriculum principles for TAFE NSW to be used as a guide to curriculum development in the form of curriculum *elements, axioms* and *values*. The
reason for setting up these curriculum principles is to establish a broad framework for the thesis model within which TAFE NSW's curriculum is developed.

(i) Curriculum Elements

A review of the curriculum theorists considered in Chapter Three reveals that a significant number of theorists advocate a model organised around four main areas in curriculum development: objectives, content, method and evaluation. There are other approaches for organising curriculum development but this view is the dominant one and clearly there is a broadly held but not uncontested view that curriculum development is organised around these four elements. Tyler (1949) made reference to these key curriculum areas in the four major elements or questions he identified for curriculum construction, although for him 'content' was a component of objectives and 'methods' was divided into two components - 'experiencing' and 'organising' (Chapter Three, Section 3.2(i)). In fact there has been a consensus of thinking amongst curriculum theorists since the modern origins of curriculum that these four areas are an important focus for curriculum development but they often use different terminology and theoretical structure (Taba, 1962; Inlow, 1966, 1973; Johnson, 1967; Saylor, Alexander and Lewis, 1981 and Miller and Seller, 1985).

Further, over the years there has been a variety of views on the nature of each element, their relative importance to each other and lengthy debate on an appropriate starting point and over the order or sequencing of these areas for curriculum development. As Print (1993) comments "Consensus about the relationships between the curriculum elements, their order and their exact nature has largely evaded those writing in the curriculum field" (Print, 1993:63). While some theorists go so far as to argue strongly
against using an objectives approach at all (Stenhouse, 1975), other major theorists (e.g. Huberman, Schwab, Reid and Walker) argue for a more open, flexible approach to curriculum development but suggest differing starting points – situational factors (Skilbeck), teachers and classroom factors (Huberman), practical deliberation (Schwab; Reid) and a platform (Walker).

While keeping in mind the above comments, the following statements draw on Taba (1962), Nicholls and Nicholls (1978) and Print (1993) to offer a guide on the meaning of these concepts:

Objectives: planning learning opportunities (Nicholls and Nicholls, 1978:71)
specific statements of curriculum intent (Print, 1993:124)

Content: knowledge, skills, attitudes and values to be learned (Nicholls and Nicholls, 1978:48)
the subject matter of the teaching-learning process (Print, 1993:141)

Method: organising learning opportunities (Nicholls and Nicholls, 1978:65)
organising learning experiences (Print:1993:164)

Evaluation: Taba (1962) comments “since the curriculum is essentially a plan for helping students to learn, ultimately all evaluation goes back to the criterion of effectiveness of learning” (1962:311)
Print (1993) notes that “in its broadest sense, evaluation is concerned with making judgements about things” (1993:187)

A further area, situation analysis (Skilbeck, 1972; Nicholls and Nicholls, 1978) adds a fifth dimension. Nicholls and Nicholls (1978) include the four areas in their model and also incorporate situation analysis as a major part of curriculum development, which they regard as a cyclical process with no beginning and no end (Chapter Three, Section 3.2). These five elements also receive particular emphasis in the writings of those
concerned with vocational education and training generally. In referring
to curriculum development in the field of vocational education, for
example, Finch and Crunkilton (1979, 1985) state that the underlying
rationale is relevance to the workplace and that decision making is the
common theme of the whole process. They summarise curriculum
development in vocational and technical education into the following
three broad areas: planning, establishing curriculum content and
implementation. These three areas encompass the five elements – the
planning area includes establishing a decision making process and the
collection of curriculum data from the internal and external environment
(situational analysis), establishing refers to developing curriculum
goals,(objectives) and determining relevant material (content), and
implementing refers to identifying, selecting and developing materials
(methods) along with evaluation (1979:17).

It is appropriate that a model portraying TAFE NSW’s curriculum
development incorporate these five curriculum elements. While there
were differences in specific models proposed for TAFE NSW (Chapter
Three) and the literature review (Chapter Three) revealed that there was
no one model which adequately portrayed TAFE NSW’s curriculum
development process, a broad framework could nonetheless be identified
for TAFE NSW’s curriculum development which related closely to Tyler’s
(1949) four fundamental areas. Furthermore, as discussed in Chapter
Three (Section 3) an important aspect of TAFE NSW’s curriculum
approach is its unique situational factors (internal and external).

TAFE NSW has traditionally commenced its curriculum documentation
with a needs assessment in consultation with industry and the
community and, prior to forming curriculum objectives, carried out an
analysis of the situation (internal and external) (Chapter Three, Section 3.4). This has ensured that TAFE NSW relates effectively to its context, responding to industry and community needs. The curriculum resource document and teaching guides which TAFE NSW teachers have used generally reflect an application of these five areas (Chapter Three, Section 3.4 and Chapter Four). This has enabled TAFE NSW to remain coherent in its curriculum processes across a vast range and scope of courses. Furthermore, most importantly, in the evolving national CBT approach the five elements remain crucially important because as shown in the two TAFE NSW module examples – *Managing and Developing Teams (8767NC)* and *Sewing Machine Operations 1 (5971A)* (Chapter Three, Section 3.5) – they are a cornerstone of this approach. The curriculum is objectives driven – using a more centralised system attached to national standards – and is based on a situation analysis of 'economic and social' needs. The other elements (content, method, evaluation) are clearly fundamental to the modules, as shown in the examples.

It is therefore argued that TAFE NSW's curriculum development should be organised around these five elements as a dynamic and continuous process occurring over time but not necessarily in any particular sequence – earlier sections argue (Chapter Three) that each of these elements is important to TAFE NSW's curriculum development process. Nicholls and Nicholls (1978) comment that "there has to be a starting point and a particular sequence of the stages has to be suggested, but in the practical situation this is not necessarily so" (1978:14, 15). The five elements depicted by Nicholls and Nicholls' (1978) model are incorporated as part of the conceptual framework.
(ii) Curriculum Axioms

The previous section referred to five curriculum elements which can be used as a specific reference or guide for the curriculum development process in TAFE NSW. This section establishes ten important curriculum development axioms which it is claimed are relevant, in a more general way, to the curriculum development process in TAFE NSW.

Oliva (1988) has identified ten major guiding principles or axioms for curriculum development and improvement. Although these were not envisaged for a TAFE NSW context, it is contended that the axioms listed below which derive "not only from disciplines outside of professional education but also from the folklore of curriculum, observation, experimental data and common sense" (Oliva, 1988:45), are relevant to the curriculum process in TAFE NSW.

- **Curriculum change is inevitable and desirable.**

  The very nature of curriculum development in TAFE NSW as responsive to industry, commerce and the community makes curriculum change not only inevitable but desirable in respect of relevance and application. Oliva comments that "change in the form of responses to contemporary problems must be foremost in the minds of curriculum developers" (Oliva, 1988:32).

- **The curriculum is a product of its time.**

  It follows from the paragraph above that TAFE NSW's curriculum is a product of its time requiring continued review as it responds to social and economic change. The present forces for example, of technological change, multiskilling and restructuring have resulted in major changes to curriculum through the National Training Reform Agenda (and Competency-Based Training).
• Curriculum changes of earlier periods often coexist with and overlap curriculum changes of later periods.

This is particularly important in TAFE NSW as curriculum undergoes continuous, constant change. Parts of curriculum coexist and overlap as curriculum content adapts to the current situation. As shown in Chapter One curriculum is undergoing a continual but varied change as it is revised and updated. Curriculum revision, as Oliva states, “rarely starts and ends abruptly” (Oliva, 1988:35). This is evidenced in the Business Services Training Division (Chapter Two), for example, where curriculum has undergone substantial change over many decades with continual upgrading and modifying of existing curriculum and replacing it with content consistent with technological change e.g. typing skills for typewriting were replaced by keyboarding for word processing and computer applications. This change was built on over time as computer hardware knowledge and software skills became standard requirements in industry and the use of the typewriter has gradually became obsolete. Another example is from vehicular trades – as the fuel injection system replaces the carburettor system TAFE NSW must keep abreast of new technology for its relevance to the workplace but at the same time teaching the old system (as the new system replaces the old).

• Curriculum change results only as people are changed.

Curriculum development and change in TAFE NSW is driven by people – employers, teachers and students, for example. To effect change people involved with the curriculum have to be committed to and support the change. This may well mean bringing about changes in people’s attitudes and beliefs and effecting social change. A recent example in TAFE NSW of bringing about such change (where the author has been involved) was the introduction of a flexible delivery curriculum module for a refrigeration course. The long standing, lock-step method was replaced by a self-paced curriculum where
students would move through the curriculum at their own pace with reference to curriculum content provided in advance by teachers on student requests. Students presented themselves for testing when they were "ready" and not at a time nominated by the teacher. This change required teachers to reappraise their approach and adopt a more flexible, less structured, individualised focus to curriculum delivery (e.g. preparing material in advance for students' individual learning (for the student to access) required a significant shift in preparation and communication skills. At the same time students who were then in Stage Two of the course had to make important learning adjustments. People must be involved in the change process e.g. in the classroom.

- **Curriculum development is a cooperative group activity.**

Groups of people need to work co-operatively bringing together knowledge and skills as a curriculum focuses on appropriate objectives and content for a course. Developing a new course in Tourism and Hospitality, for example, may require people working from different areas (curriculum developers, writers, materials and resources experts) together with people from a mixture of tourism and hospitality disciplines (such as catering, nutrition, bar operation, customer service and hotel management). Cooperation is required not only amongst sections in TAFE NSW but in the broader context of industry and community, as seen in Section 5.2.1 above.

- **Curriculum development is basically a process of making choices from among alternatives.**

TAFE NSW's curriculum development is essentially a decision-making process about the nature of courses, their duration, sequencing of content, mode of delivery, location of offering, on-and-off the job training, full- or part-time course offering and the many other factors involved in this complex process. Choices from alternatives are thus made continually in TAFE
NSW. The decision making aspect of classroom delivery is discussed in this Chapter (Section 5.2.1).

• **Curriculum development is a continuous process (of improvement).**

Constant review, monitoring and evaluation are necessary for continuous improvement to the quality of the curriculum as the needs of learners and the community change. Oliva comments that "the curriculum can always be improved and better solutions can always be found to accomplished specific objectives" (1988:42). Areas for improvement to curriculum quality in TAFE NSW include the six principles of curriculum construction and development considered in Chapter Three (Appendix 3), for example – appropriate philosophy of VET, the psychology of learning (sequencing of topics), requirements of the subject discipline in the workplace.

• **Curriculum development is more effective if it is a comprehensive, not piecemeal process.**

The new Australian Vocational Training System (now MAATS), for example, needs to be comprehensive and take account of a multitude of factors identified in earlier chapters such as the integration of entry level training, meeting national competency standards and implementing competency-based training will require a comprehensive effort and be supported by a large investment of human and physical resources in TAFE NSW over a period of time.

• **Curriculum development is more effective when it follows a systematic process.**

To effect such a comprehensive effort curriculum development in TAFE NSW will have to follow a systematic and structured set of procedures. The national training guidelines, for example, being imposed on TAFE NSW through such bodies as ANTA, BVET, SCC along with the NFROT guidelines are there to help ensure this. This is not to deny though that there are tensions and
that there should be flexibility and pragmatism within this systematic process (which as shown in Chapter Four already exists).

- **Curriculum development starts from where the curriculum is.**

Curriculum change and renewal is a matter of consolidation and reorganisation in TAFE NSW by building on or modifying existing curriculum rather than starting afresh. TAFE NSW is a large, complex organisation with established structures and programs. Oliva comments that “the investment of thought, time, money and work put in by previous planners cannot be thrown out...” (Oliva, 1988:45). As shown in Chapter Two many curricula in the Business Services areas, for example, have been built upon and strengthened through a process of continual development over many years.

These ten principles or axioms are clearly relevant in a general way to the TAFE NSW curriculum development process and must be incorporated in the model portraying this process. The thesis model in fact includes the complexity and interaction depicted by these axioms – which demonstrates the need for a comprehensive, interacting, decision-making, continually improving and systematic curriculum process. The axioms are incorporated in the conceptual framework.

(iii) **Curriculum Values**

Inlow comments that “formal education as an institution of a culture has to reflect the values that combine to make that culture what it is” (Inlow, 1966:22). In the review of literature from the general curriculum field in Chapter Three, Section 3.2 a number of theorists placed significance in the role of values for curriculum development. For example, Tyler (1949) incorporated a place for values in his broad framework, Goodlad (1966
(b); 1979) focused on values at societal, institutional and instructional levels. Skilbeck (1972; 1984) incorporated values in his "situational analysis", Walker (1971) incorporated values in his "platform" for curriculum development. Fielding and Cavanagh (1983) refer to curriculum development as a process inextricably tied to value as one of its defining attributes (1983:17). In their description of the substantive nature of a curriculum they refer to five defining attributes, positing that a curriculum "has goal directiveness (objectives), is an educational plan, details a means of achieving these goals, entails decision-making prerogatives and is an expression of value preferences" (1983:17). In a later paper Cavanagh (1992) in putting forward a case for values (in curriculum research methodology) refers further to the key role of value preferences in the process of curriculum development in the following comment:

... (in curriculum development) ... the understanding of the value dimension was one of the key considerations to making sense out of the nature of the finished product as well as the process that went into making it (Cavanagh, 1992:151).

In discussing a curriculum development framework for vocational education Laird and Stevenson (1993) also refer to the centrality of values stating that "curriculum development is essentially a process in which value judgements are made, typically about such matters as intent, content, teaching strategies, learning experiences, assessment and evaluation" (Laird and Stevenson, 1993:74) and further that "curriculum development is essentially a set of innovative judgements, none of which is value-free" (1993:75). Indeed the question of values pervades the whole national training and curriculum system. Recently, for example, in...
commenting on the importance of values for education and training, Stevenson (1996) refers to the explicit values:

underpinning policy and practice in the recent thrusts towards ‘competency-based’ vocational education and training (VET) and ‘industry-driven’ VET, where values have been confined to economic views of social productivity. (Stevenson, 1996:21)

Curriculum in TAFE NSW is designed and constructed under the new national training system by trained curriculum personnel and prepared in a documented format (Chapter Three, Section 5 provides details of this documentation) as an educational plan for delivery by teachers. This plan is derived from the personal efforts of staff who have the scope to impose a set of value preferences and viewpoints on the structure and composition of curriculum – for example, at the ITAB national and state levels and the TAFE NSW ESCs – within the framework of national competency standards. This includes the selection of objectives, list of topics, the duration of the course, the sequencing of the topics and the method of assessment (Chapter Three, Section 3.5). But as already shown (Chapters Three and Four) curriculum in TAFE NSW is goal driven and entails ‘decision-making prerogatives’ and ‘expressions of value preferences’ at many points including decisions taken by the teacher at classroom interface. Indeed the educational plan has a set of teacher and student values imposed on it as it unfolds and is shaped and reshaped in the classroom (Chapter Four, classroom case study and observation). As Laird and Stevenson (1993) comment in relation to curriculum development in the VET sector:
Even where syllabuses are centrally designed, the influence of teachers who actually teach in classrooms, workshops and industrial settings reflects their values. (Laird and Stevenson, 1993:75)

For TAFE NSW, the curriculum development process incorporates the five elements outlined in the previous section but importantly, this whole process is made up of a large number of value preferences which give the curriculum development process direction, focus and meaning. Curriculum for TAFE NSW is a plan which has to be shaped and put into practice by decision makers at the classroom level. Goodlad (1966) comments that “a conceptual system is not value free and to accept curriculum practice as one beginning point is to express a value” (1966 (a):146). The whole curriculum development process is clearly value laden – from the design stage through the classroom delivery, as Laird and Stevenson comment:

In writing about the role of values in curriculum development, we are considering not only the work of any central office staff remote from the teaching/learning situation, but also those whose work is to guide the learning process. (Laird and Stevenson, 1993:75)

Thus there is a case for going beyond, for example, the CBT approach and incorporating values as part of a TAFE NSW curriculum development model.

Concluding Comment: Curriculum Principles and TAFE NSW Context
The five attributes of curriculum referred to by Fielding and Cavanagh (1983) can be viewed as depicting a curriculum’s essential nature. For the purposes of this conceptual framework the attributes provide a reference
point or benchmark for the curriculum (and its development) along with the five elements. Although the axioms, elements and values provide a set of principles which can be used to help conceptualise the process of curriculum development they must be utilised in a specific context and setting.

The special features and characteristics of TAFE NSW which set it apart from the school system identified in Chapter Two provide the basis for adding a specific social context with an emphasis on TAFE NSW curriculum practices to the above curriculum principles towards a TAFE NSW specific conceptual framework. Further, in Chapter Three it was posited that an important part of the TAFE NSW curriculum development context is the classroom arena where the curriculum is experienced by teachers and students and indeed, as shown in Chapter Four, TAFE NSW classroom situational factors enhance and assist in shaping and reshaping curriculum processes and outcomes. This TAFE NSW context which refers to courses, teachers, students and the classroom site is summarised in the following schedules along with the curriculum characteristics, axioms, elements, values and VET (economic and political) factors identified above, all to form part of the conceptual framework in the following section.

5.3 CONCEPTUAL FRAMEWORK FOR TAFE CURRICULUM: SIX CRITICAL FACTORS

This Chapter has presented a rationale and a broad cross-section of curriculum theorists' ideas to assist in providing a conceptual framework which can be used as a basis for the thesis curriculum development model of TAFE NSW to be outlined in Chapter Six.
In this section the conceptual ideas considered throughout the Chapter are drawn together in a summarised schedule under six headings and then presented in a diagrammatic overview.

**Figure 5.1**

**SCHEDULE OF CURRICULUM DEVELOPMENT CONCEPTUAL IDEAS**

(a) TAFE NSW CURRICULUM CONTEXTUAL FORCES (SECTION 5.2.1)

(i) Curriculum Theory Characteristics

<table>
<thead>
<tr>
<th>(Section 5.2.1 (i))</th>
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<tbody>
<tr>
<td>Curriculum should be:</td>
</tr>
<tr>
<td>• context driven</td>
</tr>
<tr>
<td>• needs based, objectives driven and competency based</td>
</tr>
<tr>
<td>• teacher and student generated and processed based</td>
</tr>
<tr>
<td>• approached with &quot;common sense&quot; and be pragmatic</td>
</tr>
<tr>
<td>• focused on teaching and learning.</td>
</tr>
</tbody>
</table>
(ii) TAFE NSW Characteristics, Features and Classroom Site

(Section 5.2.1 (ii))

TAFE NSW Characteristics, Features

Courses: TAFE NSW offers courses which are vocational, relevant, practical, applied

Teachers: have workplace experience

Students: are mature, attending part-time and have a depth of experience both work and life.

TAFE NSW Classroom Site

• the interaction of teachers and students in the classroom shape and reshape the curriculum.
• the teachers’ classroom management affects curriculum development
• a contingency or situational approach identified.

(iii) Economic and Social Context

(Section 5.2.1 (iii))

Broad Economic and Social Factors

Whole range of social and economic factors which include state of the economy, employment, change in technology, industrial relations, overseas trade and market competition.

National VET System

• needs of employers
• competency-based training
• regulating bodies
• curriculum procedures
• technological change
• economic imperative

• national training system
• funding and resources
• the competitive training market
• flexible delivery
• recognition of prior learning
(b) CURRICULUM PRINCIPLES

(i) Curriculum Elements

(Section 5.2.2 (i))

Five Areas of Focus:
- situation analysis - internal/external
- objectives
- content
- method
- evaluation

(ii) Axioms

(Section 5.2.2 (ii))

Ten guiding principles or axioms for curriculum development
- Inevitability of change
- Curriculum as a product of its time
- Concurrent changes
- Change in People
- Co-operative endeavour
- Decision-making process
- Continuous improvement process
- Comprehensive process
- Systematic development
- Starting from Existing Curriculum.

(iii) Curriculum Values

(Section 5.2.2 (iii))

- Curriculum an expression of value preferences
- Value preferences of decision makers, teachers and students
- Provide direction, focus and meaning
The conceptual ideas and framework presented above are employed as a conceptual basis for the thesis model in Chapter Six.
Chapter Six

A Curriculum Development Model for TAFE NSW
INTRODUCTION

Central to the conceptual framework developed in Chapter Five are six critical TAFE NSW curriculum factors — *Curriculum Theory Characteristics*, TAFE NSW Characteristics, *Features and Classroom Site*, Economic and Social Context, *Curriculum Elements*, Curriculum *Axioms* and Curriculum *Values* — drawn together as a set of conceptual ideas for the construction of the thesis model. This chapter builds on this framework to construct an eclectic, multi-dimensional thesis model of TAFE NSW’s curriculum development processes. Incorporating the distinguishing features and characteristics of TAFE NSW and reflecting the processes of curriculum as it is experienced, particularly in relation to the classroom arena, the model and its theoretical underpinnings provides a comprehensive basis for deeper understanding of this very complex area and hence for more effective TAFE NSW curriculum development processes.

The thesis model conceptualises the very complex nature of the TAFE NSW curriculum process by illuminating the curriculum process at work from the conceptual level down to the specific micro classroom level. The model incorporates a number of perspectives of the curriculum process as it takes cognisance of the realities of TAFE NSW curriculum in operation. It also captures the iterative nature of the whole curriculum process over time as it focuses on the dynamics of the many complex interactions and relationships of TAFE NSW’s curriculum development.
Curriculum development in TAFE NSW, as evidenced throughout the thesis and drawn together in the conceptual framework, is founded on a very complex, dynamic set of factors and their relationships. To capture the key TAFE NSW curriculum forces and features the thesis model is represented as an *interacting collection of five integrated core* diagrams. Firstly, the broad framework of TAFE NSW's curriculum contextual forces is presented with supporting comment. The conceptual framework developed in Chapter Five as a basis for this model is then presented in detail and extended with a diagram and accompanying explanation of the critical relationships in TAFE NSW's curriculum development process. Next, the iterative nature of this curriculum process is considered. Then TAFE NSW's curriculum development in action with a particular focus on curriculum reshaping through student-teacher interaction and ongoing curriculum review and continuous improvement through a curriculum looping process is presented in two diagrams and supporting explanation. The outcome is a series of diagrams which offer a guide to the complex workings of curriculum as well as proposing new dimensions emphasising the importance to TAFE NSW's curriculum development of the classroom and teacher, student interaction. The chapter concludes with comments on the thesis model and an overview of its main features. The following chapter will then draw the thesis together with a summary and synopsis of the thesis model and a discussion of the implications and significance of the model in the present context.

The five core diagrams are presented over three sections with each section comprised of three parts:
(i) **Background** – a brief background comment,

(ii) **Diagram(s) and Accompanying Table** – the diagrams and supporting discussion are presented with an accompanying table explaining the numbered points in the diagram and providing reference back to the main ideas presented in the thesis.

(iii) **Commentary** – concluding comment and discussion of the central features.

### 6.1 TAFE NSW CURRICULUM CONTEXTUAL FORCES

(i) **Background**

This section presents the broad framework and context within which TAFE NSW’s curriculum development operates. Three major contextual forces are the focus of this thesis: curriculum theory characteristics, the nature and characteristics of TAFE NSW itself and the economic and social environment. Figure 6.1 draws together these three very influential curriculum forces into one diagram. TAFE NSW’s curriculum is a product of these three interacting contextual forces, each area being of critical individual importance. As shown in Chapter Three there are many different conceptions of the contextual influence on curriculum throughout curriculum literature. For example, Walker (1971) refers to a “platform” which consists of a mixture of beliefs, theories, conceptions, points of view, aims and objectives and Skilbeck (1976; 1984), refers to an “analysis of the situation” which comprises an examination of a range of internal and external factors – including cultural and social change, values, beliefs
and attitudes of teachers and students. The approach taken in this thesis model is to take account of these broad contextual forces and incorporate the role of curriculum theory. The model goes well beyond expressing the contextual influences as a number of different factors – there is a strong focus on the interaction and interrelationship of these factors. There is no one influence or factor which determines TAFE NSW’s curriculum development – it results from a vast range of interacting and interrelated factors. The diagram not only depicts the influences but portrays their dynamic, interactive nature which together form a very powerful relationship with the curriculum theory context.

An example of these interactions and interrelationships is demonstrated in the development of courses within the evolving national training system through the guidelines of the national and state bodies ANTA and BVET. The two TAFE NSW modules – in CBT format – outlined in Chapter Three (Section 3.5) offer a specific example of the nature and complexity of “interactions” in TAFE NSW’s curriculum development. The two subjects Managing and Developing Teams and Sewing Machine Operations have been developed by TAFE NSW in NTRA format to descriptor level (i.e. a brief description of the purpose, learning outcomes, assessment criteria and conditions – as required by state recognition authorities for the purpose of accreditation) for classroom delivery by TAFE NSW’s sections and teachers. In getting to the point of having these modules accredited and registered a number of procedures were followed by TAFE NSW in accordance with guidelines provided by ANTA, SCC and VETAB (e.g. NFROT requirements, AQF guidelines, national standards).
Apart from adhering to a number of procedures (the VETAB (NSW) Accreditation and Registration Manual (1996, reprinted 1997) has a detailed set of instructions) there are a number of substantive curriculum issues which require lengthy and involved discussion, negotiation and interaction amongst a variety of bodies e.g. national commerce and industry bodies (for national competencies); ITABs – national and state; standards and curriculum council; educational bodies such as TAFE NSW Training Divisions/ESCs. Interaction and negotiation is required, for example in reaching agreement on:

- **National Competency Standards** – these require a complex mix of interaction between government bodies, industry groups and other authorities (e.g. ITABs) (Chapter Three).

- **Relationship** of the course to competency standards, e.g. Sewing Machine Operations relates to ASF Level 1 from the National Clothing Competency Standards.

- An appropriate set of objectives which derive from these standards for the VET course/modules (Chapter Three) i.e. in CBT format.

- Relevant **AQF levels** (supported by the national standards framework) (Chapter Three) – the Sewing Machine Operators’ Course is AQF level 1, for example.

- **Duration** of modules, relevant topics, assessment criteria, learning outcomes and resources required (Chapter Three).

- The **mode of curriculum delivery**, e.g. full of part-time, flexible delivery, distance learning.

- **Pre-requisites** required for the course.

Clearly, reaching agreement in these areas requires the interaction of the economic context and the curriculum theory context – as curriculum workers draw on a broad base of curriculum theory and knowledge. But the interactions don’t stop here. At the point of classroom delivery (i.e. the TAFE NSW context – features,
characteristics and classroom site) where the curriculum is experienced through the interaction of teachers and students, there is a shaping and reshaping of the curriculum (Chapter Four). This experiencing of the curriculum is portrayed in Section 6.3, Figures 6.3 (a), 6.3 (b), 6.3 (c).

(ii) **Diagram and Accompanying Tables**
Specifics of the three crucially important contextual areas are further detailed in the following diagram (Figure 6.1), discussion and accompanying tables.
FIGURE 6.1
TAFE NSW CURRICULUM CONTEXTUAL FORCES

Curriculum Theory Context (1)

Curriculum Characteristics

TAFE NSW CURRICULUM DEVELOPMENT

ECONOMIC & SOCIAL FACTORS
VET National Training Needs

Economic & Social Context (3)

TAFE NSW Context (2)

TAFE NSW Characteristics, Features and Classroom Site
Diagram Reference (1) Curriculum Theory Context/Curriculum Characteristics

An extensive review of curriculum literature in Chapter Three found that TAFE NSW's curriculum development needs to draw on an eclectic base of curriculum theory including "objectives based", "process", "practical" and "critical theorist" approaches (Chapter Three, Section 3.2). With the evolving national training system there is a need for TAFE NSW curriculum to be flexible and responsive - it has draw on a strong, eclectic theoretical curriculum base. Specifically emerging from this review of curriculum theorists across the curriculum field in Chapter Three were a number of curriculum characteristics particularly relevant to TAFE NSW. These are discussed and summarised in Chapter Five and incorporated in the conceptual framework - they are listed and referenced in the following table.
<table>
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<td>An eclectic mix of theoretical approaches.</td>
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<td>3.2, 3.3, 3.4, 3.5, 3.6 &amp; 3.7</td>
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<td></td>
<td>Five</td>
<td>5.2.1, 5.3</td>
<td>269-271</td>
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<td></td>
<td>Seven</td>
<td>7.1.1</td>
<td>362-365</td>
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<tr>
<td><strong>Curriculum Theory Characteristics</strong></td>
<td></td>
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<tr>
<td>Curriculum should be context driven</td>
<td>Three</td>
<td>3.2, 3.3, 3.4, 3.5, 3.6 &amp; 3.7</td>
<td>66-216</td>
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<td></td>
<td>Five</td>
<td>5.2.1(i)</td>
<td>271-274</td>
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<tr>
<td>Curriculum development should be needs based, objectives driven</td>
<td>Three</td>
<td>3.2, 3.3, 3.4, 3.5, 3.6 &amp; 3.7</td>
<td>66-216</td>
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<tr>
<td></td>
<td>Five</td>
<td>5.2.1(i)</td>
<td>274-277</td>
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<tr>
<td>Curriculum should be teacher and student generated and process focused</td>
<td>Three</td>
<td>3.2, 3.3, 3.4, 3.5, 3.6 &amp; 3.7</td>
<td>66-216</td>
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<td>Five</td>
<td>5.2.1(i)</td>
<td>277-280</td>
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<tr>
<td>Curriculum development should be approached with &quot;common sense&quot; and be pragmatic</td>
<td>Three</td>
<td>3.2, 3.3, 3.4, 3.5, 3.6 &amp; 3.7</td>
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<td></td>
<td>Five</td>
<td>5.2.1(i)</td>
<td>280-282</td>
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<tr>
<td>Curriculum development should be focused on teaching and learning.</td>
<td>Three</td>
<td>3.2, 3.3, 3.4, 3.5, 3.6 &amp; 3.7</td>
<td>66-216</td>
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<td>Five</td>
<td>5.2.1(i)</td>
<td>282-283</td>
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Diagram Reference (2)  TAFE Characteristics, Features and Classroom Site

This refers to the specific features and characteristics of TAFE NSW which identify it as an educational institution of post-compulsory vocational education and training quite distinct from the school system and other educational institutions (Chapter Two). A critically important aspect of this context is the significance of the classroom site for TAFE NSW’s curriculum development. A curriculum reshaping process is identified at the teacher, student classroom interface (Chapter Four).

Characteristics and features which differentiate TAFE NSW from the school system and other post-compulsory institutions relate to its courses, students and teachers.

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<tr>
<td>TAFE NSW Characteristics and Features</td>
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<tr>
<td>TAFE NSW offers courses which are vocational, relevant, practical, applied</td>
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<tr>
<td>Teachers have workplace experience</td>
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<tr>
<td>Students are mature age, attending part-time and have a depth of experience both work and life</td>
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Diagram Reference (3)  Economic and Social Context

This is an extremely broad concept referring in general to significant aspects of the culture in which TAFE NSW’s curriculum is developed — as evidenced by the discussion of the context of the thesis model in Chapter One and the literature review in Chapter Three. Reynolds and Skilbeck (1976) make the comment that culture in the curriculum context is an “elusive idea ... it is a process rather than a thing” (1976:30). They refer to culture “as a field of interaction between

(i) men’s (sic.) social relationships and conventions,

(ii) the symbolic forms available to them for focussing on and co-ordinating experience, and

(iii) their system of belief, values and action”

(Reynolds and Skilbeck, 1976, loc. cit.)
In a very broad context TAFE NSW's curriculum is a product of such cultural processes. The curriculum and TAFE NSW curriculum in particular is in fact a selection from culture which shapes and influences it.

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<td>36-51</td>
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<td>144-194</td>
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<td>284-286</td>
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<td>Seven</td>
<td>7.1.1</td>
<td>355-359</td>
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<td>7.1.1</td>
<td>365-368</td>
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</table>

As a process, culture for curriculum refers to a huge mix and range of ideas, beliefs, skills, customs, institutions, relationships and social processes. For TAFE, typical aspects of culture are social and in particular, economic context. Economic context in turn influences government policies toward VET and hence TAFE curriculum.
An especially significant and influential aspect of the culture in which TAFE NSW is embedded, is the social and economic system which determines the direction of VET policy. This influence is a major driving force deriving from national and state government policies – from which emerges a new national training system essentially driven by an economic imperative.

Vocational Education and Training Needs

Of specific importance to TAFE NSW is the evolving national VET training system – incorporating CBT, national standards, key competencies, AQF, RPL.

The role of ANTA and its requirements are a significant part of recent curriculum developments. For example, the four key themes of the national VET strategy are included in the contextual forces of the model: responsiveness, quality, accessibility, efficiency.
(iii) Commentary

This diagrammatic overview of the major curriculum forces highlights several features for general comment. More detailed comment relating to the specific workings of the curriculum process follows in Sections 6.2 and 6.3.

The thesis model takes an emergent approach to TAFE NSW's curriculum development process in the sense that it is able to accommodate emerging changes in the economic, TAFE NSW and curriculum theory contexts. The model is comprehensive both in the range and depth of curriculum factors it takes into account and in how it relates to the curriculum cultural context. The idea of the word "emergent" is based on Inlow's (1966; 1973) work, The Emergent In Curriculum, in which she refers to "curriculum innovations that are taking place in formal education today" (Inlow, 1973:vii). TAFE NSW's curriculum is developed in a changing environment which requires a balance between these three contexts or influences. It is based on a critical assumption that TAFE NSW will continue to operate in a curriculum environment which is being significantly influenced and impacted upon by government policy both at national and state levels. The implications for the thesis model of this highly influential government role are critical since TAFE NSW's curriculum operates in an environment characterised at present by the government priorities of increased market competition and user choice, best practice and continuous quality improvement, more effective distribution of resources and accountability, more flexibility, greater responsiveness and enhanced overall management efficiency (Chapter Three, Section 3.5). As recently as August 1995 the DTEC/TAFE Curriculum Mechanisms Work Team (part of the TAFE
NSW restructuring Task Force) have, for example, identified seven main contextual elements which will affect the VET system:

1. **The Hilmer Report and the National Competition Policy**
   - competitive training market
   - access to publicly funded facilities
   - Proportion of ANTA funding allocated to the competitive market
   - user choice model
   - principle of competitive neutrality.

2. **Industry driven nature of VET and curriculum**
   - demand driven not supply driven
   - industry communicates needs in educational terminology.

3. **Responsiveness and relevance of VET training to a range of clients**
   - shorter review periods
   - flexibility - mode of delivery/enterprise based delivery
   - networks to build on product knowledge and understand clients' needs
   - recognition of prior learning (RPL)

4. **Links to Policy, Planning and Profiles**
   - State Training Profile
   - determining VET priorities.

5. **Closer relationships with school VET**
   - pathways
   - broadening study/career plans within school.

6. **National curriculum**
   - contributing curriculum to the national market
   - opportunities to access national curriculum
   - sharing resources - avoids duplication plus costs savings.
But while the emergent national VET system provides a critically important context to TAFE NSW's curriculum development, VET is dependent on government policy and direction since it is moulded in a political environment – both at national and state levels – and is always the subject of political vicissitudes. Furthermore this government driven mandated curriculum approach to VET has a strong emphasis for curriculum development in terms of rules, formatting, guiding principles and procedures through NFROT and SCC but is silent on such critical curriculum issues as the implementation of the curriculum and the curriculum development role of the teacher and student in the classroom (Chapter Three, Section 3.5.3; Chapter Five, Section 5.2.1).

The Curriculum Theory context is a powerful force in its own right and is the subject of changing academic rather than political forces. While it provides theoretical underpinnings for the implementation of the national training reform agenda its role is clearly much broader than this. The vast field of curriculum theory including material from the curriculum field generally and the NTRA provides a wealth of curriculum knowledge and skills to support and guide TAFE's curriculum development. As seen in Chapter Three Competency-Based Education and Training, for example, is not new to the curriculum field in general nor to TAFE NSW in particular but draws
on well-established curriculum theory. Clearly the NTRA is having a significant impact on TAFE NSW's curriculum directions and format but it is necessary for TAFE NSW to draw on the curriculum field for guidance with educational principles concerning curriculum planning, design and delivery (Chapters Two and Three). In fact as shown in these chapters TAFE NSW's curriculum theory context needs to be eclectic and utilise a number of curriculum characteristics and principles which not only provide a theoretical understanding of curriculum (and which are consistent with and go well beyond those espoused by the NTRA) but can form a basis for continued research and development to meet changing needs (flexible and mixed-mode delivery, distance learning, work-based learning, for example) and assist in responding to educational issues and concerns in the emerging national training system.

A concern raised in Chapter Three (Section 3.5.2), for example, is the narrow NTRA approach to CBT concepts 'competency', 'skill' and 'skill formation'. TAFE NSW's curriculum needs to go beyond 'the technical' and encompass a broader, more comprehensive approach to these concepts. The thesis model, by the inclusion of an eclectic theory context, provides a basis for doing this – going well beyond 'a straight down the line' CBT approach. Furthermore, the classroom site, included as central to the curriculum development process, can accommodate a broader, richer approach through its teacher-student interaction, reshaping and looping process (Section 6.3 focuses on the classroom).
Curriculum delivered in TAFE NSW is very much influenced by the characteristics and features of the TAFE NSW context where the curriculum is shaped and reshaped. As seen in Chapter Two, Chapter Four and summarised in Chapter Five there are a number of specific TAFE NSW features such as the applied, practical and relevant nature of TAFE NSW's curriculum vocational focus, the type of courses and the background and experience of teachers and students which provide a particularly strong and influential context for TAFE NSW's curriculum. Very importantly, furthermore, the context of the TAFE NSW classroom site is particularly significant since as seen in Chapter Three and Chapter Four the classroom is more than just a site for delivery of curriculum, it adds to the curriculum development process with a reshaping of the curriculum via the interaction of teachers and students and forms part of a continual curriculum improvement process. These aspects are further discussed and depicted in Section 6.3.

6.2 CURRICULUM PRINCIPLES

(i) Background

This section extends upon the conceptual framework constructed in Chapter Five to examine the complexity of interacting factors in the TAFE NSW curriculum development process. The framework identified and detailed six critical, interrelated curriculum factors: Curriculum Theory Characteristics, TAFE NSW Characteristics, Features and Classroom Site and Economic and Social Factors (referred to as contextual forces), Curriculum Elements, Curriculum Axioms and Values (referred to as curriculum principles).
The relationship of these areas to each other and to the process as a whole is shown in the following diagram (Figure 6.2). The diagram highlights the critical interrelationship between the *curriculum principles* and the three major *contextual forces* (reference points 1, 2, 3 in Figure 6.1). The curriculum principles – elements, axioms and values – provide TAFE NSW’s curriculum with focus, structure and guidance and the contextual forces provide the context within which the principles operate and exert their influence.

(ii) Diagram and Accompanying Tables
The following diagram (Figure 6.2) depicts the interaction of curriculum development principles and contextual forces.
A complex interaction of curriculum principles and contextual forces.
The figure presents a detailed overview of the six interacting curriculum development factors. Supporting tables provide a reference to the numbers in the diagram and to the main ideas presented throughout the thesis.

Curriculum elements shown in Figure 6.2 and listed under points 4-8 are a fundamental guide for TAFE NSW's curriculum process. The process is guided by curriculum axioms, listed under point 9, which provide a set of ten reference points. And further, the whole curriculum process is influenced by curriculum values listed under point 10. The curriculum process is guided by a number of value preferences of decision makers through the curriculum planning and design process and its practice via all the people involved and thus this whole process is heavily value laden.

It will be noted that elements, axioms and values are embodied in this diagram and that the contextual forces provide the operational framework. Critical to an understanding of TAFE NSW curriculum process is the complex nature of the interaction and further the continuous interdependence across all areas. A difficulty in depicting the interrelationships of TAFE NSW’s curriculum development is to show in detail the comprehensive nature of the process and at the same time present the complexity of its dynamics. Figure 6.2 depicts this complexity showing the overall impact of contextual forces and the relationship amongst all these factors (reference points 1 to 10). Curriculum development is structured around the curriculum elements (4, 5, 6, 7, 8) drawing upon the contextual forces (1, 2, 3), guided by axioms (10) and influenced by values (9).
Diagram Reference Accompanying Figure 6.2

Contextual Forces (Reference Points 1, 2 and 3)

For reference points 1, 2 and 3 see previous Section 6.1 and accompanying tables.

Curriculum Principles (refer to three areas (numbers 4 - 10))

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<td>5.2.2</td>
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<td>(comprising elements, axioms and values)</td>
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Curriculum Axioms

Diagram Reference (9)

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<td>5.3</td>
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<td>Figure 5.2</td>
<td>305</td>
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<tr>
<td>• Curriculum as a product of its time</td>
<td>Five</td>
<td>5.22(ii)</td>
<td>293</td>
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<td></td>
<td></td>
<td>to</td>
<td>297</td>
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<td></td>
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<td>inclusive</td>
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<td>• Concurrent changes</td>
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<tr>
<td>• Change in People</td>
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<td>and 305</td>
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<tr>
<td>• Co-operative endeavour</td>
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<td>• Decision-making process</td>
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<tr>
<td>• Continuous improvement process</td>
<td>Seven</td>
<td>7.1.1</td>
<td>365-368</td>
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<tr>
<td>• Comprehensive process</td>
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<td>• Systematic development</td>
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<tr>
<td>• Starting from Existing Curriculum.</td>
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</table>
### Curriculum Values

<table>
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<tr>
<th>Curriculum Values –</th>
<th>Chapter(s)</th>
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<th>Page(s)</th>
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</thead>
<tbody>
<tr>
<td>• Curriculum an expression of value preferences</td>
<td>Three</td>
<td>3.4 (ii)</td>
<td>141</td>
</tr>
<tr>
<td>• Value preferences of decision makers, teachers and students</td>
<td>Five</td>
<td>5.2.2 (iii)</td>
<td>297-301</td>
</tr>
<tr>
<td>• Provide direction, focus and meaning</td>
<td>Seven</td>
<td>7.1.1</td>
<td>365-368</td>
</tr>
</tbody>
</table>

(iii) **Commentary**

This section not only focuses on the six major curriculum factors critical to TAFE NSW’s curriculum development process but highlights the interrelated and dynamic nature of these factors. The curriculum process is comprised of an extremely complex interaction of many elements and there is a seemingly endless list of connections and interrelationships. The aim of this overview figure and accompanying tables is to capture the nature of this complexity and to serve as a framework for further explanation. Section 6.3 goes further and presents three perspectives of the underlying, ongoing processes.

Whilst the factors and their respective elements have been isolated and addressed separately within the thesis (refer attached table for thesis reference points) there are a number of ‘interacting’ features described below which underscore the dynamics of this complex curriculum process depicted in Figure 6.2.
The relationship of these six interacting curriculum factors to each other is perceived as a process which is dominated by the three major contextual forces. The TAFE NSW curriculum system is strongly characterised by its responsiveness to the social and economic forces, meeting VET needs and the larger cultural context. But it also operates from its own contextual value system and infrastructure adapting to the VET needs of the community through industry and classroom contact. A difficulty is that the guidelines for change from the national and state governments tend to be organisationally and structurally driven in terms of management policy and procedures. TAFE NSW then has to adapt policies and procedures "educationally" and an important aspect of this adaptation, for curriculum, is to draw on the field of curriculum theory which includes TAFE NSW material. The outcome at this broader contextual level is that curriculum is guided in general terms by a mixture of integrating but sometimes competing forces.

To this picture is added the interaction of the more specific curriculum principles: curriculum elements, axioms and values, which provide the curriculum process with focus and structure. The five curriculum elements in particular offer a framework for curriculum development and importantly, provide a practical framework "within which national decisions can be made ... as appropriate as may be for particular pupils" (Nicholls and Nicholls, 1978:103). Of course decisions relating to curriculum development reflect the particular value preferences of those involved. This can be a particularly complex process at present since there are government priorities which
impose a value system emphasising the importance of such values for education as market place competition, management effectiveness and resource efficiency.

Adding further guidance and contributing to the rationale of the process are ten axioms which are claimed to be a set of curriculum principles appropriate and valid in the TAFE NSW context. They offer guidelines and a frame of reference for both developing curriculum initially and later on improving curriculum. The axioms highlighted in Figure 6.2 are critical to curriculum development in the present emerging VET system which particularly, for example, requires cooperation and joint endeavour with other educational institutions, industry and the community.

The overall picture then, of these contextual forces and curriculum principles, is one of six major components of TAFE NSW's curriculum process interacting in a complex, dynamic and newly emerging VET educational environment.
6.3 TAFE NSW'S CURRICULUM IN PRACTICE AND RESHAPING PROCESS

(i) Background
This section offers three interrelated diagrams showing TAFE NSW’s curriculum development processes and reshaping from three different perspectives - depicting the complex short and long term TAFE NSW curriculum processes and highlighting the critical role of the classroom. It is to be noted that points 1 to 15 are incorporated in each of the three diagrams and refer to the same processes for each perspective (Figures 6.3 (a), (b) and (c)).

Figure 6.3 (a) provides an overview of TAFE NSW’s curriculum development and incorporates this curriculum reshaping. Curriculum development is an iterative process as the curriculum moves through the planning and design phase (reference point 4) with input from internal and external sources (points 1, 2, 3) into documentation (5) and then to the teacher for classroom preparation and delivery (6, 8). A critical part of this iterative curriculum practice is that students (7) with real world, industry experience engage with the teacher at the classroom site (8) and reshaping of the curriculum commences (9). Reshaping occurs both in the short and long term: in the short term, say week to week, the teacher (10, 12) reshapes the curriculum to meet emerging needs of the students as the curriculum is experienced; in the longer timeframe say one to three years the curriculum will be formally reviewed and revised to incorporate changes (11). The reshaping process also proceeds through the classroom via the output of skilled and trained students (13) and back into curriculum planning and design in the longer term by teachers and students (14, 15).
Figure 6.3 (b) shows how "curriculum in action" is integrated with, indeed, must be seen as an integral part of the curriculum development process as the curriculum passes from the planning and design phase to documentation, to the teacher and then into the classroom (points 1 to 7) when reshaping commences (8, 9). In particular this diagram highlights the reshaping process both in the short and long term timeframe (10, 11, 12, 13, 14, 15) as it loops back into the classroom (10, 11). There is continuous looping from the classroom (9, 10) via the teacher who reshapes the curriculum for delivery making it more relevant and useful as the ongoing situation requires. The longer term process of reshaping is depicted in the longer loop between points 11, 13, 14 and 15.

Figure 6.3 (c) shows the continuous spiral and looping nature of this reshaping process in more detail as reshaping commences with the teacher and continues into the classroom site then back to the classroom and documentation in a looping reshaping spiral. This reshaping spiral and looping occurs in an ongoing way both in an immediate timeframe between teacher and student in the classroom and in a longer timespan back to the documentation for formal change. TAFE NSW's curriculum development extends then beyond the documentation stage when the teacher receives the written plan and prepares it for classroom delivery. The most salient point of TAFE NSW's curriculum in action is that as the curriculum is experienced actively by the participants, as teacher and students interact, the curriculum is further developed and moulded to the needs of the recipients in the reshaping spiral.
(ii) Diagrams 6.3 (a), 6.3 (b) and 6.3 (c) and Accompanying Tables

Figure 6.3 (a) is an overview of the iterative nature of TAFE NSW’s curriculum development.

Figure 6.3 (b) shows the curriculum in action particularly at classroom level highlighting the reshaping process.

Figure 6.3 (c) is a detailed perspective of the reshaping spiral and loop.
## Diagram Reference Accompanying Figures

### 6.3 (a), (b) and (c)

<table>
<thead>
<tr>
<th>Diagram Reference</th>
<th>Thesis Reference</th>
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<tbody>
<tr>
<td><strong>Numbers 1 - 15</strong></td>
<td><strong>Chapter(s)</strong></td>
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<tr>
<td><strong>1.</strong> Situational Analysis</td>
<td>Three</td>
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<td></td>
<td>Five</td>
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<tr>
<td><strong>2.</strong> Internal Factors</td>
<td>Two</td>
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<td>Three</td>
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<td><strong>3.</strong> External Factors</td>
<td>One</td>
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<td>Three</td>
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<td><strong>4.</strong> Curriculum Plan and Design</td>
<td>Three</td>
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</tbody>
</table>

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Refers to the broad cultural context in which TAFE NSW's curriculum is developed. The context comprises internal and external factors, as below.

Refer to the internal TAFE NSW situation, e.g., students' educational needs, work experience; teachers' attitudes, experience; physical resources, e.g., classrooms.

Refer to the broad changes and trends in society (e.g. economic, social, political) which impact upon TAFE NSW's curriculum, e.g. VET national training system and CBT; government policy.

The planning and design stage of the curriculum development process which results in a curriculum document.
<table>
<thead>
<tr>
<th></th>
<th>Curriculum Document</th>
<th>Three</th>
<th>Four</th>
<th></th>
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<tbody>
<tr>
<td>5.</td>
<td>This is the written document (or plan) with which the teacher is provided for classroom delivery, e.g. CBT format outline in Chapter Three, Section 3.5.</td>
<td>3.5.3</td>
<td>4.3.2</td>
<td>176-189, 233-235</td>
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<tr>
<td>6.</td>
<td>Teacher Input</td>
<td>Two</td>
<td>Four</td>
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<tr>
<td></td>
<td>The teacher prepares the curriculum for the classroom. At this point the teacher commences shaping the curriculum document for classroom delivery.</td>
<td>2.2.2</td>
<td>4.4</td>
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<tbody>
<tr>
<td>7.</td>
<td>Student Input</td>
<td>Two</td>
<td>Four</td>
</tr>
<tr>
<td></td>
<td>Students enter the classroom with background workplace knowledge and skills and engage in classroom interaction with the teacher.</td>
<td>2.2.2</td>
<td>4.3</td>
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<tbody>
<tr>
<td>8.</td>
<td>Classroom Reshaping</td>
<td>Three</td>
<td>Four</td>
</tr>
<tr>
<td></td>
<td>A classroom curriculum development process begins with the experiencing of the curriculum by the teacher and students at the classroom interface. Reshaping refers to the curriculum being changed or adapted (e.g. updated for relevancy) through classroom interaction by the teacher to meet student needs. This is demonstrated in the case study, Chapter Four.</td>
<td>3.6</td>
<td>4.3.3</td>
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<tr>
<td></td>
<td>Loop Back to Teacher and Curriculum</td>
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<tr>
<td>9.</td>
<td>Following teacher/student interaction at the classroom site, the curriculum is continuously reviewed by the teacher. This happens in short and long term timeframe - as below.</td>
<td>Four</td>
<td>4.3 228-250</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>4.4 250-261</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>4.5 263</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Five</td>
<td>5.2.1(ii) 283-284</td>
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<tr>
<td>10.</td>
<td>Short Term Looping and Reshaping</td>
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<td></td>
<td>The curriculum loops back from the classroom for ongoing review and reshaping by the teacher (e.g. week-to-week).</td>
<td>Four</td>
<td>4.3 228-250</td>
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<tr>
<td></td>
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<td>4.4 250-261</td>
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<td>4.5 263</td>
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<tr>
<td></td>
<td></td>
<td>Five</td>
<td>5.2.1(ii) 283-284</td>
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<tr>
<td>11.</td>
<td>Long Term Looping and Reshaping</td>
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<tr>
<td></td>
<td>The looping continues in the long term (e.g. every three years) as reshaping of the curriculum is fed back into the Curriculum Plan and Design stage (see No. 4 above) for formal review.</td>
<td>Four</td>
<td>4.3 228-250</td>
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<td></td>
<td></td>
<td></td>
<td>4.4 250-261</td>
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<td>4.5 263</td>
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<td></td>
<td></td>
<td>Five</td>
<td>5.2.1(ii) 283-284</td>
</tr>
<tr>
<td>12.</td>
<td>Teacher Reshaping Curriculum</td>
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<tr>
<td></td>
<td>Following classroom experience of the curriculum (see No. 8 above) the teacher reshapes the curriculum document in the short term (e.g. week-to-week).</td>
<td>Four</td>
<td>4.3 228-250</td>
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<td></td>
<td></td>
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<td>4.4 250-261</td>
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<td>4.5 263</td>
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<td></td>
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<td>Five</td>
<td>5.2.1 (ii) 283-284</td>
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<td></td>
<td>Outcomes</td>
<td>Four</td>
<td>Seven</td>
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<td>-------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>13.</td>
<td>Refers to the educational effectiveness of the curriculum - and related teaching and learning process to meet student needs and training needs of industry.</td>
<td>4.5</td>
<td>7.1</td>
</tr>
<tr>
<td>14.</td>
<td>Loop Back from Outcome to Situation Analysis</td>
<td></td>
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<tr>
<td></td>
<td>The iterative process of curriculum development loops back from the classroom to the Plan and Design stage - to a situational analysis.</td>
<td>4.5</td>
<td>7.1</td>
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<tr>
<td>15.</td>
<td>Loop Back Via External Factors</td>
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<tr>
<td></td>
<td>The looping process continues - closing the gap between the planned and experienced curriculum.</td>
<td>4.5</td>
<td>7.1</td>
</tr>
</tbody>
</table>
(iii) Commentary

The diagrams presented here are three different perspective of the same curriculum process which underlie the larger, macro picture in the previous section. The first perspective (Figure 6.3 (a) presents a detailed overview of curriculum development in TAFE NSW with a particular focus on the overall flow of the process and its strong link between external and internal factors and output (trained, skilled students). The process proceeds through a number of significant steps in a cyclical, ongoing process through time and incorporates curriculum reshaping at the classroom interface. Of particular significance in the iterative nature of the whole process. Curriculum development moves through an incremental process with continuous shaping and reshaping of the curriculum occurring in a formal and informal mix. In the more formal sense the curriculum is reshaped in the long term via input back into the curriculum plan and design stage but in an informal short term way via ongoing teacher and student feedback and adjustment.

The second perspective Figure 6.3 (b) captures the curriculum in action as it passes into the classroom and is experienced by the teacher and students. Curriculum experience commences at the point when the teacher starts preparing and shaping the curriculum for classroom delivery and continues in action as it passes through the classroom. It then moves beyond the classroom as trained students take curriculum knowledge and skills into the workforce and the community. It is at the point where the curriculum is grounded and experienced that a curriculum reshaping process commences with the teacher and students. The classroom site with the participation of teacher and students and the interaction between them is then more than just a
point for the curriculum's delivery. In fact the classroom site and reshaping is critical to the whole curriculum's development. Curriculum reshaping via classroom teacher, student interaction is most significant because the content of the curriculum is moulded and reshaped to meet the needs of the students and thus the wider VET context (of industry and community) and is effective both in the short and long terms. Reshaping of the curriculum occurs in the short term informally as the curriculum is immediately experienced. In the case study (Chapter Four, Section 4.3), for example, students asked workplace related questions which required the teacher to extend beyond the content in the syllabus and reshape the planned curriculum. The diagram shows how in the long term teacher and students are able to contribute to curriculum changes at the formal Plan and Design phase. Indeed curriculum reshaping initiates a process of curriculum improvement which is both ongoing as the curriculum is experienced and continuous through the long term. This is presented in detail in Figure 6.3 (c).

Figure 6.3 (c) provides a third perspective of the curriculum in action and presents a detailed view of curriculum reshaping, capturing the spiralling and looping process of continuous improvement over time. Pivotal to the reshaping loop is the classroom site where curriculum reshaping via student input and teacher review is effected. The continuous nature of this process is depicted in the short term as a spiral which then extends into longer term curriculum documentation change. A most important feature depicted in this Figure 6.3 (c) is the continual flow and movement of curriculum review and reshaping that occurs with the teacher, the student, the classroom and in the longer term, curriculum documentation. The curriculum enters the
classroom and exits with a mixture of planned and unplanned outcomes via reshaping. The "real" curriculum that is one which has been grounded, experienced and continually improved emerges from this reshaping spiral and loop. In this model the "real" curriculum in what students actually experience in the classroom and which is a product of a range of factors not the least of which is the classroom reshaping that takes place.

Because the model is a holistic and comprehensive one and incorporates social and other contexts of curriculum, curriculum change can be accommodated at any number of macro and micro levels. This is critical since at the macro level the national training system, for example, is still evolving as VET is subjected to continuing public and private scrutiny and change. At the micro level, changes are having to take place in the classroom for example, as competency-based education and training requires different approaches to curriculum delivery (for example, flexible entry and exit and self-paced learning). Policy changes to curriculum (both at national and state levels) are ongoing – restructuring of ITABS and TAFE NSW's Training Divisions are presently taking place as this thesis model is being addressed (Chapter Seven, Section 7.3). The model is flexible enough to take into account the dynamics of the current changing situation in VET (this is changing week-to-week, month-to-month at present). It can also adapt to new and different situations through time as curriculum is subjected to broad areas of influence by government, industry and the community.
Further, the model accommodates workplace needs through the classroom looping and reshaping process. As seen in Chapter Four students bring in workplace needs and the teacher addresses these needs through interaction and reshaping of the curriculum. The classroom thus provides a vital link between workplace competency and curriculum – the fundamental ‘CBT-Gap’ problem raised and discussed in Chapter Three (Section 3.5.2). Additionally, through classroom interaction and student-teacher influence there is a focus on the educational issues raised in Chapter Three (Section 3.5.2) concerning CBT – as a result, the uniqueness of the individual is not ignored, the needs of learners are supported, there is more flexible learning (not just meeting specific needs) and there is relevance in terms of future orientation, e.g. technological change is incorporated. Indeed there is a focus not just on performance outcomes (learning attached to competency standards) but on learning outcomes to encompass the broader, richer aspects of knowledge and understanding.

6.4 CONCLUDING COMMENTS

Marsh (1986) defines a curriculum model as a “construct to highlight and simplify key curriculum elements and show their interrelationships” (Marsh 1986:6). There is a need to simplify the TAFE NSW curriculum process because as seen in this and the previous chapter the system is clearly a very complex one. Chapter Five constructed a conceptual framework for curriculum development in TAFE NSW based on the six critical curriculum factors and their interaction. This chapter builds on this conceptual base to construct a curriculum model for TAFE NSW comprised of five core diagrams,
supporting tables and commentary. The Chapter concludes with a brief overview of the thesis model. Chapter Seven will then provide a full summary and synopsis of the model and its related concepts.

6.4.1 Overview of Thesis Model

The conceptual framework (Chapter Five) supporting the thesis model is comprised of the following six critical curriculum factors, categorised as contextual forces and curriculum principles:

**Contextual Forces**

- Curriculum theory characteristics
- TAFE NSW characteristics, features and classroom site
- Economic and social context

**Curriculum Principles**

- Curriculum elements
- Curriculum axioms
- Curriculum values

Underpinned by these six factors a comprehensive, multi-dimensional, holistic model of TAFE NSW's curriculum development is portrayed in five related core diagrams which reflect the processes of curriculum incorporating the classroom site. The five core diagrams are:

- **Diagram 6.1** TAFE NSW Curriculum Contextual Forces
- **Diagram 6.2** Curriculum Development Factors in TAFE NSW: Curriculum Development Principles and Contextual Forces.
- **Diagram 6.3(a)** Curriculum Development and Reshaping. Iterative Process
The thesis model offers, in the first instance, a guide to understanding this dynamic and very complex curriculum process. Its main features are that it:

- shows the dynamic nature of TAFE NSW’s curriculum development through its interrelated components and interrelationships.

- is founded on an eclectic theoretical curriculum base.

- offers different perspectives of the whole curriculum process and incorporates a new dimension beyond the traditional Tyler objectives-based model – that of the classroom as a site of TAFE NSW’s curriculum development.

- is complex and detailed – refers to many critical aspects across five core diagrams and provides a detailed and easy reference back to the thesis (with a table of reference points and page numbers).

- takes an illuminative approach – of what happens in the real world of curriculum as it is experienced.

- provides a frame of reference to an ideal curriculum system for TAFE NSW – for curriculum development to link the planned and experienced curriculum.

- takes an emergent approach, is relevant over time – incorporates the emerging national VET training system and accommodates prospective changes in TAFE NSW through the context of the model which incorporates, for example, competency-based training, flexible delivery, commercial courses, articulation and pathways, a competitive market place.

- portrays TAFE NSW’s curriculum development as an iterative process with continuous incremental improvement through a classroom looping and reshaping process.
The central characteristic of the model is that it is a holistic one which integrates curriculum planning, implementation and classroom curriculum processes. The model is comprised of a wide range and depth of factors which are discussed in Chapter Seven as part of the summary and synopsis.
Chapter Seven

The Thesis Model, TAFE and VET.

Summary, Conclusions and Future Directions
INTRODUCTION

The main purpose of this thesis has been to construct a comprehensive curriculum development model which will offer a framework for a deeper understanding of curriculum development in TAFE NSW. An additional major aim has been to provide a basis for analysis and evaluation of TAFE NSW’s curriculum so as to improve curriculum policy and make for a more efficient and effective curriculum development process in a new, emerging and complex national VET system. As shown in Chapter Two, there is an urgent need for TAFE NSW to assess its curriculum performance in light of recent VET policies and directions. Constructing a model for use in diverse and complex curriculum environments is not a new problem, it has been addressed many times in the past as Chapter Three shows. In presenting a number of conceptual models for use in curriculum planning Gay, for example, in 1980 referred to the complexity, imprecision, vitality and challenging nature of the curriculum planning process and to the extremely difficult task of planning curriculum. More than fifteen years after they were written Gay’s words still provide an appropriate back-drop to this model:

Curriculum development is far from being a purely objective or scientific enterprise that follows a universal, predetermined planning process; curriculum development is more of an "artistic" endeavour that is often chaotic, political, and emergent. It embodies a combination of intuition, individual initiative and creativity, trial-and-error experimentation, social politics, and educated guesses. (Gay, 1980:120)
Thus there are significant complexities in constructing a curriculum development model. What is offered here is a comprehensive model which, while it incorporates aspects which are "objective or scientific", also includes a huge range and diversity of factors such as economic and political contextual influences, curriculum elements and values and classroom interaction which recognises the need for "intuition, individual initiative and creativity, trial-and-error experimentation, social politics, and educated guesses" (Gay, loc. cit.). The case study and other classroom observations (Chapter Four) demonstrate that curriculum development at the classroom level in TAFE NSW does indeed involve these processes and characteristics as teachers are involved in negotiation with students, liaison with industry, adapting material to suit student needs, feedback to curriculum designers and ensuring relevancy and currency of content and resources.

This final chapter draws the thesis together with a summary and synopsis of the thesis model and a discussion of its implications and significance in the present context. TAFE NSW’s curriculum development is portrayed as a holistic, iterative process supported by an eclectic theoretical framework and characterised by a complexity of interactions and relationships. The model incorporates the experiencing of the curriculum and its reshaping by teachers and students in the classroom as critical to the whole curriculum process. The chapter then considers the contribution of the model to TAFE NSW’s curriculum development in a changing and dynamic VET environment and the model’s likely relevance to the wider TAFE system and other VET providers. The thesis closes with
recommendations regarding future directions for TAFE NSW curriculum at State and Institute levels and offers suggestions for further research.

7.1 GENERAL SUMMARY

The conceptual framework (Chapter Five) supported by classroom research and a case study (Chapter Four) and literature review (Chapter Three) provide the basis for an attempt to offer a comprehensive model which, *inter alia*, illuminates the actual curriculum workings of TAFE NSW and its context making possible a framework for better understanding. What makes the model particularly relevant and useful is that it takes into account the specific nature and characteristics of TAFE NSW which differentiate it from the school system and other post-compulsory educational institutions.

The thesis model portrays the complexities of curriculum development, its diversity and interactions and the range of external and internal influences to which it must respond. It is multidimensional and holistic in that it encompasses the many relationships between the interacting parts and all facets of the curriculum including most importantly the classroom. Curriculum development is represented as a continuous process of improvement emphasising the significance of closing the loop between the planned and the experienced curriculum.
The need for TAFE NSW to respond to current NVET pressures gives rise to the need for much greater transparency of the curriculum process, enabling both clearer understanding and greater accountability of TAFE NSW’s curriculum processes (Chapter Two). To this end, the thesis curriculum development model is centrally concerned with making explicit the diversity and complexity of influences on the curriculum process. It is shown in Chapters Four and Six that it is impossible to separate planning and the experiencing of the curriculum and it is argued that implementation in turn involves decision-making which is part of the ongoing process of curriculum planning and the cycle of improvement.

Curriculum planning is demonstrated in Chapter Six to be an extremely challenging, vital and complex task. The model is premised on the view that TAFE NSW is a “social institution that engages in complex transactions of interactions with its environment which involves exchange of ideas, resources and people” (Jenkins and Raggatt (1974:22) and “that a model of the curriculum should be flexible and adaptable in order to respond to a variety of complex forces” (Jenkins and Raggatt, loc. cit.).

This general summary expands on the overview of the thesis model presented at the conclusion of Chapter Six and summarises below the central characteristics of the model. The following section then reviews its contribution to TAFE NSW’s curriculum development.
7.1.1 Central Characteristics of the Thesis Model

The thesis model represents TAFE NSW's curriculum development process as a holistic one comprised of a range and depth of factors including: context, classroom curriculum development, iterative and looping processes and an eclectic theoretical base as follows:

**Context**

The model emphasises the significance of a wide range of internal and external contextual factors. The practical importance of this emphasis is illustrated by the fact that, in order to be more internationally competitive in an environment of increasing globalisation of markets, the economic and social contexts of vocational education and training in Australia have changed significantly in the past ten years. To meet the needs of government, industry and the community in this changed economic climate characterised by new technology, skill formation, multiskilling and restructuring, TAFE providers have effected considerable organisational and policy change and are forced now more than ever to strive to meet the needs of students, industry and the community via relevant and effective curriculum. Nevertheless,
concerns with the needs of industry and the community have always been central to TAFE NSW policies and activities as Chapter Two has shown. Curriculum, a vital and essential element of TAFE NSW's VET provision, is thus being developed in a continually changing and increasingly complex economic, social and political context (Chapters One and Two).

The thesis model portrays the complex context of curriculum development in TAFE NSW. This derives in large part from the diverse nature of the environment in which TAFE NSW operates and is particularly important because, as the model demonstrates, TAFE NSW's curriculum must be responsive to and work within, indeed accommodate, the broad VET context. Figure 6.1, Chapter Six and the attendant comments provide a detailed account of this context with particular reference to Skilbeck's (1972, 1976 and 1984) notion of "situational analysis" (Figure 6.2 provides an overview). Clearly TAFE NSW's curriculum is strongly influenced by contextual forces both internal and external to TAFE NSW. The external curriculum influences are a mixture of social and cultural factors driven by an economic imperative. National and state vocational education and training needs deriving from an emergent national VET training system are especially important at the present time. External features which are at the heart of this training system and which impact directly on TAFE NSW's curriculum include the current emphasis on competency-based education and training, key competencies, national standards and the Australian Qualifications Framework (Chapter Three). The model enables these priorities and policies to be placed in a broad context and shows how they must be related to other factors in the process, such as national ANTA priorities of greater
responsiveness, enhanced quality, improved accessibility and increased efficiency (Chapter Three). In 1992 Gonczi and Hager commented that "policy developments in the wider political and economic context are impacting as never before on vocational education and training" (Gonczi and Hager, 1992:41). Nearly four years later this is still very much the case with the national VET system, as it evolves, having significant effect on TAFE NSW's and TAFE's curriculum development generally. These crucial changes to the VET system including the mandated curriculum accreditation process (Chapter Three) can be incorporated into the model through the external situational factors which appear in Figure 6.1 (Reference Point 3 and accompanying commentary) as the economic and social context to vocational education and training needs.

Internal factors which include such important TAFE NSW features and characteristics as the background of teachers, the age, maturity, life and work experiences of students and the vocational nature of courses offered clearly influence the nature of the classroom teacher-student interaction (Figure 6.1, Reference Point 2 and accompanying commentary) and are organisationally different from other post-compulsory educational institutions (Chapters Four and Six). The next section takes up the issue of the particular characteristics of TAFE NSW students and teachers in relation to the classroom.

**Curriculum Development in the TAFE Classroom**

Especially critical to TAFE NSW curriculum processes and its relevance is the classroom. Research supporting the model (Chapter Four) shows that the TAFE NSW classroom is much more than a mere site in which teachers implement curriculum, as much curriculum
theory suggests. There are salient differences between TAFE NSW, the school system (upon which most curriculum models are based) and other post-compulsory educational institutions. TAFE NSW has a long tradition of providing education and training which responds to industry and community needs by emphasising not only knowledge and understanding but also relevant, practical and applied skills (Chapter Two). What has emerged out of this study and its supporting theoretical investigation is that the classroom is pivotal and central to the whole process in TAFE NSW. Indeed as a number of theorists have claimed (although usually in contexts very different to that of TAFE) student experience in the classroom is, in a significant sense, the "real" curriculum.

In Chapter Three (Section 3.6) it was seen, for example, that Sockett (1976) in discussing the design of curriculum observed that the transactions effected between teachers and students in the classroom are most important and Elliott (1991), in reference to curriculum reform and reflective pedagogy referred to the importance of the classroom for curriculum – that curriculum is developed in and through the teaching process. So the classroom may be regarded as both the "real" curriculum and a site of curriculum development. The thesis model, importantly, focuses on the classroom and regards the process of teacher and student classroom interaction as a particularly significant part of the whole curriculum development process in TAFE NSW. This arises from unique characteristics which attach to the TAFE NSW teacher-student classroom interface. Of special significance is the life and work experiences that both teachers and students bring to the classroom. This is strongly supported by the evidence of Chapter Four where it is seen that the teacher and student,
for example, add to the curriculum process by making the content relevant and providing current examples of workplace experience. In the classroom where the curriculum is experienced there is negotiation between the teacher and students and a curriculum reshaping process effected. In Chapter Four it was seen that the students' ongoing, day-to-day experience and knowledge of the workplace where curriculum content is applied has an impact on the curriculum process. There is pressure on the teacher to make sure that the curriculum takes account of current developments in the students' immediate workplaces. Indeed the classroom curriculum reshaping process provides a vital link between workplace competency and the curriculum – the fundamental 'CBT-Gap' problem referred to in Chapter Three. In the TAFE NSW situation it is very important to match curriculum content with the real world and a reshaping process is instrumental in maintaining this. Furthermore, the incorporation of the classroom as central to the curriculum development process enables greater focus on meeting student needs (including CBT educational concerns) and more attention on learning outcomes – not only performance outcomes (Chapter Three, Section 3.5.2).

Iterative and Looping Processes
Classroom interaction discussed in the previous section is part of a curriculum development process which is iterative involving a number of integrated steps which move through continuous cycles over short and long timeframes with ongoing review and improvement (Chapter Six, Figures 6.3 (a), (b) and (c)). There is a critical need to keep up with changes in the workplace and the community and for the curriculum development process to be able to accommodate these changes on an ongoing week-to-week basis. As seen in Chapter Four, both the teachers and the students maintain a
relevance and currency of curriculum content by their own input. The looping, iterative process between the teacher, the student and the environment (Figures 6.3 (b) and (c)) characterises this. TAFE NSW's curriculum development is portrayed as one of continuous improvement linking the planned and the experienced curriculum. Vital to the whole cycle is the classroom reshaping process which integrates the experiences of the classroom with the curriculum's plan and overall curriculum development process. Both the looping process at the classroom teacher-student interface and the spiral of reshaping, as represented in Figure 6.3 (c) Chapter Six, have a significant influence on TAFE NSW meeting its curriculum objectives and outcomes. A critical part of this iterative process is that students with real-world life and work experience engage with the teacher in the classroom, beginning a process of shaping and reshaping the curriculum. This can be a short-term process as the curriculum is formally reviewed, thus setting in train a process of continuous quality improvement through a reshaping spiral and looping process (Figures 6.3 (a) and 6.3 (b)).

Carmichael (1993) in discussing an approach to quality in curriculum development comments that the difficult part in achieving quality in the curriculum is putting the theory into practice to ensure that there is an "emphasis on continuous quality improvement in process, products and services and a focus of attention on the customers (both internal and external) ..." (1993:5). The thesis model addresses this difficulty and demonstrates how TAFE NSW's curriculum development and its classroom delivery are part of one integrated curriculum process which iterates and loops between the planned and the experienced curriculum (Figures 6.3 (a), (b) and (c)). Closing the
loop between the planned and the experienced curriculum brings the curriculum development process closer to the classroom, its teachers, students, other clients and the workplace in which students are involved. Workplace standards and the curriculum are linked - helping achieve the national training system’s competency-based training approach of aligning the classroom with the needs of the workplace (competency standards). A focus on the broader aspects of ‘competency’, ‘skill’ and ‘skill formation’ is also achieved through the classroom interaction and reshaping process.

In the TAFE NSW context the experiencing of the curriculum is particularly critical. The curriculum as experienced by students in the classroom is, as argued in Chapter Four and noted above, the “real” curriculum shaped by formal curriculum documents. But it is reshaped by other diverse influences. Reshaping begins outside the classroom with the teacher preparing the curriculum for delivery and continues as students engage in the “curriculum” with the teacher. The reshaping continues through the output of skilled and trained students who may have input into curriculum planning and design (Chapter Six, Figures 6.3 (b) and 6.3 (c)). Over time the whole curriculum is reviewed and revised against national standards and competencies. The TAFE NSW classroom thus provides a vital contribution to the curriculum development process and, importantly, forms part of a continual improvement process at a number of levels (Chapter Six, Figure 6.3 (c)).
Curriculum Theoretical Base

The previous sub-sections deal with context, classroom and the iterative nature of TAFE NSW's curriculum development and show clearly that TAFE NSW's curriculum development is far more complex, dynamic and diverse than is represented by the traditional Tyler (1949) objectives-based model which, as shown in Chapter Three, has often been referred to as representing TAFE NSW's curriculum approach. While TAFE NSW's curriculum development is certainly needs-based and objectives driven, it needs to draw on a number of curriculum approaches. An extensive review of literature in Chapter Three reveals a number of curriculum perspectives which are relevant to TAFE NSW and offer a broadened curriculum theory context. Moreover, the classroom case-study and other classroom observations in Chapter Four clearly demonstrate that TAFE NSW's curriculum development is extremely complex at the classroom site. For this reason the proposed thesis model includes fundamental aspects of the objectives model but goes well beyond this to draw on a diverse body of curriculum theory. Thus, the model offered is an eclectic one drawing on a mixture of theoretical approaches to underpin TAFE NSW's curriculum including "objectives-based", "process", "practical" and "critical theorist" approaches (Chapter Three).

With respect to the objectives-based approach, as shown in Chapters Two and Three, TAFE NSW's approach right from its beginnings in New South Wales was to meet the needs of industry and the community via objectives-based curriculum and this is still the case in the context of competency-based education and training (Chapter Three, Section 5).
The process approaches of Skilbeck, Stenhouse and Huberman (Chapter Three, Section 3.2 (ii)) are appropriate because TAFE NSW's curriculum must be, as Skilbeck's model holds, flexible, responsive and adaptable to its environment, in a continuous, ongoing and holistic process. Further, Skilbeck holds that a comprehensive approach should be adopted through situational analysis (internal and external) and goal formation, that the best place for designing curriculum is where teachers and students meet and most importantly, the process of curriculum should relate to the experience of the learner (Chapter Three). All of this is true of TAFE NSW as Chapter Four shows.

Stenhouse (1975) preferred the process approach to curriculum development (Chapter Three) because, as Elliott (1991) comments in his support of Stenhouse, "(the process approach) embraced the process of education and not simply its content" (Elliott, 1991:15). Elliott makes the further observation that "curriculum development and teaching are not two distinct processes. The former is a dimension of the latter" (Elliott, 1991:151). The thesis model places particular emphasis on the educational experiences of teachers and students, the importance of classroom interaction and the role of the "teacher as researcher" (for example, in maintaining curriculum relevancy and currency) in delivering the curriculum as proposed in the Stenhouse approach. The particular interest in the teacher as motivator for selection of classroom content and the instrumental approach of choosing knowledge for practical use (rather than knowledge for its own sake) as proposed by Huberman is also significant in TAFE (Chapter Three).
TAFE NSW's curriculum displays characteristics of "practical" curriculum theorists. TAFE NSW's concern for curriculum must be essentially practical in nature (Chapter Two) emphasising "relevance" and "responsiveness" to the immediate (classroom) situation. Curriculum developers need to take an open-minded, eclectic approach supported by "practical deliberation". TAFE NSW's curriculum must be responsive to concrete, tangible situations, task orientated and concerned with actual, current work-place or community based situations. These characteristics are supported by the "practical theory" approaches of Schwab, Reid and Walker (Chapter Three, Section 3.2 (iii)).

Classroom research in Chapter Four also provides evidence that TAFE NSW's curriculum has characteristics recognised as similar to "critical theory" approaches to curriculum. TAFE NSW processes, for example, encourage critical appraisal of issues (e.g. students questioning the relevance and application of curriculum content) and participants, both teachers and students, engage in the curriculum's delivery with negotiation of both the processes and content (which is often regarded as fixed in TAFE) in the classroom (e.g. teachers and students interacting and reshaping the curriculum). Further, students "make meaning" of the curriculum in relation to their own experience beyond the classroom (e.g. relating content to their workplace and bringing examples into the classroom). In the end, as Lovat and Smith propose in their advocacy of a "critical" stance, it is the teachers and students that make the curriculum work (Lovat and Smith, 1993.ix; Chapter Three, Section 3.2 (iv)). The research supporting the thesis model (Chapter Four) demonstrates how, for example, teachers and students through a reshaping process do in fact make the curriculum
There was pressure on the teacher to maintain a flexible approach and for the teacher to remain up-to-date. This was a credibility issue for the teacher. In their interaction in the classroom, students and teachers are engaged in the process of making meaning together — of constructing an understanding which is meaningful in the students' work situation.

Five specific curriculum characteristics which emerge as most relevant for TAFE NSW from the literature review in Chapter Three are summarised in Chapter Five and incorporated in the thesis model (Chapter Six, Section 6.1). These are, that curriculum development should be:

- Context Driven
- Needs Based, Objectives Driven
- Teacher and Student Generated and Process Focused
- Approached with "Common Sense" and Pragmatism
- Focused on Teaching and Learning.

**TAFE NSW Curriculum Development – A Holistic Process**

TAFE NSW's curriculum development process is thus the product of a very complex and dynamic set of inter-relationships. The model focuses on actual TAFE NSW curriculum workings and is a portrayal founded on what actually happens in the TAFE NSW curriculum development process but goes beyond this to propose additional processes, the most crucial of which is the looping process of curriculum shaping. It presents a holistic framework of how the TAFE NSW curriculum development process can be understood and developed by taking into account contextual factors both internal and
external to TAFE NSW, classroom and experiencing of the curriculum, iterative and quality improvement processes and its eclectic theoretical base – all outlined above. (Refer Chapter Six, Figures 6.1 and 6.2 and accompanying commentary.)

The model is thus characterised as a holistic one viewing curriculum development as a whole, integrated process which includes the curriculum design, documentation and classroom delivery aspects of curriculum and reshaping. More specifically the model takes a total approach and incorporates the whole environment within which TAFE NSW's curriculum is developed. The diagrams constituting the model present this in full detail, providing an extensive account of the many factors and most importantly their interrelationships. These factors discussed in Chapters Five and Six include:

**Broad contextual factors —**

- VET national agenda (NVETS)
- change in technology
- economic and political needs
- TAFE student needs
- industry and community requirement as represented by ITABs and ESCs
- curriculum theory.

**TAFE classroom —**

- the experiencing of the curriculum and reshaping by teachers and students
- age, maturity and experience of students
- teachers' backgrounds
- types of courses.
Curriculum principles —

- elements: objectives, content, method, evaluation and situation analysis
- axioms: there are ten guiding axioms suggested (e.g. inevitability of change, co-operative endeavour, systematic development — refer Figure 6.2)
- values: value preferences in relation to decision making; teacher values.

In addition, the model brings these and many other factors together incorporating the interrelationships between all factors (the dynamics of this process are shown diagrammatically in the five core diagrams of the thesis model — Chapter Six).

The model as a whole illuminates the many curriculum processes at work and captures the underlying intricacies of TAFE NSW’s curriculum development plan as it is experienced. A recent comment from TAFE NSW’s Curriculum Strategy Unit sums up the importance of this holistic approach in the following words:

Curriculum design was discussed in view of both old and new principles and a resulting outcome was that curriculum should be seen not only as a document but as a whole process which extends over a long period of time including throughout the delivery of the course (Curriculum Strategy Unit, 1995:18).

To take one part of the whole process and ignore the rest as with the BVET curriculum “arrangements”, the TAFE/DTEC curriculum “mechanisms” and the ANTA/NVETS national “framework” (all referred to in Chapter Three) and essentially focus, for example, as
ANTA/NVETS does on guiding NFROT curriculum principles (e.g. that curriculum promotes access and equity, ensures efficient and consistent outcomes, provides flexible delivery – Chapter Three, Section 3.5; Chapter Six, Figure 6.1) is to ignore the essential function of curriculum – its educational role (Chapter Three, Sub-Section 3.4(i) and 3.5.3 raise this issue). These approaches are piecemeal and fragmentary while the thesis model attempts to comprehensively incorporate all factors of the curriculum, includes the classroom and the “looping” process as vital and links the design of curriculum with its implementation.

A discussion paper by one of TAFE NSW’s own senior executives alerts the NSW TAFE Commission to a curriculum problem in this latter area drawing attention to the way TAFE NSW separates curriculum development from its delivery. Willmott (1995) as an Institute Director (he is now an Assistant Director General) made the following comment:

I must say it struck me as surprising that in the NSW TAFE system curriculum development is so sharply separated from delivery. While there are a range of policy and management advantages of centralised curriculum, it is essential to build strong linkages between the development process and the delivery and the implementation process. (Willmott, 1995:2)

Once more the thesis model demonstrates how these linkages can be built.
7.2 CONTRIBUTIONS OF THE MODEL

In terms of TAFE NSW curriculum development, the most significant change in the last three years is the move from TAFE to VET through a policy and planning framework co-ordinated and directed by national and state governments via ANTA and state agencies (BVET in New South Wales) respectively. This shift in emphasis from the broad areas of technical and further education to a narrower focus on vocational education and training has now placed TAFE NSW as just one part of Australia's VET system—along with other public and private providers including the adult and community education sector (ACE). TAFE as one provider of many must comply with a whole range of initiatives as part of the National Training Reform Agenda (NTRA) such as entry-level training requirements (AVTS, now being replaced by MAATS), recognition of prior learning (RPL), a National Framework for the Recognition of Training (NFROT) and accreditation requirements (Chapter Three). Although the importance of VET to the national economy, the concept of recurrent education, a need for off-the-job instruction and flexible training and a balance of general and vocational education have been enduring themes in TAFE over the past twenty years (especially since Kangan, 1974) there is a much stronger emphasis under the NTRA for links with industry and for an industry-driven VET approach. Johnston (1994) comments for example that:

... the training reform agenda provides for a much more extensive and formal structure for the involvement of industry in the setting of direction particularly at the national level (through, for example, a strengthened network of Industry Training Advisory Boards (ITABs), industry
In order to address this agenda TAFE NSW has produced a major review of its curriculum mechanisms with the general brief to ensure that the products and services from curriculum development activity meet the expectations of external and internal customers. This review has recently been released and contains a number of recommendations for setting up a new organisational structure central to which is the establishment of Educational Services Consortia (ESC). Details of this report are referred to in Chapter Three, Section 3.4 but of significance for the thesis model is the fact that the extensive report (in two volumes) essentially focuses on administrative and organisation structures for curriculum development and does not directly address educational aspects of curriculum, such as relevancy of content in meeting industry and community needs and what goes on in TAFE NSW classrooms.

In this context the model shows that we need to add a crucial educational dimension to the present NTRA administrative, procedural model by providing a focus on the substance of the curriculum, that is curriculum as an educational program. The national vocational education and training system supported by a training reform agenda provides a mandated curriculum process comprised of a number of "arrangements" (e.g. registration and accreditation of curriculum), "procedures" (e.g. curriculum format; tendering arrangements) and "guidelines" (e.g. recognition of prior learning, provision for alternative modes of delivery; access and equity) administered by ANTA, BVET and VETAB (Chapter Three).
This is not to suggest that these are unnecessary or inappropriate but a mechanistic, rules orientated, regulated approach to curriculum has emerged from NVETS with very little reference to the curriculum as an educational program (Chapter Three). Unlike the NTRA model the thesis model offers a broad, holistic and comprehensive account of the many diverse curriculum processes at work. This provides a substantial basis to help make the whole curriculum system work better and not just focus on its administration. It is extremely important to view curriculum as far more than just a documentation process with a set of rules and registration procedures.

With its focus on curriculum processes and how they interact the thesis model offers substance to what is addressed in these administrative models and is able to provide the link between the organisational structure to support curriculum and the operational activity of developing curriculum. It is of interest to note that in a separate final report on curriculum mechanisms in NSW the Project Manager comments that the organisational and design aspects of "the proposed new curricula arrangements will generate fundamental changes in the way in which VET curriculum priorities and resources allocation are determined in NSW" (DTEC Change Management Team, 1996:16) and then makes the claim that "the ultimate outcome will be quality curriculum that is relevant and responsive to the skill requirements of industry and the community" (loc. cit.). But curriculum development itself is not dealt with. What this thesis does is to set out a model of curriculum development which could be supported by the administrative structure suggested in the Curriculum Mechanisms in TAFE Project (Chapter Three, Section 3.4). This project makes an assumption that efficient resources allocation processes will
ensure an appropriate curriculum development process. The thesis model clearly shows why this assumption is not valid and that the whole process is an extremely complex one requiring a diversity of input from curriculum elements, principles and values (Figures 6.2) and iterative processes. Quality curriculum results from paying attention both to curriculum issues and administrative strategies which must be there to support the curriculum process. This is further discussed in Section 7.3.

The model is likely to have relevance and application beyond TAFE NSW to the wider VET sector. Clearly TAFE itself has similarities across the states and territories – all being part of a larger nationally coordinated training system working within the same centrally mandated curriculum system (Chapter Two, Section 2.4). Other VET providers fall within this same training framework, especially where they seek curriculum accreditation and registration and are subject to the contextual forces as portrayed in the thesis model (Figure 6.1). For VET providers generally the classroom is likely to be a significant site for curriculum development – there is a similar interaction of the teacher and students and a requirement of curriculum, for example, to be relevant and current. The VET providers offer a vast range of courses in a competitive VET market place and there is pressure on them to meet student needs. The possible broader application of the thesis model to the VET sector is returned to in Section 7.4.
7.3 FUTURE DIRECTIONS – THE MODEL AND CURRICULUM DEVELOPMENT IN TAFE NSW AND ITS INSTITUTES

This study has demonstrated the extremely complex and diverse nature of TAFE NSW curriculum. With the need to recast the TAFE NSW system of education and training in order to meet rapidly changing technological demands and economic imperatives (Chapter Two) curriculum development needs to be responsive, flexible and adaptable. At the present time this curriculum must be able to operate within the changing economic and social context of an emerging national training system. The model offered in this thesis provides a comprehensive guide and basis for detailed analysis of the existing TAFE NSW curriculum development process. It goes beyond this and portrays how the process should be perceived and thus offers a point of reference for improving and enhancing the system in this newly emerging VET context.

Through this study it is now possible to take a detailed, comprehensive and holistic view of TAFE NSW’s curriculum development and specifically apply the model to help make curriculum development work in TAFE NSW more effective and efficient (Chapter Two). In fact, the thesis model and its supporting research offers those working in the curriculum field both a theoretical framework and a practical guide to curriculum development in TAFE NSW.

Sockett (1976) makes the comment that “If theory in education is to inform practice, it must be theory about practical” (Sockett, 1976:2). The following section now considers curriculum development practice at the TAFE NSW Institute level (presently being reviewed by TAFE
NSW management) and makes a number of practical recommendations in the context of the new organisational arrangements. It does this by applying the thesis model (founded on the practical workings of TAFE NSW's curriculum and informed by curriculum literature) and drawing on the writer's extensive experience and knowledge of TAFE NSW at the Institute level – based on more than twenty years full-time employment in TAFE NSW in a variety of positions including Teacher, Head Teacher, College Principal and Institute Manager for educational planning. The following discussion includes reference to several recent TAFE NSW curriculum documents through to December 1996 – the cut-off point for this study.

7.3.1 Current TAFE NSW (Curriculum) Structures

At the beginning of 1997, Institutes are setting up organisational structures for Curriculum Support Units (CSU) to fit in with the latest TAFE NSW policy guiding the new restructure (outlined in Chapter Three). TAFE NSW is comprised of eleven separate TAFE Institutes across the state (three of which are Institutes of Technology) plus the Open Training and Education Network (OTEN) which are responsible for the delivery of courses and supporting infrastructure such as marketing, staffing and planning. In respect of curriculum structures there are plans to establish seven statewide Educational Services Consortia (ESC) whose main role is to develop curriculum to descriptor level (brief description of the purpose, learning outcomes, assessment criteria and conditions) for accreditation with state and national accrediting bodies. These will replace the present Industry Training Divisions (Chapter Three). There is a centralisation of
administration particularly relating to financial aspects at the TAFE NSW Head Office level but there is a strong move for Institutes to have increased autonomy. In June 1996 the Minister for Education and Training for New South Wales, for example, in addressing the Annual Conference of TAFE Managers on restructuring VET in NSW stated that:

A strong state-wide identity for TAFE will be retained. However, in the context of providing greater autonomy to Institutes and placing decision making closer to the students, the mechanisms for this are changed... More significantly, Institutes will have greater autonomy in relation to course and strategic decisions and will participate more directly in state-wide level planning than has been the case in the past. (Aquilina, 1996:10, 11)

It should be noted that autonomy in relation to courses refers here to what courses to offer - not the curriculum of the courses. This is the line with DTEC and TAFE NSW's Structure and Functions Report (DTEC/TAFE NSW 1995) and TAFE's Curriculum Mechanisms in TAFE Project (Curriculum Mechanisms in TAFE Project Team, 1996) (Chapter Three). Further, Institutes will have a strong input in a number of areas including curriculum support:

Apart from the education support consortia mentioned earlier, there are a number of other new mechanisms to contribute to state-wide co-ordination in which Institutes will have a strong voice. These include the state-wide equity units, Institute curriculum units, staff training and development... (Aquilina, 1996:11)
It is recommended in the TAFE Project Report that the main function of the Institute Curriculum Unit, to be called *Curriculum Support Unit* (CSU), is to support teaching and learning at the Institute level as follows:

Each Institute identify a unit to strengthen teaching and learning. The role of the unit will be to:

(a) improve ongoing support to teachers

(b) customise curriculum to meet local/institute needs

(c) facilitate involvement of teachers and Institute Managers in national, state or Institute initiatives for curriculum development and related curriculum activities

(d) identify appropriate contact persons for the ESC for liaison purposes

(e) develop a register of staff with expertise in staff and/or curriculum development whom Institutes are prepared to release for this purpose.

(Curriculum Mechanisms in TAFE Project Team, 1996:20)

(It is to be noted that points (b) and (c) in particular resonate with the thesis model.)

But as a senior TAFE NSW executives group in a Background Discussion Paper notes:

This recommendation is capable of various interpretations. The fact that it is contained in a report on the “Curriculum Mechanisms in TAFE Project” may suggest that the Unit should focus
primarily on curriculum matters, including the preparation of curriculum documentation and learning materials. On the other hand, it could be argued that the primary focus of the Unit should be much broader and centre on "strengthening teaching and learning" and the "ongoing support to teachers"... (Institute Curriculum Support Services, 1996:2)

An example of establishing a Curriculum Support Unit is in the Illawarra Institute of Technology (where the writer has been located in a senior educational position for several years). A more detailed set of recommendations will be released later in 1997 by the Institute when a new Illawarra Institute structure will be finalised. The Institute has made the following recommendations at this early stage:

The Unit will:

(i) Provide high standard course material.

(ii) Engage in appropriate consultation with industry and the community to ensure relevance and flexibility in course delivery.

(iii) Provide the necessary link between the ESC, the Institute and those responsible for delivery.

The Unit is seen as assisting in the progressive devolution to TAFE Institutes of increasing responsibility in curriculum matters, with initial concern for the delivery end of the curriculum development continuum. (Institute Curriculum Support Services, 1996:5)

In reference to (i) above, at present the course material provided centrally by Training Divisions (in CBET format) is very basic – e.g. a list of topic areas (Chapter Three, Section 3.5). Some Training Divisions provide teaching resources but the depth of material varies
considerably. This leaves the development of course material to teachers – the CSU would assist the teacher, for example, in preparing visual presentation.

### 7.3.2 Recommended Changes

In essence then, curriculum design and documentation in the proposed system described above will be handled by the statewide Educational Services Consortia (ESC) and Institute Curriculum Support Units (CSU) will provide support for teaching and learning at the delivery end and help make curriculum locally relevant and flexible. The idea of a Curriculum Support Unit would be endorsed by the thesis model particularly because of its teaching and learning support, but the overall system is flawed because there remains a separation between the curriculum plan and classroom experience. As this study demonstrates there is a fundamental need to incorporate the classroom as a central part of the whole curriculum process. Indeed, while one role of the curriculum process is to support the classroom at the delivery end, at the same time the classroom itself should be supporting the curriculum development process as portrayed in the thesis model.

This study has been concerned from the outset with improving curriculum development in TAFE NSW (Chapter Two). The following is an attempt, using the thesis model as a guide, to overcome the major shortcomings identified above in the new and still evolving curriculum development system. A practical framework is offered which can be used to enhance the structure and process of curriculum
at statewide (ESC) and Institute levels (CSU). Reference is made to the Illawarra Institute of Technology as a specific example of an Institute focusing on new curriculum arrangements, serving as a case study of how the model can contribute to the development of curriculum policy and process in TAFE NSW.

A major problem identified above is the separation of the planned and experienced curriculum with the ESC developing curriculum to descriptor level (brief description of the purpose, learning outcomes, assessment criteria and conditions) and leaving delivery arrangements to the Institutes thereby separating the curriculum's design and documentation from its delivery and classroom experience. There is a critical need, in terms of the thesis model, to take a holistic approach and integrate the planned and experienced curriculum. The most practical way to achieve this is to change the structure and process of the Statewide ESCs and Institute CSUs so that curriculum development for TAFE NSW incorporates both ESCs and CSUs and captures the complexity and diversity of the whole curriculum development process – drawing on its context, the classroom experiencing of the curriculum and the curriculum's iterative and eclectic nature referred to above. The following is a framework for doing this.

The framework is founded on two major curriculum needs:

- There is a need to focus on the whole integrated curriculum development process and not just on separate, isolated parts and thus to close the gap between the planned (statewide) and the experienced curriculum (Institute).
• There is a need to go beyond the present administrative, managerial emphasis of what is best for organisational structures to an educational focus (content, curriculum principles) of what is best for curriculum development.

Structure and Process

The proposed change in structure is to extend the present recommendations beyond that of Institutes essentially providing teaching and learning support, to Institutes having a central role in curriculum development and for ESCs to expand their curriculum development work to incorporate ongoing feedback from classroom delivery. To achieve this the two systems (Statewide ESCs and Institute CSUs) need to be integrated so as to operate as one inclusive, whole system. This can be done by linking each of the seven ESCs (Chapter Three) with respective ESC course areas in each Institute (via CSUs) through a system of ESC curriculum development teams. Institute CSUs would maintain their recommended teaching and learning support role for each of the course (industry training) areas but with an extended role of organising course representatives (teachers, Head teachers) to be part of ESC curriculum development teams.

Each Institute CSU would provide seven local ESC curriculum representatives or nominees to be curriculum team members – as required and as suitable (dependent on the course/subject area). In this way each Institute has curriculum input from the classroom to each Statewide ESC and in turn each ESC has a direct curriculum link at classroom level to eleven Institutes. Thus, each ESC curriculum development team would consist of: an ESC Chairperson
(representing a course area) plus a course representative from each Institute (i.e. eleven representatives). This proposal is shown in Figure 7.1 (a) which presents an overview of TAFE NSW ESC curriculum development teams and 7.1 (b) which shows the organisation of a typical ESC team (Business and Public Administration, for example).
FIGURE 7.1 (a)

TAFE NSW ESC CURRICULUM DEVELOPMENT TEAMS

- Access and Foundation Programs
- Business and Public Administration
- Community Services, Health, Tourism and Hospitality
- Construction and Transport
- Information Technology, Arts and Media
- Manufacturing and Engineering
- Primary Industries and Natural Resources
FIGURE 7.1 (b)
THE BUSINESS AND PUBLIC ADMINISTRATION ESC CURRICULUM DEVELOPMENT TEAM

Institute - Business & Public Administration Sections
(Across 11 Institutes)

Curriculum Development Team

Composition of Team
Chairperson (from ESC)
and
Eleven Institute Representatives

Business & Public Administration ESC

Business & Public Administration

Industry 

INDUSTRY
This structure provides a very strong basis for linking the planned and experienced curriculum thus enabling an integration of curriculum design, documentation and delivery. It is suggested that the curriculum teams be chaired by ESC representatives (a course area specialist involved in the curriculum's design and documentation, for example) and that they facilitate meetings and co-ordinate activities. The prime functions of the Institute representatives on the team are to provide local industry and community input and classroom feedback to curriculum design. Most importantly this structure places the teacher in a central curriculum development role and makes the teacher and classroom integral to the whole process.

The key to linking the two is the role of the teacher. It is proposed that teachers play a central role in curriculum development by their inclusion in curriculum development teams in the proposed new structure above. In this way the ESCs and CSUs become part of one integrated curriculum process and TAFE NSW's curriculum development can move away from an emphasis on management and administration to a central focus on the classroom and the curriculum as such. Instead of the curriculum documentation just being handed over to the Institute for delivery and for teachers to be used in the design stage in an ad hoc, piecemeal way – as is presently the case with teachers being released on secondment when they are available – there is a substantial and continuous input by teachers and a link between curriculum design and delivery.

It is also recommended that the teacher's role include input at the planning and design stage of curriculum as the documentation is being initially prepared because this provides links from the TAFE NSW
classroom to the content of the curriculum. This would be done on an ongoing basis via the teacher's representative on the curriculum development team ensuring that the curriculum is continually updated. This would help close the loop between the curriculum document and its delivery and make the curriculum as experienced in the classroom an integral part of the curriculum planning process. Clearly, as the research supporting the model shows (Chapter Four), the teacher has a critical role in TAFE NSW's curriculum development. The classroom adds significant value to the curriculum process through teacher-student curriculum shaping and reshaping at the classroom interface as demonstrated in the looping process depicted in Figures 6.3 (b) and 6.3 (c). Curriculum substance would be added (included in the thesis model as curriculum principles, Figure 6.2 - curriculum objectives, content, method, evaluation, situation analysis, values) to the process particularly to the competency-based approach which provides only a basic outline of curriculum content (Chapter Three, Section 3.5).

This proposal goes to the heart of the curriculum development process which the thesis model is portraying. That is to view the experiencing of the curriculum by teachers and students as "the real" curriculum and, furthermore, to focus on the substance of curriculum namely its content and process as an educational program not just its rules and procedures. Pivotal to this "real" curriculum focus is the teacher and associated educational processes. The model presents the elements of the curriculum process (objectives content, evaluation, method and situational analysis) as central to curriculum development (Figure 6.2) and places the teacher and classroom interaction not administrative and management systems as crucial to achieving curriculum
outcomes. To achieve such a focus it is suggested, in light of this study, that attention be placed on the curriculum experience in the classroom. The present administrative models outlined above (by BVET, DTEC and TAFE) create an illusion of substance that curriculum is focussing on the teacher and the classroom – for example, the Report on new curriculum arrangements for VET in New South Wales (Chapter Three, Section 3.4) comments in its conclusion that “the ultimate outcome of these arrangements will be quality curriculum that is relevant and responsive to the skill requirements of industry and the community” (DTEC Change Management Team, 1996:16) but there is absolutely no mention in the Report of teachers or classrooms. In fact the classroom takes on a critical role in this proposed system because each Institute is included in the ESC curriculum development process through the provision of teachers – this represents a powerful, combined input of teacher and classroom experience because each ESC has input from up to eleven Institutes (teachers and classrooms) for each of its course areas.

A further point is that a co-ordinated statewide curriculum development team for each ESC (incorporating each Institute) would have the strong advantage of working within a very broad context because it has representation from external national, state and local Institute forces (e.g. industry and community needs, NVETS and BVET guidelines) and internal TAFE NSW factors (e.g. classroom, student needs). In terms of the thesis model this means that the curriculum is driven by (and can take account of) a very comprehensive and diverse range of influencing contextual factors down to the local level (Refer Figure 6.2 and supporting commentary and Section 7.1.1 above).
Implications of the team approach for ESCs and Institutes are that it will extend the role of the CSU in the Institutes by including a curriculum development role (with teacher participation) and expand, indeed broaden, the role of ESCs through their involvement with the delivery end of curriculum. An advantage of this approach is that it adds to or extends upon (not changes) the proposed ESC and CSU roles and in fact in the case of the Institutes draws on the system as it functions now and indeed adds value. The following section shows how this may be achieved through a brief case study of the Business and Public Administration ESC (still known as a Training Division or Faculty) in the Illawarra Institute.

For the Illawarra Institute, in the present Training Division or Faculty System, there are already regular Faculty meetings which bring educational staff together from across the fourteen sites of the Institute. In the Business and Public Administration ESC (Training Division) area, for example, there are monthly meetings of senior educational staff and bi-annual meetings of all staff covering a range of topics and issues (these can include educational areas such as curriculum content and modes of delivery). These meetings would continue under the proposed system and provide a forum for feeding curriculum information (via the teacher, Head Teacher representative) to the Business and Public Administration Curriculum Development Team.

A problem for sections and their teachers in the present system is that the course designers from the ESC (Industry Specialists) are not part of these meetings nor any other forum to do with the curriculum's delivery. Curriculum delivery is the province of the teachers. So there is no formal mechanism for feedback involvement by teachers
back to the ESC on curriculum matters. In the proposed system curriculum delivery would not only be the province of teachers but of the ESC as well. At the Institute, through the extension of the CSU role, teachers from the ESC area will sit on curriculum development teams representing their section (course delivery area) and Institute. The CSU's role in addition to its teaching and learning support role would be to arrange for the appropriate teacher via the section to represent the Institute on the team in consultation with the local section.

Clearly the ESC role through the curriculum development team is also greatly enhanced by its broadened role because the curriculum is brought much closer to the needs of the client via classroom feedback and places a stronger focus on the relevance of the educational program.

An important implication of this team approach for teachers is that it will broaden their activities beyond the teaching role into curriculum development. (Stenhouse - Chapter Three - teachers as researchers, curriculum developers). This may require training in a range of curriculum and related skills – for example, in consulting with industry and professional bodies for relevancy of content (as tied to competency standards) and resource development (to match industry requirements). Furthermore, this system supports curriculum development as an iterative one enhancing continuous quality improvement. With input from all Institutes across the state the curriculum team provides a forum for keeping abreast of and monitoring economic and social change over long and short term timeframes in all the geographical regions of New South Wales and
brings curriculum development closer to the workplace, community and client (Section 7.1.1 above). The curriculum process in this proposed system is thus able to cater more comprehensively for ongoing change (Figure 6.3 (c) and supporting commentary). Moreover, by incorporating the teacher and classroom in the process TAFE's curriculum development is able to draw on an eclectic mix of curriculum approaches including "objectives", "process", "practical" and "critical theorist" (Chapter Three; Section 7.1.1). The teacher's input in curriculum makes this happen through, as shown in Chapter Four for example, interaction and negotiation with the students in the classroom (e.g. curriculum content and its relevance to the workplace). Teachers must not see this interaction and negotiation as a threat to their credibility but rather see it in a positive, constructive way as an opportunity for meaningful classroom based curriculum development (Chapter Four, Section 4.3.3).

Outcomes of this curriculum integration would be of practical benefit to TAFE NSW's curriculum development overall. This is essentially achieved through the teacher's input and by incorporating their point of view and the experience of the curriculum in the classroom. A major benefit is that curriculum design and documentation will be directly linked with delivery. A major implication of this is that the ESC will engage in the training function of the curriculum, a role not presently entered upon – this is now left to the provider (the Institute) (Chapter Three, Section 3.5). At the Institute level a major outcome and benefit is that institutes will have input into the design and documentation of curriculum which in turn will help provide ongoing relevance for the students, industry and the community. This will enhance the quality of curriculum delivery at the classroom level.
7.4 RESEARCH RECOMMENDATIONS

There is not a strong tradition of curriculum development research in TAFE NSW as Chapter Three has shown. Clearly TAFE has experienced radical change in policy in recent years but as Wiltshire has pointed out: "It is widely agreed that there has been a dearth of research in the past on policy issues in vocational education and training" (Wiltshire, 1993:69). This comment is also supported by McDonald et al. (1993) in their Report on proposals for a research and development strategy for VET in Australia. Very recently McDonald has reinforced this comment saying that:

Sadly, as Australia’s focus on VET has grown, quality research and development has been allowed to decline. As a result R & D has, largely, failed to provide the support that policy makers, teachers in the classroom and trainers in the workplace have needed. (McDonald and Hawke, 1996:11)

Clearly there is a need for more VET research. In the last three years this need for more research has been recognised with funding being provided, for example, by the ANTA Research Advisory Council (ANTARAC). There is also a need for research direction and strategy to guide the research. Moran (1994) (Chief Executive Officer of ANTA) comments that:

A more sophisticated and more substantial research effort is extremely important for vocational education and training, and hopefully the results will be immensely valuable in charting direction in the future (Moran, 1994:269).
McDonald and Hawke make the point that: “the need is for new strategic initiatives, rather than specific projects” (McDonald and Hawke, 1996:11). Policy change needs to be supported by strategic initiatives to implement change. McDonald and Hawke have recently proposed a three-part strategy for achieving an improved VET system in New South Wales

- a framework for research as an integral part of VET operations
- a range of specific priority areas for VET research
- the formation of a research and development centre for VET in New South Wales and a strategy of research funding in 1995-96.

(McDonald and Hawke, cited by Anderson, 1996:20)

A number of writers have suggested areas in which research is needed in the VET area and many include curriculum as a priority. McDonald et al. (1993) identify the major priority area for research in curriculum development and delivery as:

The assumptions underlying competency based education/training, ways of implementing CBT, the nature of competency based assessment, and the implications for post secondary sector and workplace training of the implementation of the Mayer report and the Carmichael reforms. (McDonald et al. 1993:43)

They also identify several areas for general research – these include:
• CBT assessment and competency standards, assessment of higher order competencies

• Relationship between competency standards and underpinning knowledge and skills

• The nature of workplace learning

• Rigorous analysis of current vocational education curriculum and the assumptions which underlie it.

(McDonald et al., 1993:43)

Gonczi (1994) comments that "curriculum developers in TAFE need to take account of a bewildering number of issues..." (Gonczi, 1994:19) and raises four areas which "need debate". Two of these in particular, are relevant to issues arising in this thesis. They are:

1. What should be the goals of VET curriculum - what groups should determine these goals?

2. If competence and expertise in occupations depends on workplace experience how do we best integrate such experience into our overall curriculum model. Should this be essential for all VET courses to include a workplace or practicum component?

(Gonczi, 1994:19, 20)

Quirk (1993) of TAFE NSW, suggests a series of case studies to examine a range of curriculum questions – three important areas are:

What is involved in situational analysis, and how does it affect the subsequent design of curriculum?

How are the learning outcomes of a course determined? Are all learning outcomes pre-specified, or is there scope for the encouragement
and recognition of unanticipated learning outcomes?

How may curriculum design address the demand for the development of key competencies.

(Quirk, 1993:123, 124)

McDonald and Hawke (1996) comment that research is not about projects but about strategy and utilisation. They state that areas which would benefit from much more research are:

- delivery of VET flexible delivery, and language, literacy and numeracy issues;
- underneath the training reform agenda how much the rhetoric of training reform is being reflected in practice;
- the role of industry in VET policy and practice how best to ensure that R & D is driven by the needs of its stakeholders;
- better data to help in training reform.

(McDonald and Hawke, 1996:11)

Kenyan (1996) makes the pertinent comment, in terms of the thesis model, that: "There is still a great deal of research needed into ways of implementing training reform at ground level" (Kenyan, 1996:16). He also proposes that: "We need further research into the practical ways of (helping) ... training providers to carry out training and assessment in the workplace" and that "predicting the nature of future training delivery is also going to be a much needed area for research" (Kenyan, 1996:16).
Clearly there is widespread recognition of the need for curriculum development research in VET generally and for TAFE specifically. Of critical, practical importance though, is putting research findings and ideas into practice. Stenhouse (1975) in discussing curriculum research and development comments that "the central problem of curriculum study is the gap between our ideas and aspirations and our attempts to operationalise them" (Stenhouse, 1975:3). One useful way of helping to close this "gap" is by the sharing of ideas and concepts. Some of the central ideas of this thesis, particularly those relating to the importance of the classroom to TAFE's curriculum development have, for example, been used to support a submission by a section of a TAFE Institute in Queensland (Bremer Institute, 1996) to Queensland TAFE proposing that curriculum development be more interactive. This resulted from a published article by the writer outlining some of the basic ideas and research findings of this study in an Australian vocational and education training journal (Ball, 1996). The article is now included in the National VOCED Database (NCVER, 1996) which has resulted in further interest, inquiry and sharing of ideas.

**Recommendations for Further Research**

TAFE NSW's core business is delivering programs and, in terms of state and national training systems, achieving greater educational effectiveness. In practice this means a strong focus on improving the quality of client service – in essence meeting customer needs and expectations in a changing, economically driven VET market place. But there are no easy formulas or strategies to assist TAFE NSW with meeting these demands. The comprehensive, integrated, experiential model of curriculum development offered in the study draws together a diverse range of situational factors which influence, indeed drive
TAFE NSW’s curriculum development and significantly impact upon TAFE NSW’s educational effectiveness in meeting customer needs. This study, though, is not an end in itself – there are a number of curriculum issues which derive from the model and need to be followed up with further research. The following three proposed practical inter-related but separate research projects are “specific priorities” linking research with practice, helping improve the curriculum process in TAFE NSW and its educational performance.

*Curriculum Development in the TAFE NSW Classroom*

In demonstrating the significance of the classroom for TAFE NSW’s curriculum development this study examined in depth one curriculum subject area and considered a broad cross-section of other subject areas via a wide range of classroom observations and offered strong evidence of the importance of the classroom to TAFE NSW’s curriculum. But the TAFE NSW system is a diverse, complex and extremely large one with variations from one curriculum area to another – for example: Trades (Welding; Automotive), Personnel (Welfare; Human Resource Management) and Information Technology (Computing). It is therefore suggested that to capture the full richness and diversity of the TAFE NSW curriculum system additional classroom research be effected across other TAFE NSW areas seeking further evidence of the nature of the role of the classroom in curriculum development.

This could be done in a number of ways, as with the thesis methodology for example, by case-studies of curriculum in the classroom, interviewing, surveying and talking to teachers,
keeping of diaries by teachers, classroom observations, collaborative research (teacher and observer) and search conferences. It is important to note that what is being researched is the impact that teachers and students have on the curriculum as it is being experienced (negotiated, interacted) in the classroom and the extent and nature of any shaping, reshaping and looping processes.

_Supporting the TAFE NSW Teacher in Curriculum Development_

Critical to the holistic process of curriculum development portrayed by the thesis model is the teacher and teacher-student classroom interaction. This is referred to as the "real" curriculum. In the experiencing of the curriculum the teacher plays a central role and in fact is the key to the success of the curriculum as an educational program. It is crucial then to know how best to support the teacher in this curriculum development role. As seen in Chapter Four the teacher through interaction and negotiation with the students is involved in providing recent, relevant workplace examples and making the content more relevant. These are areas, for example, in which research is needed on processes through which the teacher could be supported.

This is an area where TAFE NSW teachers themselves could provide valuable assistance by carrying out their own research on how best they can be supported in the curriculum development role. This approach has strong foundations in the Stenhouse idea of "teacher as researcher" (Chapter Three, Section 3.2) in which
he recommends that teachers take a research stance to their own teaching – and better understand their classroom (Stenhouse, 1975:156). This approach would also assist in the need identified by McDonald et al. "to create a culture in the TAFE systems generally, and amongst the teachers in particular, which values research" (McDonald, et al., 1993:51).

The Relevance of TAFE NSW Curriculum in Meeting Client Needs

A driving force of the thesis model is to make VET curriculum work better for TAFE NSW and thus support VET policy at national, state and local government areas. Fundamental to the new national VET system in meeting client needs is the alignment of curriculum content with industry and community competency standards. A critical issue is how to ensure that curriculum content is providing outcomes consistent with the standards required by industry, meeting client needs and closing the gap between the planned and experienced (classroom) curriculum.

In terms of the thesis model this refers to the external situational factors portrayed in Figure 6.1, Reference Point 3, and discussed in the supporting commentary.

The research could be carried out by surveying relevant industries and community groups along with state-wide ESCs and ITABs (National and State). One important measure of meeting client needs is that outcomes be consistent with industry
and community competency standards which guide the curriculum.

A further recommendation for research is the *relevance of the thesis model to the wider VET system*. In Chapter Two (Section 2.4) and earlier in this chapter it is claimed that the thesis model is likely to have relevance to the wider TAFE system in Australia and to the VET sector generally. It is suggested that research be undertaken to investigate the relevance of the model to the VET sector — TAFE, other providers of VET such as Adult and Community Education (ACE) (a large, growing and significant area) and the many private providers.

A starting point for this research particularly in relation to its scope would be with the national VET training authority (ANTA) and the VET agencies across the states and territories (for example BVET in NSW). This would assist in determining the geographic location of the providers and the nature of the courses they offer.

Particular areas of focus for the research would be:

- the application of the thesis model — the six critical curriculum factors and the five integrated core diagrams.
- The role of the classroom as a site of curriculum development, not just implementation.
- The relevance of classroom interaction — the reshaping, looping process.
- The iterative, holistic nature of curriculum development.

The methodology for the research would include classroom observation (the curriculum as experienced) and stakeholder interviews.
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APPENDIX 2

THE 'EDUCATIONAL LADDER' IN NEW SOUTH WALES.

Australia, Sydney: Angus and Robertson.
SIX PRINCIPLES OF CURRICULUM CONSTRUCTION AND DEVELOPMENT


The Tyler model provides a useful set of principles or guidelines for the selection and development of curriculum objectives and related content.

**Principle 1**

**Consider the requirements of industry, i.e., use industry as a source of data.**

Of all the factors to be considered in the construction of vocational curricula, the requirements of industry, involving the identification of employment needs, is perhaps the most critical. 'The real thrust of building curricula for vocational education is found in the analysis of jobs and occupations.' (Larson)

In general terms the curriculum constructor must identify:

(i) what is done on the job, and

(ii) how the job is likely to change in the future.

This process of identification involves task or job analysis and close liaison with industry. Job analysis involves determining and recording the principal tasks and duties of a job. Through further analysis, the knowledge, skills and attitudes required to perform those tasks/duties are determined along with additional facts about the job. Such facts may involve the relative importance of tasks/duties, the conditions under which these tasks/duties are performed and the frequency with which they are performed.

The task of collecting and recording all of the pertinent information about the task and duties of a job is accomplished by any one or a combination of data gathering methods. These methods include:

(i) **Consulting (advisory committees)**

Such committees bring together teachers, representatives of industry and the trade unions, curriculum experts to discuss such matters as current needs of the industry, future trends and requirements likely to effect employment needs and occupational tasks, proposals for new courses or modifications to existing courses.
(ii) **Secondary sources**

The use of secondary sources such as research findings, comments and analysis of others via books, trade journals, magazines etc. can provide relevant information, for identifying current and future trends in the trade or industry under study.

(iii) **Job analysis or trade surveys**

This involves analysis of the activities carried out by a worker in a particular field so that the training program can focus upon those critical activities performed by the worker. Task analysis reveals essential knowledge involved, skills to be employed and desirable attitudes required in the performance of the job. Questionnaires, interviews and checklists are commonly used to obtain job information or more direct means such as actual work participation or observations of the jobs being performed are employed.

**Principle 2**

**Consider the requirements of the student, i.e. use the typical student as a source of data.**

The vocational student is another primary source of possible objectives. Information about the ‘typical’ TAFE student which is likely to be useful might include his abilities or entering behaviours, e.g., educational level, special abilities; motivational factors such as needs and interests; and employment conditions. Such information might be obtained from a number of sources such as school and college records, use of standardised tests of ability, experience of teachers and employers.

**Principle 3**

**Consider the requirements of the subject discipline, i.e. use the subject matter specialist as a source of data.**

A source of curriculum objectives involves a study of the subject matter discipline. Here one is concerned with the question – ‘Is the subject matter included essential for the logical development and mastery of the field of knowledge (called the subject) to which it belongs?’ A study of the subject matter involves identifying the major ideas or key concepts in one’s field and in generating objectives that exemplify them.
Principle 4

Consider the requirements of an appropriate philosophy of vocational education.

Here one is asking the question – ‘Are the curriculum objectives derived from our three primary sources, consistent with an appropriate philosophy of vocational education?’ A ‘philosophy’ should help the curriculum constructor decide if the objectives should be taught. The term ‘philosophy’ is being used somewhat liberally to mean a set of values or general principles regarding what should be taught in TAFE colleges or in particular areas of vocational trade preparation. In some cases the ‘philosophy’ used to screen objectives may be the general policy of the particular teaching school or what are appropriate objectives may be more broadly defined by the TAFE department e.g. those outlined in the TAFE submission to the Kangan Committee. The purpose of applying this principle is to eliminate any objectives derived from the three primary sources which are inconsistent with the accepted ‘philosophy’.

Principle 5

Consider knowledge derived from the psychology of learning.

A further screen through which curriculum objectives should pass is the criterion implied by what is known about the psychology of learning. As the number of objectives has been reduced by the use of a philosophical screen, the use of a screen relating to knowledge from the psychology of learning will generally result in a still smaller list. The ‘psychological’ screen is used to ask if the objectives can be taught?

Keeping in mind that curriculum objectives represent educational ‘ends’ that are the results or outcomes of learning it becomes obvious that unless these educational outcomes are attainable they are worthless as educational goals.

Knowledge from the psychology of learning will influence the selection of objectives in terms of such factors as e.g., the length of time required to acquire certain learning; age levels at which certain kinds of learning are likely to occur; best sequencing of learning activities; transfer of knowledge and skills from the classroom to the job etc. Application of the ‘psychological’ screen further reduces the list of objectives by eliminating those objectives which are inconsistent with psychological principles or unattainable.
Principle 6

Consider a classification of educational objectives.

With regards to this principle one is asking the question 'Has a wide and representative sample of objectives been included?' The curriculum objectives are now examined to ensure that they represent an adequate coverage of the knowledge, skills and attitudes to be developed. One approach to ensure that this has occurred is to compare the selection of objectives with some classification or checklist of possible educational objectives. One such classification is referred to as the Taxonomy of Educational Objectives (Bloom et al, 1956; Krathwohl et al, 1964; Harrow 1972).

Bloom and his associates devised a classification system or 'taxonomy' of objectives which classifies objectives into three broad domains. These are:

(i) The Cognitive Domain (objectives related to knowledge);
(ii) The Affective Domain (objectives concerned with interests, attitudes and values);
(iii) The Psychomotor or Performance Domain (objectives related to practical and general skills).

Within each of these 'domains', five or six categories (or levels) are established and arranged in rank order from the simplest to the most complex.

(Refer to Appendix I for a summary of the three domains and levels and Appendix II for examples of 'action verbs' associated with the three domains).

This system of classification provides a basis for checking that a given set of objectives covers an appropriate breadth of categories (the domains) and at suitable levels of achievement (the hierarchical levels within the domains). The classification is helpful in judging the relative worth of curriculum objectives in relation to

(i) the three domains i.e. whether too much emphasis has been placed on one domain at the expense of others, and
(ii) the levels within the domains i.e. whether all levels required, within a particular domain, are represented.

It should be noted that there is nothing intrinsically wrong with having most objectives in one domain or at one particular level as long as this has been the result of a conscious or deliberate decision. The use of the taxonomy simply reveals whether too narrow or too broad a sample of educational objectives has been included.
STUDENT ORIENTATED
VOCATIONAL CURRICULUM MODEL

PHASE I: FINDING OUT WHAT NEEDS TO BE LEARNED
- NEED AND DEMAND
  - JOB DESCRIPTION
  - HYPOTHESIS

- TASK ANALYSIS
  - BIBLIOGRAPHIC SEARCH
  - INDUSTRY SURVEY
  - SCIENTIFIC, TECHNOLOGICAL & SOCIAL CHANGE

- VALUES & RELATIONSHIP OF PEOPLE TO WORK

PHASE II: INVESTIGATING HOW IT IS TO BE LEARNED
- TASK ANALYSIS
  - BIBLIOGRAPHIC SEARCH
  - INDUSTRY SURVEY
  - SCIENTIFIC, TECHNOLOGICAL & SOCIAL CHANGE

- DESCRIPTION OF THE AREA OF COMPETENCE
  - REVIEW BY ADVISORY COMMITTEE
  - STUDENT CHARACTERISTICS AND NEEDS
  - SOCIETAL NEEDS

PHASE III: PROGRAM DEVELOPMENT
- DEVELOPMENT OF LEARNING-TEACHING RESOURCES
- SELECTION AND ORGANIZATION OF CONTENT

PHASE IV: IMPLEMENTATION
- SYLLABUS
- REVIEW BY ADVISORY COMMITTEE

HUMAN RESOURCES
- TEACHER TRAINING STAFF DEVELOPMENT
- STUDENT COUNSELLING
- LIBRARY SERVICES
- LEGACY AND SUPPORT STAFF
- ADMINISTRATIVE
- TECHNICAL
- RESEARCH
- ADVISORY

MATERIAL RESOURCES
- IMPLEMENTATION AND EVALUATION
- FACILITIES, BUILDINGS, PLANT AND MATERIALS
- MONEY RESOURCES

APPENDIX 4

David Haworth (1980)
CURRICULUM DEVELOPMENT ACTIVITIES

CURRICULUM DEVELOPMENT DECISIONS AND CONSIDERATIONS/SOURCES OF DATA.

TAFE Curriculum Task Force Curriculum Model
APPENDIX 7

STEPS IN CURRICULUM DEVELOPMENT PROCESS

CURRICULUM DEVELOPMENT POLICY

INDUSTRY LIAISON

Needs Analysis
- labour market needs
- demand
- existing provision
- program profile
- occupational and training needs analysis

Identification of need

Skills profile

Development of desired profiles of outcomes/competencies
- standards statements

Pathways
(options, entry & exit points)

Articulation arrangements with other programs/providers

Staff

Library facil.

Learning resource development

Develop program outline

Aims and objectives
- Content/topic areas
- Structure
- Student selection procedures
- Assessment procedures

Identify resources required

Buildings
Capital equipment
Staff development
Recurrent costs.

Full curriculum document prepared

Approval of document - by Advisory structures

Yes

Accreditation

Approval of curriculum document

Yes

Authority to conduct sought-
resources available to offer program

Approval to conduct program

Market program
- Undertake staff development

Develop learning resources
- Employ necessary staff

Implement program

- Select students
- Run course
- Purchase capital equipment
- Assess students

Staff/QM procedures
(college/ITD level)

Review/evaluate

Student/graduate satisfaction
Industry satisfaction

STRUCTURE AND PROCESSES OF NATIONAL VOCATIONAL EDUCATION AND TRAINING SYSTEM

The National Training System in 1995 and its key relationships can be represented as follows:

National VET System: Key Relationships
# COMPETENCY-BASED TRAINING

(Extract from Carmichael, L. (1992) *Australian Vocational Certificate Training System.* Canberra: ESFC/NBEET, Pages 8, 9)

<table>
<thead>
<tr>
<th>'Traditional Approach'</th>
<th>Benefits of CBT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The skills a person needs to do a job</strong></td>
<td><strong>Enterprises are defining the skills a person needs to do a job in a modern industry or enterprise, in line with Australian competency standards</strong></td>
</tr>
<tr>
<td>Skills are aligned to old award classifications.</td>
<td></td>
</tr>
<tr>
<td><strong>The skills they have now</strong></td>
<td><strong>Employees have their skills assessed against the competency standard for their position. This helps define their training needs.</strong></td>
</tr>
<tr>
<td>What the student already knows may not be taken into account.</td>
<td></td>
</tr>
<tr>
<td><strong>Effective and economical training</strong></td>
<td><strong>Student largely work at their own pace. Students work individually or in a small group with a teacher managing the learning process, involving a wide range of learning methods. Course or training completed when the student has mastered the competencies. Student mainly covers the materials that constitute the competence they are learning. Allows for both on-the-job and off-the-job training. Courses can more directly meet industry needs.</strong></td>
</tr>
<tr>
<td>Student works at the course or group pace. Teacher stands out the front and 'instructs' the group. The course or training time is fixed (term/semester etc). Everyone covers the same material, so students might cover material they know. Tends to focus on 'classroom' training. Courses often do not directly meet the needs of industry.</td>
<td></td>
</tr>
<tr>
<td><strong>Assessment/exams/testing</strong></td>
<td><strong>Student must establish they know and can 'do' things relevant to the workplace. Students are challenged to match or better set standards. Recognise prior learning if it is relevant to the competence. Certificate tells employer what trainee is competent at, and at what level. Assessment can be done at work.</strong></td>
</tr>
<tr>
<td>Students must establish they 'know' something. Students are often sorted into 'successes' or 'failures'. Often does not give credit for what has been formally or informally learned before. Tells employer what student has studied. Assessment is mainly/all in the classroom.</td>
<td></td>
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TAFE TEACHER INTERVIEW QUESTIONS
CLASSROOM CONTEXT AND CURRICULUM DEVELOPMENT

TAFE teacher perceptions of the importance and relevance of classroom contexts to curriculum delivery.

The following five questions were asked of the twenty eight TAFE teacher participants who were individually interviewed by the writer in personal interviews held between 3 November 1988 and 17 November 1988.

Questions

1. Is the curriculum document the main guide to your teaching?

2. How important or not is the curriculum document to curriculum delivery in the classroom?

3. In what sense is the curriculum document a guide or not to your curriculum delivery?

4. What is your most important aim in delivering the curriculum?

5. Would you change a curriculum document to meet student needs if necessary?
Management Advanced Certificate Course Details

Management Advanced Certificate

(Extract from TAFE NSW Handbook 1996, Page 228)

Management

Qualification: Certificate
Course No: 8766
Training Division: Business Services
Attendance: 6hpw-1yr (216hrs total)
This is an introduction for the tactical level manager. This course teaches you basic skills for managing a small to medium sized business or those skills you need for a division in a large organisation.
Articulation: This course gives you advanced standing in Management Certificate Advanced 8722 and Management Associate Diploma 8767.
Entry Requirements: You must have done Year 12 or equivalent.
Subjects:
- 8722A Management of Organisations .................. 54
- 8722B Business Communication .................. 27
- 8722C Business Behaviour .................. 27
- 8722D Marketing Fundamentals .................. 27
- 8722E Managing People and Change .................. 27
- 8722F Business Statistics .................. 27
Electives:
- 8722Q Strategic Planning & Organisation .................. 27
- 8722R Management Practice .................. 27

Country Locations: Alby, Arm, Bilimt, CHEC, Cooma, Dpto, Dubbo, Gslnr, Grfin, Lhgw, Mtlt, Mswbrk, Nctle, PtMacq, Shlhbr, Tmwrth, Taree, WgA Wga, WWlngng

Management

Qualification: Associate Diploma
Course No: 8767
Training Division: Business Services
Attendance: 6hpw-3yrs (648hrs total)
This course is for people who want to work as a manager in a small to medium sized enterprise or within a division in a large organisation. The topics you study meet local needs and those of managers doing business overseas.
Entry Requirements: You should have done Year 12 or equivalent.
Subjects:
- 8722A Management of Organisations .................. 54
- 8722B Business Communication .................. 27
- 8722C Business Behaviour .................. 27
- 8722D Marketing Fundamentals .................. 27
- 8722E Managing People and Change .................. 27
- 8722F Business Statistics .................. 27
- 8722G Operations Management .................. 54
# TOPICS FOR OPERATIONS MANAGEMENT – 3519M (8722G)

(Extract from Teacher and Student Guide (1989), School of Business and Administrative Studies. TAFE NSW, Page 7)

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<tr>
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<tr>
<td>1.</td>
<td>Orientation; Production/operations management</td>
<td>Heizer/Render chap 1</td>
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<td>2.</td>
<td>The Productivity Challenge/Decision making tools</td>
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<td>3.</td>
<td>Linear Programming/Forecasting</td>
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<td>Waiting Line Models/Simulation</td>
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<td>5.</td>
<td>Product Strategy/Process Strategy</td>
<td>&quot; &quot; &quot; &quot; 6 &amp; 7</td>
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<td>Location Strategy</td>
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<td>7.</td>
<td>Layout Strategy</td>
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<td>8.</td>
<td>Human Resource Strategy/Work Measurement</td>
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<td>Procurement/Just in Time &amp; Learning Curves</td>
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<td>Aggregate Planning Tactics</td>
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<td>11.</td>
<td>Inventory Management Tactics</td>
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<td>12.</td>
<td>Materials Requirements Planning</td>
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<td>13.</td>
<td>Short Term Scheduling Tactics</td>
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<td>14.</td>
<td>Project Management</td>
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<td>15.</td>
<td>Quality Control Tactics</td>
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<td>16.</td>
<td>Maintenance and Reliability Tactics</td>
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<td>17.</td>
<td>Review and Revision</td>
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### Lesson Observation Guide – ITATE

Form used by lecturers at ITATE (Institute of Technical and Adult Teacher Education) for observation of TAFE NSW teachers enrolled at ITATE in Diploma of Teaching.

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<th>LESSON PLANNING</th>
<th>PREPARATION</th>
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<td>Statement of Objectives</td>
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<td>Lesson Notes</td>
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<td>Planned Procedures</td>
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<td>Logical Lesson Content</td>
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<td>Teaching Aids</td>
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<td>Motivation of Students</td>
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<td>Logical Lesson Development</td>
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<td>Knowledge of Subject Matter</td>
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<td>Explanation and Illustration</td>
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<td>Linking of Main Points</td>
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<td>Effective Use of Language</td>
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<td>Effective Use of Voice</td>
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<td>Use of Chalkboard</td>
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<td>Use of Other Teaching Aids</td>
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<td>Questioning Techniques</td>
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<td>Student Participation</td>
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<td>Classroom Management</td>
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<td>Provision for Student Note Taking</td>
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<td>Demonstration of Skilled Operations</td>
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<td>Supervision of Student Practice</td>
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<td>Revision of Work Covered</td>
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<td>Linking with Future Lessons</td>
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<td>Testing and Evaluation of Students</td>
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</table>

| GENERAL COMMENTS:                |                      |

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*APPENDIX 13* 415

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