
SHEFFIELD HALLAM UNIVERSITY
Stock no.
8928

Towards a Reconceptualisation of Skill:

A study of skills in higher education

Peter Spencer

A dissertation submitted in partial fulfilment of the requirements of
Sheffield Hallam University
for the Doctorate of Education

June 2004

Abstract

The concept of skill has become increasingly important in the discourse of education over recent years and now appears to have assumed a central position in the debate surrounding the purpose and function of higher education. Skill is a construct which is now required to function as a unifying principle and conflates into one notion, previously separate understandings of national economic competitiveness, skilled performance and higher education. It is a construct which is over-used and under-theorised and paradoxically (for such a 'unifying' concept) appears to be fractured by fundamental inconsistencies and structural ambiguities.

The aim of this study is to reveal the nature of the problem which impacts on higher education *and* skill, and to place skill in an appropriate context within higher education. This is undertaken by analysing the literatures which hold skill as a central concept; by attempting to construct a logical framework to provide greater clarity and focus in the use of skill within the discourse of education; to establish an appropriate underpinning rationale for delimiting the use of skill in educational discourse; and to seek to influence educational debate on the appropriate and incommensurable uses of skill within the discourse of education.

The research deploys discourse analysis – notably the social constructionist theories of Ernesto Laclau and Chantale Mouffe (1985) – and argues that skill has become a *nodal point* both within the discourse of education and a *floating signifier* between the several discourses which hold skill as a central concept.

The study argues that the current conception of skill is both antithetical to skill production within higher education and inimical to the purposes and function of higher education. And further, that skill now functions as a *social myth,* embodying a new ideology which continues to inflict serious bilateral damage on both higher education *and* skill.

CONTENTS

ABSTRACT i

LIST OF CONTENTS ii

ACKNOWLEDGMENTS vii

DEDICATION viii

1. Introduction 1

1.1 Introduction to the theme of the study 1

1.2 Background and focus of the study 2

1.3 Problem statement 3

1.4 Professional significance of the enquiry 4

1.5 An overview of the methodology 5

1.6 Delimitations 6

1.7 Approach and structure 7

PART 1

2. The Rise of Rhetoric and the Discourse of Skill 9

2.1 Introduction 9

2.2 Historical perspective 9

2.2.2 The rhetoric heats up 13

2.2.3 A shift in the discourse 15

2.2.4 Full of Eastern promise? 17

2.2.5 Seismic shifts in the discourse 18

2.2.6 Some early initiatives 19

2.2.7 TVEI 20

2.2.8 CPVE 20

2.2.9 Youth training 21

2.2.10 The rise (and fall) of NCVQ 23

2.3 Moving skills into higher education 26

2.4 Expansion of higher education 29

2.5 Summary 32

3. Some Methodological Considerations 34

3.1 Introduction 34

3.2 Social constructionism 34

3.3 Structuralism 36
3.4 Discourse analysis 39
3.4.1 Epistemological considerations 42
3.4.2 Relativism 47
3.4.3 Interpellation 48
3.4.4 Hegemony 50
3.4.5 Antagonism 52
3.4.6 Hegemony in the discursive realm of skill 52
3.4.7 Establishing the methodology 53
3.4.8 Multiperspectival approach 55
3.5 Laclau and Mouffe's theory of discourse 58
3.5.1 Relating Laclau and Mouffe's theory to skill 60

PART 2

4. Defining Skill, a search for conceptual clarity 63
4.1 language and meaning 63
4.1.1 Some definitions of skill 65
4.1.2 'Common sense' definitions 66
4.1.3 Clarity, competence and confusion 66
4.1.4 Early studies of skill 69
4.1.5 Postmodernism and beyond 71
4.2 Philosophical considerations 72
4.3 Ubiquity 79
4.4 On 'difference' 79
4.5 Higher education 80
4.6 Modern dualism 81
4.7 Summary 82

5. Examining the Industrial Discourse of Skill 83
5.1 Introduction 83
5.2 Shared conceptions of skill 84
5.2.1 More diverse understandings 85
5.2.2 New Skills? 86
5.3 We are all skilled now 87
5.3.1 Attitudes and dispositions 88

5.3.2 Skill by proxy 89
5.3.3 The inflationary spiral 91
5.4 Summary 93

PART 3

6. The Nature of Skill 94
6.1 Introduction 94
6.2 Representations of Skill 94
6.3 Some initial considerations 95
6.4 In defence of skill 97
6.5 Postmodernism and skills 98
6.5.1 Competence as postmodernist? 99
6.5.2 Competence as modernist? 101
6.6 The rear view 103
6.6.1 The forward view 106
6.7 Skill as different from education 107
6.8 Skill as a socially bounded construction 109
6.8.1 Skill as grounded 110
6.8.2 Skill as bounded 110

7. Some Fundamentals of Skill 116
Section One
7.1 Introduction 114
7.2 Early work on transfer 115
7.2.1 Later studies 117
7.3 Transfer, skill and education 121
7.3.1 Multi-skilled? 122
7.3.2 High level skills 124
7.3.4 Some further considerations 125
7.3.5 Some conclusions 127

Section Two
7.4 Introduction 130
7.5 Skills and expertise 130
7.6 Time and the development of skill 132

7.6.1 Intertextual considerations 132
7.6.2 Chess, games and rock and roll 135
7.6.3 Some implications 137

Part 4

8. The Myth of skill 143
8.1 Introduction 143
8.2 Conceptualising skill 143
8.3 The concept of myth 144
8.3.1 Structuralist conception of myth 145
8.4 Some further considerations 146
8.4.1 Stealing the language 148
8.5 Towards a focussed understanding 150
8.5.1 Laclau and Mouffe's conception of myth 150
8.5.2 Skill as a social myth 154
8.5.3 Creating a myth of skill 155
8.6 Some implications for higher education 156
8.6.1 Unpacking the myth 157
8.6.1 An antithesis of function and purpose? 159
8.6.2 Higher education and skills 16o

Part 5

9. Towards a reconceptualisation of skill 164
9.1 Introduction 164
9.2 Rhetoric and analogy 164
9.3 Some outcomes for higher education 166
9.3.1 Higher education as a fruitless task? 166
9.3.2 Interpellation and ideology 169
9.3.3 The value of higher education 170
9.3.4 Skills and latrogenesis 171
9.4 Some outcomes for skill 172
9.4.1 Paradox 1. Understanding and knowledge 173
9.4.2 Paradox 2. Skill by proxy 174
9.4.3 Paradox 3. Generic/Specific skill 175
9.4.4 Paradox 4. Time 176

9.4.5 Paradox 5. Damage by enhancement 177
9.6 Skill and higher education 178

10. Summary, Conclusions and Implications 180
10.1 Problem restated 180
10.2 A review of the methodology 180

Summarising the outcomes of the study 181
10.3 Part one 181
10.4 Part two 182
10.5 Part three 183
10.6 Part four 184
10.7 Conclusions and implications for professional practice 185
10.7.1 First point of departure 188
10.7.2 Second point of departure 189
10.7.3 Third point of departure 190
10.7.4 Fourth point of departure 191
10.8 In closing 191

Acknowledgements

It gives me much pleasure to acknowledge the debt I owe to my supervisor Professor Peter Ashworth who provided help when I needed it, direction when the path became unclear and the confidence to continue the journey.

I should also like to thank all of the EdD teaching team who made this journey of discovery so exiting and enlightening.

To my colleagues Susan Horner, Kevin Nield, and particularly Stephen Ball for their generous and kind support over the past four and a half years.

To Allan for listening and believing.

And finally, to my wife Lynne without whose selfless and unfailing support this undertaking would not have proved possible.

For My Mother and Father

Gertrude Elizabeth Spencer
(1923 – 1993)

Harry Spencer
(1921 – 2004)

Thank you

Chapter 1 Introduction

1.1 Introduction to the theme of the study

Over the last 30 years the concept of skill has become increasingly important in both the delivery and expected outcomes of education. The importance of skill in a changing conception of education has come to prominence against a background of changing governmental and social aspirations for education (Wolf, 2002). Higher education has not been exempt from such changes and now finds itself engaged in a process where instrumental considerations such as national economic competitiveness are the valued outcomes of a university education and where the forces of the market place and industry shape higher education (Barnett, 1994).

The relationship between skills-based approaches to education and previously established notions of education has gathered considerable momentum over that past three decades. With the emergence of the government's latest '*Skills Strategy*' published in July 2003, higher education has come under increased pressure to engage in a more overtly vocationalistic approach than at any time in the past. It is an approach which places the acquisition of employment-related skills at the heart of the strategy and where the outcomes of higher education are expected to include this same set of skills.

Despite some early resistance to the notion that such employment derived and overtly vocational conceptions ought to be the task of education (Ashworth and Saxton, 1990; Barnett, 1994) the assumption that links educating for skills with economic performance is now virtually unchallenged (Drew, 1998). It is an assumption which has conflated into one notion the view that economic performance is contingent on the skills in the available workforce; with the view that as a nation we are lacking such skills and (crucially) that it is the task of education (rather than industry) to provide these skills. This study critically examines the relationship between this emergent view of skills *as* education and in doing so takes the reconceptualisation of skill within higher education as its theme.

1.2 The background and focus of the study

Throughout the period of time encompassed by this study the concept of skill has emerged from the discursive worlds of industry and economics to dominate the discourse of education. The rise of the rhetoric and its impact on the discourse of education has been profound. Early concerns that as a nation we may not have been providing our young people with the 'right' skills for employment (Callaghan, 1976) were followed by educational initiatives designed to address issues of (un)employment (Spours, 1995) and later to aggressive hegemonic interventions designed to radicalise educational provision (Jessup, 1991). The period which followed the specific skills developed by the NCVQ later gave way to an understanding of skills as generic constructions, which have subsequently found their way into all areas of education (Warhurst et al, 2004). Indeed, skill is now thought so central to the provision of education that it has displaced the term 'employment' in the title – Department for Education and *Skills*.

Skill appears to have become almost *the* defining factor in the provision of education yet somewhat paradoxically it also appears to achieved this status without an agreed or coherent definition of skill itself (Bennett et al, 2000). The result of which is a construct that is substantially overused and under-theorised, and where many of the notions advanced as appropriate definitions have done little to clarify, and much to obscure the underlying characteristics of skill (Tribe, 1996).

The increased positioning of skill as a central construct of intellectual development within higher education (for example, *problem solving skills* and *analytical skills*) can be contrasted with the rather counterintuitive notion that such skills are both derived from and applicable to the world of employment. This tension between the 'needs' of industry, governmental concerns of national economic competitiveness, and the requirements of higher education has been an emergent theme throughout the period encompassed by this study. More recently, there has been a shift in understanding as to what might constitute skill with the emergence of personal attributes, dispositions and attitudes being conceptualised as 'skills' (Grugulis et al, 2004). This has been mirrored in a new expectation that the provision of these and other skills which were (historically) the function of industry

ought to be the function of education (Westwood, 2004). This represents something of a radical discontinuity with the past and has been an important and influential driver of government policy and in shaping a new discourse of skill. Significant shifts in the discourse such as these over the past several years have characterised the emergence of new *socially constructed* notions of skill. These constructions have displaced previous shared notions of skill and induced a seismic shift in understandings of the meaning and purposes of both higher education and skill.

Postmodernist influences have also impacted on the notions of both skill and higher education over the past three decades, influences which can be seen in a growing rejection of a universal foundation of knowledge and in the increasing significance of discourse and of social and cultural ascriptions of meaning (Usher and Edwards, 1994). This rise has been influential in helping to create a growing degree of uncertainty in what we know and what it means to know (Jaworski and Coupland, 1999) a 'shaking of' the epistemological foundations of both higher education and skill over this period.

Over the past 20 years many aspects of research into skills have moved forward, yet curiously perhaps, these do not appear to have made any significant impact on the disposition of skill within the discourse of education. The powerful hegemonic forces which have created an ideological notion of skill also appear to have interpellated higher education creating a form of 'false consciousness' which appears to have masked alternative notions relating the function and purpose of skill within the context of higher education.

1.3 A statement of the problem

It is contended that skill is a concept which, whilst being almost universally applied throughout all sectors of education, lacks any real unity of meaning or purpose. It is a construct which is substantially over-used and under-theorised, lacking in clarity of definition, consistency of meaning and deeply fractured by logical disjunctions, pragmatic ambiguities and metaphysical inconsistencies. The requirement that higher education engage in skills-based education has amplified these difficulties and appears to have created an ideological position in which skill,

as a social construction functions to mask alternate possibilities for action. It is a construction which has profoundly shifted the discourse away from previously understood notions of education and is a part of a new discourse influenced by industry and economics. This process appears to have inflicted serious bilateral damage to previously understood notions of skill and higher education in that it has profoundly compromised the meaning and functioning of skill and would appear to be damaging to the function and purposes of higher education.

1.4 Professional Significance of the enquiry

It is hoped that this study will help to provide greater clarity and focus in the use and application of the term skill within educational discourse. Over the past twenty five years, uses of the term have grown at a seemingly exponential rate with all aspects of education now required to hold skill (in some form) as an important construct in the delivery of their educational provision. Paradoxically perhaps, clarity and understanding of the value, purpose and application of the concept do appear to have kept pace with increased usage. Educational discourse is now replete with references to a concept which appears to have little shared understanding, clarity of purpose or focussed application within the wider educational community. This study is an attempt to begin to redress this imbalance and to attempt to restore clarity, focus and meaning to an important central construct of contemporary educational provision particularly within the context of higher education. In doing so the research will seek to establish a rational theoretical basis for the reconceptualisation and delimitation of skill within the discourse of higher education. In doing so it will:

- Examine the literatures which hold skill as a central construct and analyse the basis of such constructs within the order of discourse.
- Attempt to construct a logical analysis which provides greater clarity and focus in the use of skill within educational discourse.
- Seek to provide an appropriate theoretical basis for delimiting the use of skill in educational discourse.
- Attempt to influence educational debate on both the appropriate and incommensurable uses of skill.

1.5 An overview of the methodology

A detailed discussion of the methodology and the underpinning precepts is undertaken in chapter three (methodology), however, a brief outline of the approach taken seems useful at this point to frame the enquiry. Broadly, the approach taken is that of Social Constructionism. It is premised on the basis that language can be regarded as social action, and (crucially) that language itself is constitutive of society. As such, this enquiry engages with the notion of epistemological relativism in claims to knowledge and attempts to modify this more extreme view of discourse analysis through the application of a critical realist ontology. These approaches are reflected in the methods used to analyse the discourse of skill and contrast with other studies whose approaches indicate a regard for language as a transparent medium onto something else.

The study draws on structuralist and (specifically) poststructuralist theory and ranges across the field of discourse theory and analysis. It should be noted that it is not intended to engage in specific, detailed textual analysis, as is the practice in some forms of discourse analysis. It is for this reason that the discourse theories of Laclau and Mouffe have been selected, in that, as indicated by Phillips and Jorgensen (2002) they do not provide specific concrete methods for discourse analysis (p.165). This is an *intended* design feature of the approach taken here. One of the principal difficulties in analysing the eclectic use of skill in discourse is the highly divergent nature of the subject. Studies of skill are (generally) tightly focussed on a very specific area of skill within an already specialised and highly specific domain. It is this process of detailed analysis within tightly controlled parameters which would appear to have contributed (in part) to the highly divergent and compartmentalised view of skills, and may have contributed to the confused and fragmented notion of skill which is particularly evident within the discourse of education. Given the requirement to examine the several competing discourses which hold skill as a central construct the replication of such approaches would hardly seem effective or appropriate in securing a more inclusive view of the issues.

The discourse theories of Laclau and Mouffe contend that discourse relates to the sum of all social exchanges and therefore all actions may be construed as

discourse (Laclau and Mouffe, 1985). Laclau and Mouffe provide a range of analytical focus points that can be drawn from their model of discourse (Phillips and Jorgensen, 2002: 166). This enquiry will focus on the specific expression of skill within the several discourses examined and specifically the articulatory practices implicated in the modification of meanings within the discourse of education. It will seek to explore what particular meanings have been established, and what meanings these processes have excluded. The enquiry will also seek to identify the struggles taking place over the meaning of skill in order to identify what signs are the objects of struggle over meaning between competing discourses of industry, national economic performance and education.

1.6 Delimitations

Whilst aiming to influence professional practice in higher education by adopting a wider perspective than many other (necessarily specific) studies there is no claim that these findings may be applied across all aspects of higher education specifically or other aspects of vocational education generally. The setting and perspective of the study (higher education) necessarily restricts a wider application of the findings to other areas of education. It is recognised for example, that other areas of full time vocational study such as further education may well have significant *structural* differences such as access to work-based learning, requirements for lower-level skills and more focussed vocational aims which would ameliorate some of the criticisms advanced in this study.

This would also seem to be the case *within* the context of higher education that there are areas where it is recognised that there are some forms of knowledge and skill acquisition which do not fit the general pattern assumed in this work (medical education for example). Moreover, the current conception of skill is related to *contingent* understandings constructed by particular approaches and dictated by particular events and circumstances which have privileged one set of views over those of others. Policy and practice often have a short shelf life (particularly in education) and given that it is in the nature of all contingent meanings that things can and will change over time and there is no reason to suppose that this will not apply here.

There are also particular delimitations of discourse analysis itself. This is discussed in detail in chapter three but it is important to state that discourses are not *objects* in the sense that they have established borders and limits. It is up to the researcher to establish meaningful, reasonable and trustworthy parameters and as is all discourse analysis the process can (quite rightly) be held open to claims of relativism in its knowledge production.

1.7 Approach to, and structure of, the dissertation

The work is split in to five parts:

Parts one to three (chapters 1 to 7) are largely concerned with establishing and reviewing the data. Some analysis is undertaken at appropriate points in these sections but it might be helpful to note that the methodology is not fully deployed until parts four and five (chapters 8, 9 and 10).

Part 1 (chapter 2) scopes the emergence of a discourse of skill over the past 30 years and chronicles this in relation to the rise of a rhetoric of skill together with the processes, policies and practices which have helped to shape current conceptions of skill. This is followed by a detailed analysis of the methodological considerations which underpin discourse analysis and this study.

Part 2 (chapters 4 and 5) is concerned with issues of definition and meaning examining the discourses of education and industry and applying a philosophical analysis to constructed notions of skill.

Part 3 (Chapters 6 and 7) deals with the nature of skill and attempts to reveal some of the complexities, ambiguities and tensions inherent within current (and historical) notions of skill.

Part 4 (chapter 8) sets out the general arguments for the establishment of particular societal constructs as *myths* and explores specific issues which relate to the current conception of skill as a social *myth.*

Part 5 (chapters 9 and 10) attempt a reconceptualisation of skill by problematizing constructions of skill within higher education, analysing 'sites of damage' to both skill and higher education before reaching some conclusions about commensurable and incommensurable uses of skill.

A note on the Literature Review

The nature of this particular task has not lent itself to the inclusion of a classical literature review. The requirement to range across several fields of knowledge in order to arrive at a more inclusive analysis has necessitated placing an analysis of the literatures in each of the parts where these severally apply. Early attempts to include a specific review resulted in a confusing repetition of the key arguments and positions adopted in the several literatures, and restricted the flow, logic and coherence of the dissertation. It was accordingly abandoned.

The literature used in the dissertation is comprised broadly of: social constructionist literature; structuralist and poststructuralist literature on the nature of language; discourse theory and analysis; semiotics; sociology of work and industrial relations; skills development and acquisition (cognitive, sensorimotor and psychomotor); cognitive psychology (specifically related to transfer, expertise and skill acquisition); myth; policy and practice of post compulsory education (HE and FE); competence; governmental reports, documents and policy papers together with associated analytical literature; and philosophical analysis (principally of education and linguistics).

The nature of the enquiry has not made it possible to place these literatures in discrete sections although every attempt is made to deal as completely as possible with the appropriate literature at that time. But given the nature of the work (discourse analysis) an approach which deals with anything and everything which falls within the ambit of the discourse, and the fact that the study attempts a broad reach, some literature is of necessity displaced to other parts of the work.

Part One

Part one (chapters 2 and 3) scopes the emergence of a discourse of skill over the past 30 years and chronicles this in relation to the rise of a rhetoric of skill together with the processes, policies and practices which have helped to shape current conceptions of skill. This is followed by a detailed analysis of the methodological considerations which underpin discourse analysis and this study.

Chapter 2 The Rise of Rhetoric and the Discourse of Skill

2.1 Introduction

The growth of skill-speak within the UK educational system has been dramatic. The term 'skill' (once the preserve of craft-based education and training) now seems to have found its way into every aspect of education. Largely undefined, and with little shared agreement of its meaning or application, 'skill', paradoxically, seems to be emerging as one of the defining concepts of education in the 21st century, a concept thought so central to the nature of educational endeavour that *Skill* has now replaced *Employment* in the departmental title (Department for Education and Skills).

What follows is an attempt to explore some of these issues. This chapter chronicles the rise of a *'rhetoric of skills'* which has characterised many educational initiatives and policy documents over the past 30 years.This chapter is largely concerned with the growth of the discourse of skills in late modernity, however, a short review of some earlier events may prove helpful in framing these more recent approaches to skill.

2.2 A short historical perspective

Skills are closely associated with vocational education and this would seem a sensible place to start. In the early part of the 1900's the majority of the available school population attended institutions which concentrated on the '3 R's' together with some handicrafts and which they left at age 13 or 14 (Wolf, 2002:57). Alongside this mass system a low volume but high status academic sector, concentrating on classics and mathematics sent a minority of their students to University (ibid:57). Vocational skills-based education at this time appears to have been largely conducted as a function of employment through apprenticeship schemes, a feature which remained important throughout most of the 20th century (Sanderson,1999). An example of how significant a role was played by such industrial rather than educational initiatives may be gauged by examining the large volume of vocational training being undertaken in this way. In 1961, 34% of 15 year old boys left school to go directly into an apprenticeship. A figure which even

10 years later (1971) had remained almost static at just under 33% (Owen,1999; Sanderson,1999). The industrial significance of skill is of particular concern and is returned to a little later (chapter 5).

Throughout the majority of the 20th century vocational qualifications appear to have been largely independent of government initiatives. The City and Guilds of London Institute (CGLI) established in 1878, became the largest vocational examining body in the country. The numbers of students receiving vocational awards validated and examined by CGLI remained reasonably static over several years beginning the 20th century at around 9,000 per annum. Over the course of the next 45 years this figure rose and fell slightly in line with economic conditions before rising steeply from around 15,000 in 1945 to more than 90,000 by 1960 (CGLI 1993). From the 1920s onwards other agencies also began to set vocational examinations such as Ordinary National Certificates and Diplomas (OND and ONC) and by the 1930's there were more than 1.25 million part time students engaged in vocational study, a figure which was to rise a further million to 2.25 million by the mid 1950's (Cotgrove,1958; Dent, 1966).

The 1944 Education Act which introduced the *tripartite system* of secondary education attempted to include a more vocational focus. From a vocational, skills-based educational perspective this was seen (at the time) as a significant movement towards the establishment of a more industrially focussed form of secondary education. The Ministry of Education writing in 1947 stated that the distinguishing feature of a secondary technical school was:

> [related to] a particular industry or occupation or group of industries or occupations…[it] caters for a minority of able children who are likely to make their best response to when the curriculum is strongly coloured by [industrial or commercial] interests both from the point of view of a career and because subject matter of this kind appeals to them. (Dent, 1966:116).

At this time there were 324 senior technical schools in the UK (a figure which was to prove to be a high water mark). Seven years later the number had reduced to 250 (mostly in technical colleges) with 79,000 pupils – around 4 percent of secondary enrolment. By 1965 this figure had fallen to 3 percent and in 1975 just

half of one percent remained in this form of technical education (Sanderson, 1999). So the attempt to introduce technical secondary education was unsuccessful.

In 1969 the Haslegrave report (Committee on Technician Courses and Examinations of the national Advisory Council on Education and Industry) recommended changes to the vocational award structure. The outcome of these recommendations resulted in the setting up of two new quasi-governmental bodies the Technician Education Council (TEC) and the business Education Council (BEC) which later merged to become BTEC, bodies which went on to develop Higher National Certificates and Diplomas (Wolf, 2002).

It would seem reasonable to assert from a review of the vocational education on offer at this time that the majority of the expansion of vocational education taking place in the UK in the 20th century was non-governmental in origin and driven by the requirements of apprenticeships and a growing number of vocationally aware part time students seeking job specific skills. The lack of any organised - as opposed to ad-hoc system - of vocational education is well document in the literature (Cotgrove,1958; Dent, 1961; Barnard, 1966; Cantor and Roberts, 1972; Lawrence, 1972; Owen, 1999; Wolf, 2002) and has been equally well criticised (cf. Barnett, 1986; Sanderson, 1994 and 1999). Interestingly this lack of any organised response to the growing demand for technical skills-based education does not appear to be a consequence of any lack of demands that the government should act. In fact quite the reverse appears to be true. Between 1868 and 1969 some 23 reports and commissions emphasised the need for more technical education.

Alison Wolf (2002) points out that despite such strong and continuous pressures for change nothing much really happened. In advancing this analysis, she indicates how various trenchant comments drawn from these reports demonstrate a consistent use of (skills) discourse remarking that: "In 1868 commentators are bemoaning the UK's performance vis-à-vis Germany, and in 1988 their successors are doing exactly the same" (p.63).

The concept and usage of such *'manifest Intertextuality'* (Fairclough, 1992:117) is explored later, however it is perhaps useful to consider at this point that the rhetoric which seems to shape the discourse of skills very strongly from the mid 1970's (and which is of principal concern here) is not entirely confined to this period but appears to have been a consistent and significant factor in the discourse of skills for more than 130 years. Some further examples may be helpful in illustrating the point. Drawing quotes from reports separated by almost 100 years (1884 to 1962) Wolf (2002) asserts that the critical discourse of the reports is so similar that: *"[if one were to] change the writing style slightly...there is no way that one could date them blind"* (pp.63-4). Some examples illustrate the point well:

> We find that our most formidable assailants are the best educated peoples...For some time past, whilst we have advanced they have advanced faster still; they have driven us from several of their domestic markets and they are sharply competing with us in the markets of other nations (Report of the Royal Commission on Technical Instruction, 1884).
>
> England is very much behind hand as regards the provision for the commercial as well as the technical education of the proprietors and principal managers of industrial works....(Germans) are better fitted to do the work required of the middle ranks of industry than any the world has even seen (Labour Conditions and Adult Education, Ministry of Reconstruction, 1919).
>
> (Other countries) are making an immense effort to train more scientific and technical manpower and ...we are in danger of being left behind (Percy Report on higher technological education, 1945).
>
> ...industry in this country has been short of skilled labour ...there is no doubt the shortages of skilled manpower have been an important factor in holding back the rate of economic expansion....the rate of industrial training must be increased (White Paper on Industrial Training, 1962).

This pattern of concerns expressed about national economic performance related to inadequate levels of appropriate vocational education and training appear to have continued right through to the present day (cf. DfES, 2003; LSC, 2001, 2002, 2003). However, as the next section indicates, in the early 1970's the focus of concern appears to have shifted away from the provision of a vocational / technical education and towards the acquisition of skills per-se. It is a process which appears to accelerate strongly from the middle of the 1970's onwards.

2.2.2 The Rhetoric Heats up

At the start of the new millennium there appears to be little current educational practice which does not concern itself with the concept of skill acquisition. The past 25 years or so have seen a remarkable and seemingly exponential growth in the use of the language of skills and their application to all aspects of education. Precise beginnings are not easy to determine. Hyland (1998) and Tribe (1996) trace the initial rise to the Crowther Report on secondary education in the late 1950's, which called for more broad-based general studies in the latter stages of schooling. The beginnings of a more openly skills-based discourse in further education probably date back to the early 1970's and the start of the *communication skills* movement in General Studies. Waugh (1988) asserts that the movement towards conceptualising skills in this way may have been a consequence of University educated general education teachers exerting a 'certain' intellectual hegemony over the curriculum otherwise dominated by technical teachers.

Wellington (1987) places the 'best candidate' as James Callaghan's 'Ruskin College speech' of 1976. The speech, ostensibly an attack on modern teaching methods expressed 'a concern for standards' and contained a robust criticism of the poor relationship between industry and schools. The speech suggested that the schools were not providing the *necessary skills* :

> I am concerned to find complaints from industry that new recruits from the schools sometimes do not have the basic tools to do the job [Callaghan went on to say] There is no virtue in producing socially well adjusted members of society who are unemployed because they do not have the skills (Holt 1987, p22).

The speech - which was to become a major theme in justifications advanced for skills approaches to education throughout the 1970's and 80's (Drew,1998: 7-9) - contains two key implications which would go on to dominate the debate right up to the present time. The first is that a set of *relevant* or *necessary skills* exist - something which was not established at the time and which has remained contentious to the present day - and the second is more covertly stated; but which is (essentially) the connection between *skills as partly constitutive of education*

and the conflation of this notion with that of (more overtly stated) national economic requirements linked to the acquisition of skills. Of importance to this particular study is that a careful analysis of the whole speech reveals nothing of what these *necessary skills* might be, the implication is simply that they exist. This is an important point. Policy documents from this time onward appear to be characterised by an increasingly bullish rhetoric of skills and an equally vague definition of what these might be.

Two key white papers of the early 80's (*New Training Initiative* 1981 and *Training for Jobs* 1984) helped to cement this notion of skills being fundamentally linked to education. The 1981 white paper (one of the principal documents which led to Youth Training Scheme) had as its aim: "to ensure that the school curriculum develops the personal skills... needed for working life" (para 12). As in the Callaghan speech no indications are given as to which skills are needed for working life. In paragraph 24 the paper states: "It [the YTS] will aim to develop basic and recognised skills which employers will require in the future". The following paragraph contains references to literacy and numeracy but these can hardly be said to lie outside of the normal school curriculum and no attempt is made to specify the skills required for a vocational education. Interestingly, this does not inhibit the authors of the report from asserting as had many before that: "skill shortages have held back our economy" (para 48).

Three years later the 1984 white paper *Training for Jobs* returned to the theme that education was failing to provide industry with people equipped with the 'necessary skills': "we need to provide greater emphasis on equipping (students) with skills that are currently required" (para 41). As with the 1981 paper no attempt is made to clarify this notion of 'necessary' or 'required skills' (Holt, 1987:24). Some measure of the durability of this empty rhetoric may be gauged from papers published some ten years later – Prosperity Through Skills – the national development agenda (1993) places *"skills for success"* at the top of its *"priorities"* yet contains no definitions of any of the skills listed (pp.6, 8 and 19) nor does it give any indication as to how these might be achieved.

Almost 20 years after the 1981 white paper, the first report of the 'Skills Task Force' *Towards a National Skills Agenda* (1999) also seems to be locked into the rhetoric of the 1980's. The same language and sentiments used some 20 years earlier are still finding expression (p11). In a strangely ironic reflection of the Callaghan speech 23 years earlier which contained the sentiment: "Complaints from industry that new recruits do not have the basic tools to do the job" the 1999 report states: "The task force has received many complaints that young people...are increasingly ill prepared for, or ill matched to, the needs of industry" (para 3.14). A plethora of papers from the Further Education Unit (FEU) the Manpower Service Commission (MSC) the Institute of Manpower Studies (IMS) and Department for Education and Science (DES) in the 1980's appear to have firmly cemented the use of skills language in educational papers – "Skills and attitudes needed for adult working life" and "work related skills" (Better Schools, 1985 para 47); "core skills" (IMS report No39).

The New Training Initiative (NTI) led directly in 1983 to the creation of the YTS. Initially conceived as a one year programme it was quickly expanded to two years in 1986 and tasked with providing the 16 and 17 year olds participants with vocational training plus instruction in 'core transferable skills' (Wolf, 2002: 67). Some measure of the growing relationship between what was (then) seen as an essential national economic imperative and the role of education in helping to achieve economic recovery may be gauged from the Manpower Services Commission (MSC) statement in 1985 that their aim was to attract two thirds of all 16 to 17 year olds onto these skills-based youth training schemes (Evans, 1992).

2.2.3 A Shift in the discourse?

It is perhaps from this time – the inception of the YTS programme in the early 1980's – that a real step-change in the rhetoric of skill began to emerge. The influential report *Competence and Competition* commissioned and published in 1984 jointly by the MSC and the National Economic Development Office (NEDO) directly – and unfavourably – compared the British training and education system with those of Japan, Germany and the USA (NEDO and MSC, 1984: iv). The report made direct connections between economic success and the supply of skilled people (Drew, 1998:9). *Competence and Competition* was particularly

concerned with what came to be known as 'intermediate skills' (Wolf, 2002:70). The report was unequivocal in its condemnation of existing education provision in supplying the *necessary skills* for today's workforce:

> Effective performance at work...is not a traditional aim of education and training in the UK... [the UK risked] falling further behind in producing the key competencies needed today. The report recommended that: [to] avoid future severe skill shortages amongst competent craft and middle level people, employers should take the lead in proposing training outcomes and standards (NEDO and MSC 1984: iv).

A series of studies published in the *National Institute Economic Review* at this time also appears to have been very influential in forming and shaping this new and emergent discourse linking education, economic performance and in conflating these notions with conceptions of skill (Wolf, 2002:70-72). The National Institute of Economic and Social Research (NIESR) reported on studies of productivity in several industries comparing the UK with other countries but most notably and frequently with Germany. The conclusions consistently reinforced the notion that UK productivity and competitiveness was lower because of the lack of appropriate skills in the workforce. Examples from German hotels, engineering, clothing and woodworking industries asserted that it was the increased proportion of vocational qualifications in the workforce which was responsible for the superiority of the German economy (Prais, 1995:69) and that the more complex the work the greater was the observable gap between the UK and its continental competitors (cf. Prais and Wagner, 1983; Daly et al, 1985; Prais and Steedman, 1986; Prais et al, 1989). The understanding of qualifications as proxy for skills is an important point which is picked up in chapters 5 and 9.

This (now overtly) stated link between the need for certain skills in order to remain internationally competitive; the feeling that as a nation the UK was falling behind our competitors; and the view that education ought to be more engaged with the needs of industry and commerce appears to have become increasingly accepted by particular and influential governmental agencies. Whilst this was largely confined to further education, indications began to appear that skills-based education was set to reach beyond the16 to 18 vocational initiatives. In 1985 the

green paper *The Development of HE into the 1990's* (DES) contained very clear statements about the role and value of
"able, skilled and well-motivated graduates [in ensuring economic success]" (the implications and effects upon higher education are discussed later in the chapter).

Drew (1998) points out that the argument which conflated economic and educational imperatives was essentially supported by the prevailing view which held that Britain was in economic decline; that society and technology was changing with extreme rapidity; that it is only through the deployment of skilled people that we can hope to compete effectively; and that the educational system must provide such people (Drew ,1998:9).

2.2.4 Full of Eastern promise?

These points are illustrated nicely by the actions of the governmental agency charged with promoting YTS programmes in the 1980's. In early 1986 full-page advertisements began appearing in national daily newspapers 'warning' the Japanese of the advent of 'Spikey Dodds'. The advertisement stated that Spikey:

> Would be trying out various skills before choosing the one he'll train through to the end of the second year...by the end of the course he'll have a skill and a certificate to prove it... and a better chance of getting a job. [the final paragraph states] Our competitors in the Far East have been training their young people like this for years (in Holt, 1987:36).

The clear implication was that the Japanese were now in for a hard time as we (the UK) were about to take them on at their own game. This assertion of what our competitors "have been doing for years" could hardly have been further from the truth. In complete contrast to the sentiments (and 'facts') expressed, the Japanese had at the time these statements were made, more than 94% of all its young people staying on to 'senior high school' (to age 18) (Ishikawa, 1997). The system of vocational schools begun in the 1960's had, by the mid 1970's been superseded by a totally different educational drive, one which placed an excellent general education as more desirable than, and superior to, vocational training of any kind (Look-Japan, 1983). Interestingly, reports undertaken for the MSC by the NEDC on the Japanese vocational system two years earlier stated:

> Vocational education designed to import the basic skills required for a given occupation is not prominent in the system...major employers have no interest in vocational education attainments...and are indifferent to vocational education courses taken at post-compulsory stage...as a result the system does not expect to concentrate on vocational education" (NEDC and MSC report, 1984:45).

The underlying assumptions which drove such a strategy can only be guessed at, but it is clear that the understanding of the Japanese vocational education system was several years out of date. Contemporary western notions such as, the merger of vocational training with education; industrial competitiveness being linked to particular forms of training and the near-market value of 'skills' rather than 'education' appear to have been derived from our own situation and values at the time, and were certainly not features of the Japanese system. It was a view of a system in the Far East which Wellington (1987) described as "at best out-dated and at worst purely fictional" (p.38). By 1987 however, the MSC was spending well over £2 billion a year on just such a model predicated on findings delivered in *Competence and Competition* and more than 420,000 young people and a quarter of all 16 year olds were enrolled on YTS programmes (Spours, 1995).

2.2.5 Seismic Shifts in the Discourse

In contrast to the rather indifferent performance which characterised governmental (in)action on vocational education and training over the previous decades, by 1986 a seismic shift in the discourse appears to have taken place. At this point, just ten years after James Callaghan's 'Ruskin College' speech a working committee chaired by Oscar de Ville and commissioned by the MSC reported on the provision of vocational qualifications on offer in England and Wales (MSC, 1986). Essentially the report concluded that the current system of vocational awards was a "jungle" and that a new, clearer structure which placed industrial standards and industrially derived notions of competence at its heart should be developed. The report which led directly to the formation of the National Council for Vocational Qualifications in 1986 concluded that there were:

> Serious shortcomings [with current vocational qualifications] with no clear readily understandable pattern of provision [and that] assessments

> carried out by [examination] bodies inadequately test or record competencies required in employment [and that] assessment methods were biased towards testing knowledge or skill rather than competence (MSC, 1986).

There are many objections to such a position, not least of which might be that such qualifications were being condemned on grounds which they were never established to address (cf. Spencer, 1995) but whatever objections might have been raised at the time at the sweeping away of such long-standing examinations and assessment structures (and there were very few) (cf. Ashworth and Saxton,1990; Barnett, 1990) with the emergence of NCVQ the discourse of skill underwent a profound change.

2.2.6 Some Early Initiatives

Although the National Council for Vocational Qualifications did not formally come into existence until the publication of the white paper *'Working Together – Education and Training'* (DoE and DES, 1986) its roots can be traced back to 1981 and the emergence of the NTI (Smithers, 1993). Stewart and Hamlin (1992) have this as stemming from a report published by the Central Policy Review Staff (CPRS in 1980). The NTI made it clear that Vocational Education and Training (VET) was in need of serious revision and that their intention was to place the employer at the centre of VET provision and it was within the NTI that the first references began to be made to the standards of competence which were to become a central focus for NCVQ activities (Drew, 1998; Wolf, 2002).

The period covered by the 1980's and early 1990's would come to be dominated by NCVQ and their subsequent development of national Vocational Awards (NVQ's). However, there were also several other initiatives over this same period which seem to have been drawn from the same ideological base and which clearly have had an impact on shaping the current discourse.

Of these initiatives perhaps the most significant were the Technical and Vocational Initiative (TVEI) of 1982; the Certificate of Pre-vocational Education (CPVE) of 1984; and the Youth Training Scheme (YTS) implemented in 1983.

2.2.7 TVEI

The TVEI was essentially an initiative aimed at vocationalising the curriculum for 14 to 18 year olds. The vision statement outlined its role as:

> ...to help produce a more highly skilled, competent and effective workforce for the 1990's. It is a bold long-term strategy, unique amongst nations, for investing in the skill of all our young people 14 to 18 in full time education and equipping them for the demands of working life...(Training Agency 1990).

The report went on to state that the initiative would "relate what is learnt in schools to the world of work", that it would seek to "improve skills" and "provide...direct experience...of real work" (ibid). Wellington (1986) indicates that the aim of the initiative was also to "provide a curriculum which had industrie's confidence [and to] provide skills which would be of direct value to them at work". Whilst this was not the only time that such notions of 'appropriate skills' were drawn down from VET into schools. Other example would include the Waddell report (1978) which recommended the replacement of GCE and GCSE examinations with qualifications more effective at acknowledging and assessing skills and learning. 'Better Schools' (Des, 1985) initiated the National Curriculum and listed curricular objectives which included skill development for a rapidly changing world and teaching methods which enabled co-operative working, personal responsibility and an enterprising attitude. However, the TVEI marked the first direct intervention of the MSC in schools provision (FEU, 1989:1). The scheme was extended to all schools in 1986 and at its conclusion was estimated to have cost £1 billion (Hudson, 1996). Wellington (1986) concludes that:

> [the] TVEI with its huge control of financial support has done more to create links between schooling and the world of work than any other initiative in the history of the curriculum (Wellington 1986).

2.2.8 CPVE

The Certificate of Pre-vocational Education (CPVE) was a DES initiative which engaged the CGLI and BTEC in developing a new vocational qualification aimed at 16 year olds in further education. Broadly, the initiative aimed to provide programmes which were:

> ...relevant to the needs of young people as emerging adults and prospective employees. The curriculum...must include...analytical and creative skills...constructive activities which involve putting ideas into practice, making, doing and organising" (Joint Board 1984)

By 1988, around 10% of 16 year olds in full-time education in England and Wales were on CPVE programmes studying a common core of personal and career development, communication, numeracy, science and technology skills together with skills for learning, decision making, adaptability, practical and social skills (Drew, 1998:27). CPVE helped to cement the notion that what was needed for all education to be considered 'appropriate' was a common core of skills which related directly (or could be related) to industrial or economic objectives. By the late 1980's CPVE had evolved into the CGLI Diploma of Vocational Education, an award which was itself replaced by GNVQ and whilst this has also now been replaced the concept 'core skills' appears to remain firmly rooted in the discourse.

2.2.9 Youth Training

The ambitious targets set for Youth Training Schemes (YTS) in the 1980's (cf. Evans, 1992; Spours, 1995) perhaps owe as much to the crisis in youth unemployment as they do to any revisionist desire to re-shape the nature and objective of vocational education and training. By the mid to late 1980's unemployment was running at somewhere between 3 million – a conservative estimate and 4.5 million – estimates made by other governmental but non-political bodies (DfE, March1993). Unemployment in young males had reached 20.9% in 1984 (Wolf, 2002). The decision in September of 1988 to exclude all of those under 18 from drawing unemployment payments added substantial further numbers of young people joining the scheme (DfE, May 1992).

This relationship between youth training and unemployment was later highlighted by Dearing (1997) who suggested renaming the scheme to distance the positive aspects of training from the negative connotations with which the scheme had become associated. There is a great deal more which may be said of the YTS throughout the period of its operation but which is of little value to this particular

enquiry. However, what is of concern is the contribution the YTS programme made to the changing nature of the discourse following its inception.

It is of some significance for the subsequent role of skills in education that these profound changes to vocational education were (at the time) openly questioned by those actively involved with their implementation. Ruth Jonathon's (1987) detailed analysis and critique of the YTS core skills development and implementation shows how those charged with developing the core skills were uncertain about what they were developing and where (if anywhere) they might lead:

> This mixture of disarming candour about the ignorance of the destination, and the blithe confidence concerning how to get there was to characterise the core skills development programme (Jonathon 1987:101).

A further measure of the stalled rhetoric is that almost 20 years later this position had barely changed:

> There is little consistency between employability skill proponents over how the skills in the list are defined; how they can be developed; what 'standards' students might aspire to reach in these skills; and how these standards are to be assessed – if at all (DfEE, 1998, para 15).

Paul Grosch, commenting on the work of the Further Education Unit (FEU) in the 1980's also shows the unsafe nature of self-serving assumptions of the 'new mantras of skill'. He asserts that The FEU publication 'Basic Skills' builds upon the concept of core skills, which are themselves an elaborated definition of basic skills (Grosch, 1987:156). The extent of the potential difficulties in predicating a whole edifice of skills on such an uncertain and tautological premise, a premise which it is clear was not shared even by those charged with the task is further evidenced by Grosch who indicated that the FEUs vocational preparation 'common core skills' were built into a set of approximately 130 skills which were followed by generic skills, occupational skills, skills across the curriculum, product and process skills, service skills and social and life skills, the intention being that students should progress from skill acquisition through skill transfer to eventual skill ownership. (FEU, 1982:114).

Drew (1998) points out that the YTS was one of the important influences behind the establishment of NCVQ since it exposed a serious gap in the training provision whereby the large numbers of young people joining the employment market had no clear lines of progression. Wolf (2002) adopts a more polemical viewpoint indicating that the Review of Vocational Qualifications (1985) set up by the MSC and the DES "delivered conclusions that were largely established before it ever met" (Wolf, 2002:68). The review which led to the establishment of NCVQ was (as indicated earlier) responding to particular economic and commercial pressures, and it was felt that nothing short of a root and branch revision would provide the necessary 'improvements' to what was considered to be an outmoded system of vocational education and training. The task was characterised by Gilbert Jessup – the new deputy director and chief architect of the approach as: "force[ing] a fundamental review of the objectives of education and training" (Jessup, 1991:135). Jessup claimed that the current system was one of "discontinuities and overlaps [and] unnecessary entry restrictions [which] discourage people from continuing with education and training" (p.8). He also demonstrated what form such a revisionist approach would take in stating that the new system - with its tightly specified and industrially derived standards - would provide: "The key to unlocking the…system [creating a] more highly skilled and more flexible workforce" (ibid:10-11). It seems clear from the foregoing that the NCVQ was not only born out of economic and industrial imperatives but also that its founding principles held to these same ideals.

2.2.10 The Rise (and Fall) of NCVQ

Positioning the role of the NCVQ in relation to the rise of skills-based educational discourse is problematic. Many of those involved in the creation and implementation on NCVQ policies and initiatives would argue that many of the radical revisions to vocational education and training proved not only to be positive but essential interventions in establishing an appropriate skills-based educational system responsive to the needs of industry and the economy (cf. Jessup, 1991, 1997; Training Agency, 1988; NEDC and MSC 1984; CBI, 1990). Others would argue that the intervention of the NCVQ was deeply problematical and one which has inflicted a great deal of collateral damage in attempting to push through such a comprehensive and radical set of ideologically-based reforms (cf. Raggatt and

Williams, 1999; Robinson, 1996; Wolf, 2002; Assiter, 1995; Barnett, 1994; Bennett et al, 2000; Jonathon, 1987).

Both cases have been strongly supported by their particular proponents but irrespective of the merits (or otherwise) of either viewpoint, what does seem clear is that the legacy of the NCVQ has been to provide startling contrasts in what is a deeply fractured educational debate, one which seems focussed around an idea that not only are skills partly constitutive *of* education, but - for followers of this influential industrial and economically derived ideology - they *are* education. This theme is introduced in the next short section and is returned to later in the enquiry.

As an institution NCVQ presided over the most radical change ever undertaken in vocational education and training in Britain. From its formation in 1986, the NCVQ implemented a period of change so rapid that within just a handful of years it had largely dismantled existing qualifications; established a radically new award structure and had used this to validate and publish almost 800 new national Vocational Qualifications (NVQ's); and - with the help and assistance of the MSC – engaged in determining industrial standards of competence with more than 180 Industry Lead Bodies (ILB's). Yet just ten years after its inception the NCVQ had ceased to exist and by October of 1997 it had merged with the Schools Curriculum and Assessment Authority (SCAA) to become the Qualifications and Curriculum Authority (QCA). Its impact on contemporary approaches and its legacy on discursive practice make interesting reading.

By May of 1995, 95% of all occupations were covered by 'standards of competence'. There were 794 National Vocational Qualifications which had been created and accredited (Wolf, 2002:75). Whilst the 'demand' for these new qualifications was a central and continuing aspect of NCVQ discourse, the reality did not always appear to match the rhetoric. By 1996 for example there were 364 of these new qualifications which had never been awarded to even a single candidate; a further 43 had each only ever been awarded to a single candidate and many others had not reached double figures (Wolf, 2002:76). In fact, just 42 of the total 794 NVQ's accounted for 83% of the total number of awards, most of which were themselves re-workings of long-established craft awards (ibid). It is, by

any account, a spectacular level of achievement - that so radical a revision to the existing provision could have taken place and that so much new provision should have been made available in so short a time. By the same token it can be taken as an equally spectacular level of failure – that so few of those it was intended to benefit should fail to embrace the new vocational initiative. Researching NVQs in the early 1990's brought me into direct contact with the anxieties and concerns of the council on this matter. I was researching into current levels of success rates on particular NVQs and attempting to establish comparisons to other equivalent vocational awards. Their response was extremely secretive, they would only agree to supply (highly misleading) registration figures and when more direct pressure was applied that they supply figures (as GCLI and BTEC had done) this simply brought a flat refusal and claims that the data were 'too commercially sensitive' to release (Spencer, 1995).

The impact which the various initiatives undertaken by NCVQ have had on educational discourse appear to be correlated both with aspects the NCVQ (and subsequent government agencies) have taken to be its successes. Examples of which might be; industrial standards of competence, assessment, learning outcomes, skills development and transfer, performance at work as a measure of 'educational attainment' rather than time served or examined knowledge and 'core skills'; and its failures, examples of which might be; the refusal of other 'outmoded' vocational awards to disappear – in 1996 for example, NVQ accounted for only 25% of vocational awards conferred (Robinson, 1996); and in the very low industrial take-up of work-based NVQ programmes - more than 95% of all NVQ programmes - designed for work place delivery were conducted in colleges of further education (IMS, 1994); or the changes to the curriculum which have (in many sectors) resulted in full-time programmes of study being reduced from an average of 28 class contact hours per week to less than 14 (cf. Spencer 1995).

Many of these claims and counter claims appear to be somewhat antithetical in nature. For example, the contrast between the assertion that 95% of occupations covered by the standards of competence which were industrially based, dictated and 'demanded' by industry (Jessup, 1991,1997; CBI, 1991,1994; DTI, 1994) seems rather at odds with the counter-assertion that it was almost always

consultants rather than industrialists who engaged in the process of setting standards. Smithers (1993) indicated that such persons – lacked both industrial and educational experience – "[and] engaged with NCVQ philosophy as a business opportunity". Others suggest that the ILBs charged with the development of standards often found themselves "inquorate because of a lack of industrial interest or commitment" (Stewart and Hamlin, 1992; Parsons and Marshall, 1995). The CBI itself, discovered after commissioning a survey of employees in 1994 that only 3% were working towards an NVQ (IMS, 1994). The largest single reason cited by employers as to why they were not engaging with NVQs was that they were not perceived as having relevance to their business (CBI, 1994) a curiously strange statement to make given that business 'had demanded' such qualifications in the first place (Smithers, 1993). It is perhaps indicative of the strongly ideological nature of the NCVQ's position (established by industrial and economic imperatives) that as Wolf (2002) points out; despite the clearly poor penetration of NVQ's into industrial training that when the NCVQ came under criticism for failing to deliver on its promises "the CBI sprang to [its] defence" (p77).

This example is perhaps indicative of the rather divided nature of NCVQ's impact on vocational education and training. Taken together with some of the previous issues discussed earlier, it may also give an indication of some of the discursive practices which were instigated by the emergent programme of NVQ activity. It is of some significance for the subsequent examination of the impact and effects of skills-based educational discourse on educational discursive practice that by the time of the dissolution of the NCVQ in 1996 the assumption which linked education with skills and skills with economic performance had become (and has remained) virtually unchallenged (Drew, 1998).

2.3 Moving Skills into higher education – *the great debate*

In *'The Idea of a University'* Newman (1853) described the function of a university as providing the individual with principles of thought and action which would transcend mere (sic) intellectual education, one which would instil a *genius loci*, constitute a whole and embody a specific idea. In such an education Newman claimed that knowledge was "something more than a sort of passive reception of scraps and detail". Barnard (1961) states Newman's ideas represent "the

inwardness of university life" (p.121) and that to Newman, the true value of a university lay in "the individual engaging with a residential community of scholars", and that given a choice this is of more value than "any exacting (but non-residential) programme of study" (ibid: 120). It is a vision which sees university education as developing the individual and a process which is seen as independent from the subject being studied.

Such views may be thought relatively unsurprising in the 1850's but what is perhaps more surprising is that (in a clear echo of Newman) they were still finding expression by the middle of the next century. In 1947, Barnard was warning of "the dangers of [allowing] Universities to function simply as places of instruction rather than as societies" and arguing that if students lived at home or in lodgings and:

> Merely travelled backwards and forwards to attend University classes [it would be impossible to develop community life] which is perhaps the most educative thing that the University has to offer (Barnard 1947: 200).

This seems to provide an indication of a belief in a liberal view of education (in concert with many other commentators) rather than one which holds that attending a University ought to provide specific instrumental or extrinsic ends.

The growth of University education – which stood at 6 Universities in 1902 (Oxford, Cambridge, Durham, London, Federal Victoria and Birmingham) – expanded substantially with student numbers rising from 12,778 in 1908-9 to 40,465 by 1935-6. In the post war period raised these further from 63,063 in 1947-8 to 93,524 by 1961-2 (Barnard 1961:250, 326). Yet despite such rapid expansion it seems clear that the prevalent view of the time (and for a considerable time following) was still that the purpose of education was to engage with the needs of the individual in exclusion to those of industry or the economic imperatives of the state (Burgess, 1977). Burgess indicates that the focus on individual disciplines in Universities led to disciplines being self-justified and promoted a view that research (rather than teaching) was the essential element of University life, a view which led directly to a lack of interest in professional and vocational education. Williams (1985) and Boys et al (1988) indicate that Universities had a vested interest in continuing with a system which was based on the individual interests

and choices of academics and students, one where it was assumed graduates would find employment to suit themselves and the economy.

There is an interesting comparison to be made in the discourse between the view of a University (1850 – 1970) held by many to be liberal in nature and congruent with the views expressed in the previous paragraphs that (essentially) a University education is to develop the individual and not to function as a servant of the state or the economy; and those which begin to be expressed in the discourse of the past 25 to 30 years, in which a fundamentally different concept appears to emerge.

A contemporary example illustrates the point well. In an article in the Times Higher Educational Supplement in November of 2003 it was reported that Ivor Crewe, President of Universities UK had written to the government to complain that the government's skills strategy white paper (*21st Century Skills*) – essentially the latest blueprint for skills-based education and training for qualifications up to QCA level 3 – had "marginalised HE" and that not including higher education in the skills strategy "was a lost opportunity to fully integrate skills development and build a truly knowledge-based economy". In the same article Professor Roderick Floud, Vice Chancellor of London Metropolitan University (and former head of UUK) said "Universities are seriously concerned at the relative lack of attention in the skills strategy to the upper skills levels". To place this is contrast to the views of those who prosecute a liberal view of education, the white paper focuses almost exclusively on matters of industrial performance and its relationship to the national economy. Where the 'individual' is mentioned (in Chapter 4 for example) this is almost entirely related to needs of industry and the economy. The desire on behalf the UK's Universities to engage with this industrial and economic view of higher education as expressed in the THES article is perhaps some measure of the effectiveness of governmental and industrial rhetoric over the past 25 to 30 years in shifting the locus of educational discourse.

This shift in the discourse is quite profound, from the former position which reflects a concern for the education of the individual, for the benefit of individual, to the latter which appears to embrace the notion that an ideologically conceived, skills-

based approach is constitutive of and appropriate to a University education. The move away from the former and the embracing of the latter is central to this enquiry and needs some explanation.

2.4 Expansion of Higher Education

The movement towards a mass higher education system can probably be traced to the commissioning of the Robins Report in1963 which recommended the expansion of higher education through the creation of a small number of new Universities - mostly Colleges of Advanced Technology (CATs) - and the establishment of Polytechnics. The process was not without difficulty. Many Regional Colleges could lay equal claim to university status as CATs – by virtue of the HE level work undertaken. Despite promises to create a further 10 new Universities (later abandoned) by the late 1960s the university sector had expanded to just under 40 institutions. The HE sector now had a 'binary divide' with the newly formed Polytechnics forming the other half of the provision (cf. Robinson, 1968).

Although this may be taken as the transition point in the move to a system of mass higher education the size and scope of this transition is less certain. For example, Robinson (1968) writing at the time when polytechnics had just been brought into existence states: "The Robbins report…assumed that HE was only for an elite minority and that we should merely try to increase the size of this elite" (p.12). This point is also amplified by Wolf (2002) who indicates that the Robbins report cited research which concluded that: "even at the most optimistic estimate…it is unlikely that [applications to universities] could rise to more than 8 percent of the population" (p.180). The report itself concluded that "the percentage of the age group entering full-time higher education…will reach 15 percent towards the end of the first quarter of the twenty first century" (para.183). In fact expansion was to meet this figure by the mid 1970s.

Robbins saw the purposes of higher education as; producing cultivated people; to engage in the search for truth and to transmit a common culture and standards of citizenship. He also tentatively expressed what was clearly a growing political belief that higher education must also help develop employment-related skills (cf.

Anthony Crossland's 'Woolwich' speech 1965 and Lancaster University speech 1967).

The Council for National Academic Awards (CNAA) established in 1964 to validate awards in the new polytechnics also saw the purposes of higher education as sustaining a set of general intellectual capacities (Barnett, 1994:87). 'Principle 3' of the CNAA statutes states:

> Each student's programme of study must stimulate an enquiring, analytical and creative approach, encouraging independent judgement and critical self awareness (CNAA, 1989:18).

However contentious the idea of higher education as a principle player in helping to deliver national economic performance through a direct engagement with industrial economic imperatives, by the late 1960s Britain had established a binary system of higher education and it was becoming clear that the new polytechnics would be required to respond to the growing demands of British industry and increasing political pressure that they should meet such needs (Robinson, 1968; Burgess and Pratt, 1974).

The 1970s brought profound changes to the nature of employment in the UK. Rising levels of unemployment together with previous and long-standing concerns about international competitiveness (discussed earlier) seems to have shifted the focus away from education for the individual and towards education as a key aspect of economic growth and development. In 1972 the Faure report described a world-wide 'problem' (sic) in which education – whilst being the second largest item of expenditure in the world's national budgets, was coming under increasing criticism as being: irrelevant to contemporary needs; too slow to change when technology was changing knowledge with increasing rapidity and too fixated on traditional academic disciplines which, (it was thought academe valued disproportionately to their current usefulness (UNESCO, 1972). As indicated earlier, such concerns led directly to the Prime Minister's 'Ruskin College Speech' and initiated the radical new approaches which, it was hoped would provided the 'necessary skills' (Callaghan, 1975) to meet this challenge.

Drew (1998) points out that there were three main themes advanced at this time as political and economic justifications for adopting skills approaches: rapid social and technological change; the need [because of such changes] for individuals to be highly skilled and to be able to transfer those skills to new situations and the relationship between an individuals' abilities and the nation's economic performance (p. 8). The changes to the nature, structure and delivery of vocational training and education in the 1980s (largely confined to 14 to18 year olds and those in further education) began to have an increasing effect on higher education. The CBI which began lobbying government hard for changes to VET (Wolf, 2002) indicated that: "employment considerations needed greater emphasis in planning the development of higher and advanced further education " (Education, Science and Arts Committee 1980: 329-330). Although most higher education provision remained untouched by the changes which were about to sweep through further education, Drew (1998) indicates that: "Governments from 1980 had little sympathy with the notion that undergraduates can develop economically useful abilities without deliberate attention to these skills by HE courses" (p.13).

Throughout the 1980s several surveys were conducted which helped to extend the argument beyond further education and into higher education. These surveys suggested that graduates in the UK were under-equipped for employment. Employers were indicating *skills shortages* with their graduate employees (Roizen and Jepson, 1985; Brennan and McGeevor, 1987). The white papers which followed *(Working Together*, 1986; *Higher Education: meeting the challenge,* 1987; and *Higher Education: A new framework*, 1991) were an attempt to redress what were seen as imbalances between the needs of education and those of industry (Assiter, 1995:11). The concept of core skills was reinforced by the influential CBI report of 1989: *Towards a Skills Revolution.* Other bodies such as BTEC, TVEI and CPVE also began to reinforce the notion of skills gaps, building in a core of related knowledge; skills and qualities into their programmes (Maclure, 1991). Reports and policy documents from the late 1990's do not appear to be any more helpful in clarifying the picture than previous attempts. *Employability skills - skills development in HE* published in1998) lists *"knowledge about people and organisations"* along with *"personal attributes"* as key skills. The report goes on to state that:

> There is little validated understanding of how these skills can be developed in the course of higher education [and that] These skills are also notoriously hard to assess reliably or validly (para 26).

Later reports are little better. *Towards a National Skills Agenda* (the first report of the national skills task force 1999) further widens the definition of generic (core) skills to include*: "Attitudes, discipline, motivation, judgement, leadership and initiative"* (para 3.8). It also goes on to indicate that generic skills also cover: *"Reasoning skills (scheduling work and diagnosis), work process management skills" and "personal values"* (ibid, para 3.8). And in paragraph (5.11) adds in *"Teamworking and customer care"* as *"generic skills lacking in the workforce".* The issue of generic skills is discussed in some detail on chapters 5 and 7).

2.14 Summary

This aspect of the work has attempted to provide a background discursive context for the emergence of 'skills talk' over the past several years. The rise of the discourse of skills seems to reflect long standing political and economic concerns about international competitiveness (Wellington, 1987). Principally concerned to raise the 'effectiveness' of education in meeting the needs of national economic and industrial imperatives, government and its agencies instigated radical changes in an attempt to engage secondary, further and higher education in a reformist agenda (Wolf, 2002). These radical initiatives appear to have been successful in placing employment – in the form of 'employability skills' – as an important construct in shaping educational policy and practice (Grugulis et al, 2004).
The subsequent rise of the NCVQ, which was predicated on a new understanding of employment derived and work based competence, set the tone for an understanding of skill, which persists to the present time (Jessup, 1991). National and global concerns about the purposes, function and increasing cost of education coincided with a rapid expansion of higher education. These two concerns – the changing purposes of education and the rising (perceived) need for increased industrial and economic outputs – appear to have been instrumental in driving forward a reformist agenda. The consequence of which would appear to be a fundamental and much more overtly economic and industrial focus which successfully conflated concerns relating to national economic performance, the

particular skills (thought to relate to economic and industrial performance) and higher education - as the mechanism by which this might be done - into one notion (Drew, 1998). The outcome of which seems to be that skills, once (principally) thought to be the *business of industry* and therefore provided by industry now appear to have been re-focussed as the *business of education* (Warhurst et al, 2004). The issues relating to the discursive struggle over the definition and meaning of skill are attended to in chapters 4 and 5.

Chapter 3 Some Methodological Considerations

3.1 Introduction

This chapter considers the methodological and theoretical assumptions used throughout the study and is concerned with the overarching epistemological and ontological issues which have dictated the general approach and choices taken towards particular methods of research. These indicate a particular epistemological stance which is critically examined both at an individual and metatheoretical level.

Broadly, the approach taken is that of Social Constructionism. It is premised on the basis that language can be regarded as social action, and (crucially) that language itself is constitutive of society. As such, this enquiry embraces the notion of epistemological relativism in claims to knowledge. These approaches are reflected in the methods used to obtain and analyse the data and contrast with other studies whose approaches indicate a regard for language as a transparent medium onto something else.

The study draws on structuralist and (specifically) poststructuralist theory and ranges across the field of discourse theory and analysis. This is followed with a summary of social constructionism before moving onto a critical evaluation of structural and poststructural linguistics. The chapter concludes with a critical exploration of discourse analysis and an outline of the discourse theory of Ernesto Laclau and Chantal Mouffe.

3.2 Social Constructionism

Social constuctionism stands in contrast to other views of the world such as essentialism, materialism or foundationalist conceptions which hold that knowledge is grounded on a solid, metatheoretical base which transcends contingent human actions. And specifically that 'reality' is something which exists independently of human actions and conceptions – views which underpin much of empiricist and rationalist knowledge structures (Phillips and Jorgensen, 2002; Howarth, 2000; Parker, 1992). Social constructionism in contrast, holds that our

knowledge of the world should not be treated as objective truth. Social constructionists content that our knowledge of the world is contingent on our ways of categorising the world and that access to reality is only available to us through such categorisations. This is a position which leads to a critical approach to the kind of taken-for-granted knowledge which surrounds much of our views of the social and material world. (Burr, 1995; Gergen, 1985).

Social constructionism also holds that what we regard as knowledge has an *"historical and cultural specificity"* (Burr, 1995: 3) and that the ways in which we come to represent the world are therefore contingent - that is, they could have been different and will change over time. It is because of this that our views about the world are *"products of historically situated interchanges among people"* (Gergen, 1985: 267). This link between what we take to be knowledge and our own cultural and historical context produces a corresponding link between knowledge and social processes in which social interaction creates knowledge and constructs common truths. Social constuctionists contend that it is these social processes which create and maintain our understanding of the world and the space in which we are able to struggle about what is true and what is false (Burr, 1995:4; Gergen, 1985: 269).

However, this is not to suggest that social constructionism is accepted as an appropriate or true account of knowledge production – it is not. There are many trenchant criticisms of this methodology both from those outside of this paradigm and (perhaps more crucially for this study) from those within.
External criticisms could hardly be more fundamental or profound calling into question both the epistemological and ontological premises upon which the methodology is constructed. Realist and rationalist notions of knowledge production based upon conceptions of a material world, place 'scientific laws' at their epistemological base (Macdonell, 1987; Howarth, 2000). For such notions of epistemological truth, it is the causal properties of structures such as connectivities and correlations, and not social understandings which reveal the ways in which phenomena may be understood (Parker 1992). However tempting, there is insufficient space to engage in a dialectic of incommensurable methodological paradigms here. Perhaps what is of greater concern for this enquiry is the critical

analysis which has been levelled at social constructionism from within. Perhaps the most problematic of these, concerns the relativism inherent within constructionism. Although relativism will be discussed later (in discourse analysis) it is worth some consideration at this point.

Critics argue that in maintaining that all knowledge and social identities are contingent, social constructionists are postulating that there are no constraints or regularities in social life and that everything is in a state of flux (Phillips and Jorgensen, 2002:6). There are those (Gergen and Baudrillard) who assert that that such a position is simply a natural concomitant of adopting a social constructionist position but for the majority of social constructionists this view is too extreme and is little more than *"a caricature of social constuctionism"* (Phillips and Jorgensen, 2002:6). However, the notion that knowledge proceeds from the social realm places materialists and idealists (relativists) in a dichotomous position with materialists holding that that everything that exists depends upon matter – a real world. Whereas idealists regard ideas, constructs and concepts as independent and creative of the things we think are real (Parker, 1992:23).

At its most extreme, relativism would argue for the position that the social world creates all we know and all we could know, and that each person's account and therefore knowledge of the world is equally valid and real. In this formation it is only things which exist inside 'texts' which can be said to exist at all. The alternate explanation is that things only really exist outside texts (in the real world) and that discourse is simply reflecting a pre-existing reality (Parker, 1992:25). This is an issue which will be examined further under discourse analysis but it is perhaps, worth pointing out at this stage that most social constructionists adopt the view that the social field is much more rule bound and regulative than this extreme view of social constructionism implies. And, even though knowledge is always contingent *in principle* specific situations place restrictions on what statements can be accepted as meaningful (Phillips and Jorgensen, 2002:6).

3.3 Structuralism

Structuralist and poststructuralist linguistic philosophy embraces the notion, that reality is constructed by - or through the cognitive processes allowed by -

language and equivalent sign systems. This radical view provided the basis for the development of the concept of discourse analysis in the social sciences by assuming that there is a clear analogy between language and social relationships (Howarth, 2000:17). The seminal work of Ferdinand de Saussure made several fundamental contributions to what we now consider discourse analysis and discourse theory although the term and concept was not to appear until much later. His distinction between synchronic and diachronic linguistics showed that language can be considered as a system of fixed related terms (synchronic) and also as an evolutionary development of language (diachronic) (Saussure, 1974:81). His proposition that *"language is a system of signs expressing ideas"* (Saussure, 1983:15) drew a sharp distinction between the structure of language as a fixed and unchanging system *(langue*) – the necessary set of linguistic rules which speakers of language must adhere to if they are to communicate meaningfully, and that of language in use or speech *(parole)* – individual acts of speaking (Howarth, 2000:18). In developing his theory Saussure asserted that the basic elements of language are signs. Signs unite the *signifier* or sound image with the *signified* or concept. This relationship demonstrated no natural relationship between the signifier and the signified, indeed Saussure postulated that *"signs are arbitrary in nature"* (Saussure, 1974:68).

Structuralist theory holds that the structure of language is not determined by the reality to which it refers but to this arbitrary relationship between the meanings we attach to words - as a consequence of social conventions and not to any inherent property of the words themselves (Philips and Jorgensen, 2002:9). Saussure concluded that the words we use are part of a network or structure of other words from which they differ, and that it is from everything that it is not, that a word derives its meaning. According to Saussaure, meaning and signification take place entirely within the system of language itself. In this way it may be said of structuralism that objects do not pre exist concepts but depend upon language systems for their meaning (Howarth, 2000:19). The assertion that meanings derive from negative relations to each other, constructs a system where possibilities for meaning are marked out but no definite meanings are pinned down (Macdonell,1986:10). This provides a significant paradox, for if all possibilities for meanings remain open, meaningful communication is rendered impossible. To

resolve this paradox Saussure later asserted that positivity occurs in the signs – defined through oppositions such as good/bad, presence/absence and so on. In this way the initial conception of an open structure was replaced with that of a closed structure of oppositions (Macdonell, 1986:10).

Many theorists who initially embraced the ideas of structuralism went on to question this idea of a closed, abstract and general structure of language. The poststructuralist field which arose out of this questioning began to assert that meanings could only be found in concretised social and institutional practices and that there was no meaning in language as such (Macdonell, 1986:12).

Poststructuralists argue that the sharp distinction made between the structure of language *langue* - as a fixed and unchangeable network of signs which give meaning to one another and that of *parole* – the random and idiosyncratic application of language in use – was not as distinct as that postulated by Saussure. Whilst, like structuralism, poststructuralism engages with the idea that signs derive their meanings through their internal relations to the network of signs, rather than any perceived relationship to reality, it rejects the notion that the structure of language is stable and unchanging. Poststructuralism asserts that whilst structures do exist, these are always in a temporary state as meanings and signs shift in relation to one another (Phillips and Jorgensen, 2002:11).

For structuralists, *parole* cannot be an appropriate object of study because of the arbitrary and unstable nature of language in use to that of the fixed and stable structure of *langue.* In contrast, poststructralists hold that it is precisely in this arena of language in use that the structure of language is created and changed. And that the creation of language in use draws upon structure (or speech would not be rendered meaningful) whilst simultaneously challenging how the signs are fixed in relation to each other.

In moving beyond Saussurian structuralism, poststructuralists subscribe to the view that there is not just one generalised system of meaning but many systems or discourses and that meanings change from discourse to discourse (Howarth, 2000). A position which implies that such structures are social constructions and

as such changeable over time. An analysis which also implies that the relationship between language and reality is also arbitrary (Phillips and Jorgensen, 2002).

3.4 Discourse Analysis

> You take your first step into discourse analysis as you take your first step away from language. It is this paradox which makes the issues (in discourse analysis) curious, useful, dangerous and liberating (Parker, 1992: xi).

Discourse analysis is not one unified field of activity or understanding which has a convergent view or united approach across the social domain. It is perhaps more properly characterised as a complex and contested concept within the social sciences (Connolly, 1993:10-44). Howarth (2000) indicates that *"the proliferating discourse about discourse"* has resulted in some rapid changes to the concept with some discourse analysts focussing on a very narrow enterprise concentrating on a single utterance or conversation, whilst others regard discourse analysis as synonymous with the whole social system (Howarth, 2000:2).

Charting a clear pathway through discourse analysis is problematical. Some examples may be useful in illustrating the diverse nature of discourse analysis. It can (it seems) be everything and anything. The influential theorist Jacques Derrida certainly reflected this view when he asserted that *"with the invasion of language into the universal problematic everything became discourse"* (Derrida, 1978). In similar vein, Laclau and Mouffe show how their deconstruction of the Marxist ideology and the consideration of poststructuralist philosophy has led to a concept of discourse which includes all the practices and meanings which shape the social world (Laclau and Mouffe, 1985, 1987). They use discourse analysis to emphasise that *"every social configuration is meaningful"* and that *"the discursive is coterminous with the being of objects"* (Laclau and Mouffe, 1987:84).

By contrast to this rather ontologically relativist assertion, other theorists (realists) see a different ontological dimension, arguing that the social world consists of an independently pre-existing set of objects which cause events and processes in the real world (Harre and Madden, 1975; Bhaskar, 1978; Stones, 1996). This understandably regards discourses as objects in themselves and realists focus on

language as a structured system in its own right (Parker, 1992:28). An alternative view is that taken by Marxist approaches to discourse analysis. These approaches view discourses as ideological systems of meaning that obscure or seek to naturalise uneven distributions of power and see the task of discourse analysis as a mechanism to expose deception and '*false consciousness'* and to counter-pose emancipatory alternatives – a function which Laclau and Mouffe would interpret differently since they posit that discourse analysis excludes any viable conception of ideologies as anything other than objective or sedimented discourses whose contingency has been forgotten (Laclau and Mouffe, 1985:113).

The theorists who follow *critical discourse analysis*, focus on a more dialectical relationship between discourse and the social systems they constitute. The work of Fairclough and Wodak (1997) which incorporates sociological and philosophical aspects from the work of Althusser, Gramsci, Giddens and Habermas, seeks to provide an overall sociological framework with which to conduct discourse analysis, stressing the centrality of human meaning and understanding in explaining the social world; and through human agency and reflexivity impose changes on social relationships (Fairclough and Wodak ,1997:259-60).

Foucault, Derrida and others also posit a comprehensive concept of discourse, regarding social structures as inherently ambiguous, contingent and incomplete systems of meaning (Derrida, 1982; Foucault, 1981, 1991). Such fundamental precepts have done much to influence the work of contemporary theorists such as Laclau and Mouffe.

Nor are these the only differences which inhabit the field of discourse analysis. Some theorists propose detailed methodologies for the practice of discourse analysis. One such example would be Norman Fairclough's 'three dimensional model' (Fairclough, 1992, also van Dijk ,1997, and Jaworski and Coupland, 1999. Whilst others, such as Laclau and Mouffe have developed a theory of discourse *"with a broad focus* (which*) does not include many practical tools for textually oriented discourse analysis"* (Phillips and Jorgensen, 2002:24). In proposing no specific methodology for the practice of discourse analysis, Laclau and Mouffe represent a view taken by some theorists in stopping short of proposing any

practical or methodological apparatus with which to conduct an analysis (Willig, 1999:18; Howarth, 2000: 2; Phillips and Jorgensen, 2002:1).

All of the above makes the selection of a particular method of discourse analysis something of a conceptually complex problem, embracing as it does profound differences of ontological and epistemological significance. It seems clear that as Connolly suggests, not only is discourse analysis a complex and contested concept within the social sciences but that the meaning, scope and application of discourse is relative to the different theoretical systems in which it is embedded (Connolly, 1993:10-44).

As Howarth points out, such theoretical systems contain particular assumptions about the nature of the social world and the way in which we are able to obtain knowledge of it (Howarth, 2000:3). This issue is amplified by Phillips and Jorgensen who indicate that whilst discourse analysis can be applied to all areas or work, it cannot be used will all kinds of theoretical framework:

> In discourse analysis, theory and method are intertwined.... researchers must accept the ontological and epistemological premises upon which such theories are based...in order to use discourse analysis as their method of empirical study (Phillips and Jorgensen 2002: 4).

Given the centrality of such matters to the outcome of any discourse-based enquiry, a brief description of some of the key the philosophical precepts which underpin discourse analysis would seem appropriate.

Whilst it has been shown the discourse analysis cannot be regarded as one unified field of social enquiry, it can be said that all approaches agree that *language is not simply a reflection of any pre-existing reality*; that there is not just one system of meaning (as in Saussurian structuralism for example) but many, and that these *meanings change from discourse to discourse*; and *that discourses transform social practices* and are themselves *transformed by social practices* (Phillips and Jorgensen, 2002 12 – my italics). Central to the understanding of discourse is the notion of discourse as constituting the world of the social. This view, that our ways of talking do not neutrally reflect the world, our identities or

social relations, but play an active role in creating and changing them is shared by all discourse analysts (Potter and Wetherell, 1992; Laclau and Mouffe, 1985; Fairclough, 1995; Jaworski and Coupland, 1999; Austin, 1962, Foucault, 1981). This is a fundamental premise of discourse analysis whether reflected in the 'performative speech acts' revealed by Austin (1962); the global and abstract linking of discourse and ideology (Althusser); hegemonic practice (Gramsci) or historical contingency (Foucault).

This would seem to have particular relevance to skill as an *object* of social discourse. Following the precepts outlined previously, it could not be said that skill pre-existed any of its several conceptions (Howarth 2000: 19) but that its status as an object of reflection has been brought into being by particular discourses. Nor, given the fact that the concept of skill appears in the discourses of politics, economics, education, medicine, industry, commerce (and many more) (Wolf, 2002; Ericsson and Smith, 1991; Vallas, 1990; Stienberg, 1990; Attewell, 1989; Wellington, 1988; More, 1980) can it be ascribed singular or definitive meaning. And crucially, given the polysemic nature of skill, its transformation by discourses and discursive practice together with its transformative influence on other discourses - and by extension, social practices - it would seem to engage with the particular paradigms inherent within discourse and discursive practice.

3.4.1 Epistemological considerations

> The rise in the importance of discourse has coincided with a falling off of intellectual security in what we know and what it means to know – this is a shift in epistemology in theorising knowledge (Jaworski and Coupland 1999:3).

This quote seems to rather elegantly allude to the debate about what forms of 'truth' can be considered to be legitimate knowledge. Researchers with a positivist epistemological view hold a particular set of views about what specific set of conditions are necessary to regard particular knowledge claims as true – necessary conditions, which for the most part conform to materialism and rationalist conceptions of knowledge, often validated by reference to a Popperian paradigm of 'falsification'. On the other hand, a researcher following a social constructionist paradigm, holds that truth is merely one possible interpretation

amongst many other possible 'truths' and that as such it is simply an interpretative and contingent construct of the data and never a definitive or singular outcome.

Whilst not wishing to engage in a fruitless dialectic on incommensurable paradigms, there are some fundamental issues here which bear down on this particular enquiry into skill. Jaworski and Coupland capture something of the increasing uncertainty about the status of knowledge and the nature of truth. It is clearly the function of any epistemology to lay down specific conditions by which theory can correlate with facts, and that the fulfilment of such conditions will produce the predicates for valid knowledge (Macdonell, 1986:65). Many theories have attempted to assert that there is a neutral form under which any knowledge can correlate with reality, but from the large number of competing epistemologies throughout the past several hundred years, two appear to have emerged as the dominant epistemological positions, synthesised by Hindness and Hirst (1977) into two categories - empiricism and rationalism.

Empiricist epistemologies hold that all valid knowledge derives from experience *"sense data, cross sections of conscientiousness, the facts of observation"* and that these data create the experience of human subjects (Hindness and Hirst, 1977:10). Empiricist epistemologies also hold that knowledge is drawn inductively from the particulars of experience enabling the nature of things to be reproduced in thought. Rationalist epistemologies on the other hand, hold that valid knowledge proceeds from the logical ordering of conceptual thought and that knowledge is possible *because* the world is rational and ordered (Hindess and Hirst, 1997:10-11). These are not mutually exclusive positions (Hindess and Hirst cite Kant's view of epistemology as combining elements of both positions), but irrespective of the particulars, all epistemologies seek to establish correspondence between two general spheres – words and things or knowledge and reality. *"To know is to abstract from the object its real essence, the possession of which by the subject is called knowledge"* (Althusser and Balibar, 1970:36-7).

The assertion that it is impossible to demonstrate that some forms of discourse (empiricist or rationalist) are any more valid than those whose truth is simply assumed seems to be an illogical premise. Yet the argument which supports this

assertion is as elegant as it is logically robust. Hindess and Hirst assert that the fundamental oppositions set up by epistemologies such as those between theory and fact or between man as a knowing subject and the object to be known, lay down the conditions under which theory can correlate with fact, or the subject know the object, and that these will be the conditions of valid knowledge. The difficulty appears to be that in undertaking such a process, the endeavour *presupposes* knowledge of what a subject, object, theory or fact is. And it also *presupposes* knowledge of the conditions by which they can correlate with each other.

The clear epistemological weakness in assuming such a position is revealed in asking the question 'what validates the knowledge presupposed in the epistemology'? (Hindess and Hirst, 1977:13-18). They assert that nothing can, and that attempts to do so simply result in circular logic. For example, that it is only through experience (empiricist) that we can know that what is given in experience does come from objects. Or, to take a rationalist perspective, that we can know through induction that we can access a *real* knowledge of the world because the world is *really* structured by laws – and that we can know this by induction!

This has a rather uncomfortable corollary however, for if all epistemologies lack logical coherence, where might this leave the notion of universal truths or of a privileged access to 'reality'? Given the critique advanced above, that -

> No special class of statements about how language and reality are linked is itself privileged, immune from revision (and) hence suitable to serve as the sort of guaranteeing metalanguage epistemology has classically sought (Thompson, 1981:92)

- it might be thought that the desire to seek for rational and coherent epistemological base is rendered valueless. This however, is not to strike a nihilistic note or to say that such a critique of epistemology transforms all knowledge to the status of beliefs. It clearly remains the case that various disciplines employ specific and coherent criteria, and that within the terms of their deployment in the specific subject areas, it is these criteria which decide the adequacy of their results (Viskar, 1992:15-22).

Indeed, it is interesting that the very notion that in employing a critique to question seemingly 'solid' epistemological guarantees we may in fact, be engaged on a more liberating rather than problematical course of action. As Macdonell (1980) points out, in rendering 'epistemological guarantees' worthless we have no need to evaluate knowledge in terms of any general idea of truth or falsity. And that in turn, this leaves us free to question knowledge in other ways (as Foucault, Althusser, Laclau and Mouffe and others do). And that this critique of epistemologies *"leaves us with knowledge whose relations to objects cannot be given some unified and guaranteed form - the form of truth" (*Macdonell, 1980:66-7).

Not withstanding that particular theorists might wish it otherwise, it remains clear that the epistemological status of accounts produced through a process of discourse analysis remain contested (Potter, Wetherell, Gill and Edwards 1990, Parker 1992). However, it can also be shown that it is possible to counterpose a rational argument in support of a more relativist epistemology which validates much of discourse theory. Smith (1995) suggests that such problems of epistemological validity occur when inappropriate validating theories are applied to discourse (such as empirical or normative constructs). As against this division of empirical or normative theories of society, Smith suggests that discourse theory can be characterised as *'constitutive theory'* that is a framework of consistently related concepts and logic linked to a particular social ontology which provides a common language to describe, interpret and evaluate social phenomena (Smith, 1995:26-8). In this way, *constitutive theory* is connected to the social reality it describes and interprets and it cannot be falsified by the accounts of reality it facilitates (Howarth. 2000: 30). This account is supported by Culler (1998) who suggests that the empirical accounts which discourse theorists produce require evaluation as interpretations of the research objects they have constructed and not as either confirming or refuting other empirical theories (Culler, 1998:139-40).

The epistemological position taken by discourse theorists rejects essentialist theories of knowledge production and is anti-foundationalist in that it also rejects notions of empiricism, idealism and realism (Phillips and Jorgensen, 2002:5;

Howarth, 2000:132). This rejection of such approaches would seem to require a more complex approach in constructing and verifying truth and knowledge.

This is to return to the points raised by Phillips and Jorgensen earlier that the language we use is not a reflection of any pre-existing reality (p.12). For theorists such as Foucault (and others such as Bachelard and Canguilhem) objects are never given by the experience and facts, but constructed in historically specific systems of knowledge. Foucault's earlier 'archaeological' phase of discourse analysis focussed on the rules which, determined which statements in a given discourse are accepted as true and meaningful at a given point in time. He argued that truth is a discursive rather than absolutist construction and that differing discourses determine what is true and what is false. Foucault postulated that such 'regimes of knowledge' – the rules for what can and cannot be said and the rules which govern considerations of truth and falsity – are historically contingent. In that whilst there are an infinite number of ways to construct statements there are an innumerable number of statements that would never be accepted as meaningful (or true) as the historical rules of a particular discourse delimit what it is possible to say (Foucault ,1972, 1973, 1977). Foucault believed that specific and singular knowledge regimes were identified with particular historical periods – a conception not shared by other discourse theorists who argue for a more discursive struggle between discourses in which discursive conflict characterises the attempts to define truth.

For discourse theorists, questions of truth or falsity are not determined by theories which relate to an independent world of objects, rather they are seen as relative to standards a set down by particular systems of knowledge (Viskar, 1992:15-22). The privileging of aspects such as validity and objectivity over those of meaning has been questioned in the writings of Wittgenstein, Heidegger, Kuhn and Foucault, and illustrate the philosophical and epistemological difficulties in making issues of truth relative to systems of meaning (Foucault 1981: 60-1; Wittgenstein 1953: Propositions 240-1). This is of particular importance (and is picked up in chapter 4) given that all discourse theorists subscribe to the precept that there are many systems of meaning and that these meanings change from discourse to discourse (Phillips and Jorgensen, 2002:12). The consequence of which means

that decisions about the truth or falsity of statements are settled *within* orders of discourse using the criteria established by those orders themselves (Howarth, 2000:133).

3.4.2 Relativism

Returning to the inherent nature of relativism within discourse theory for a moment, it seems appropriate to ask that if (as agreed by discourse theory) issues of truth and falsity are seen as relative to particular systems of knowledge (Viskar, 1992:5-22), and if the truths which such endeavours produce are contingent - in that they could have been different and will change over time (Gergen, 1985:267), then what guarantees are there that the new understandings produced by discourse analysis will be better than the ones being criticised?

Theorists such as Potter, Ashmore and Edwards (1995) argue that relativism is unavoidable and accept this as a necessary condition for all knowledge production. They regard relativism as an important feature, which provides a fundamental scepticism about claims to knowledge and reality, and makes it possible to question everything. A position which means that whilst claims and judgements can be made they remain open to discussion and debate about their status (Edwards, 1995:25-49) a position entirely consistent with the precepts of social constructionism. In contrast, theorists such as Parker (1992) and Willig (1999) argue that accepting *in principle* that all statements of the world are of equal value, critical research becomes impossible. To redress this 'imbalance' they invoke the ontology of critical realism to address what they consider to be aspects of the world which lie outside of the discursive realm:

> Critical realism is concerned to allow analysis to move beyond, outside of versions of intersubjective reality (and) takes account of different senses of reality, and the reality outside sense (Parker 1992: 36).

For Chouliaraki and Fairclough (1999) this modified form of relativism supported by critical realism is an acceptable position. They support the argument against judgmental relativism (that all discourses are equally good representations of reality) outlined above, arguing that holding such a position weakens any criteria for distinguishing what can be accepted as a true statement. In most important

respects however, it would seem that such differences appear to be related to the particular discursive fields followed by the discourse analysts rather than generic fault lines within discourse theory itself. Chouliaraki and Fairclough are proponents of critical discourse analysis in which the general tendency is to apply conventional scientific methods in the production and presentation of empirical material (Phillips and Jorgensen, 2002:198) - a position which argues that some representations reflect reality more appropriately than others.

Edwards, Potter and Ashmore's approach (discursive psychology) embraces not only a more openly relativistic approach to epistemological matters but also goes further to take account of the researcher in the design and construction of the research (reflexivity) (Phillips and Jorgensen, 2002:198).

It seems clear that in following the premises of social constructionism, discourse theorists are involved in a dialectical relationship with relativism, negotiating – according to their particular epistemological and ontological framework – the principles and processes of their research.

It is perhaps with these two considerations – the principles of research, and the concrete process of research – that the relativistic circle can be squared. Phillips and Jorgensen propose a 'political' understanding of knowledge production in that it is neither possible to present the absolute truth any more than it is possible to completely avoid saying something (p.206). They postulate that an appropriate status of *scientific knowledge* would be a *truth that can be discussed*, where *truth* refers to a concrete grounded level at which some stories are advocated as better than others (thus avoiding the relativistic claim that all statements about the world are of equal value) and *discuss* refers to the principle that the researcher should always be open to alternative truth claims (Phillips and Jorgensen, 2002:205-6).

3.4.3 Interpellation

Interpellation was suggested by Althusser as an alternative to the classic western view of the subject as an autonomous and sovereign entity (Philips and Jorgensen, 2002:15). In place of this self determination, Althusser claimed that individuals are placed (interpellated) into certain positions by particular ways of talking and that this places certain expectations on the consequent behaviour and

actions of subjects (Althusser, 1971:174). For Althusser, interpellation was a function of ideology in that he theorised that aspects of the social are controlled by ideology and function through *'the repressive and ideological apparatus of the state'* (p.174). In this conception, interpellation refers to the process whereby language constructs a social position for the individual and makes them an ideological subject (Ibid:174).

Whilst the concept of interpellation remains central to much of discourse theory, the ideologically deterministic view espoused by Althusser has given way to a wider conception in which subjects still remain (in discourse theoretical terms) positioned within discourses whilst rejecting the view that this is reflective of a single subject position (Laclau and Mouffe, 1985:115). This view holds that – like poststructuralism – one discourse can never establish itself so strongly that it becomes the only discourse able to structure the social and that there are always several competing discourses in play (Phillips and Jorgensen, 2002:41).

However, this is not to suggest that Althusser's construction has no resonance in this enquiry. There remains some sense of interpellation as an ideological aspect, in that (for example) the promotion of a particular view of education as a servant of the state and promoter/driver of economic wealth (DfES, 2003) is to establish something of a classic ideological position. A position which appears to privilege one position over another and seeks a state hegemony and in 'hiding alternative conceptions' of value and purpose and might be said to promote a 'false consciousness' about the value and purpose of education amongst those subjects interpellated by this ideological position (an issue returned to later in the chapter).

The singular ideological determinism of Althusser's position is, however, rejected by Laclau Mouffe and replaced with a conception of the subject as *fragmented* – that is interpellated in many positions by different discourses although this conception does not see the subject as any more autonomous or sovereign than previouse understandings, the interpellation of the subject is still determined by discourses and understood as 'subject positions' within a discursive structure (Laclau and Mouffe, 1985:115).

Laclau and Mouffe go further than recognising the multi-faceted nature of the *fragmented* subject. They postulate that where subjects are interpellated by competing discourses striving to organise the same social space simultaneously (as appears to be the case in the discourse of skill) the individual is interpellated in different positions at the same time. This creates and *overdetermination* of the subject in which the individual is positioned by several conflicting discourses among which a conflict arises. Laclau and Mouffe postulate that the subject (individual) is always *overdetermined* as a consequence of the contingent nature of discourses, in that (in principle) the subject always has the possibility to identify differently in specific situations. And this is what renders identity interpellated by discourses contingent – that is, that it is possible but not necessary (Laclau and Mouffe, 1985:115-117).

This would seem to have significance for this enquiry. In the order of discourse which embraces skill for example, the interpellation of subjects within the industrial discourse, positions subjects in relation to their recognised status as *'skilled'*, *'semi-skilled'* or *'unskilled'* workers. More (1980) shows how the attribution of such labels is powerful interpellator able to confer status, power, influence and position within the hierarchy established in the lives of working people (pp.15-22). This 'historical position' appears to continue to exert a powerful influence on the contemporary skills debate. The same language continued to be used throughout the 1970s, 80s and 90s - see for example; Callaghan speech (1976); Wellington (1987); the white papers - *New Training Initiative* (1981); *Training for Jobs* (1984); *Prosperity Through Skills* (1993); *Towards a National Skills Agenda* (1999) and is still very much in evidence in the latest governmental white paper – 21st Century Skills (DfES, 2003). These and several other significant examples are examined in detail in later Chapters.

3.4.4 Hegemony

The concept of hegemony famously advanced by Gramsci – essentially, one based on a transformative ideological premise that the working class would transform its own particular interests into those of *'the people'* or *'the nation'* as a whole becoming a *'collective will'* that represents universal values and interests (Gramsci, 1991:181-2) – is not one which is extended here. Rather it is the

conception of hegemony advanced by Laclau and Mouffe - that no discourse is a closed entity but is constantly being transformed through contact with other discourses. It is this *discursive struggle* in which different discourses engage and conflict with each other in order to fix the meanings of language in their own way and achieve a dominance or privileging of one particular perspective is what is seen to drive the process of hegemonic practice (Laclau and Mouffe, 1985, 1990; Butler et al, 2000). As will be seen later, this conception of hegemonic practice has particular implications for the discourse of skill, for example, in establishing a "hegemony of knowledge over skill" (Corrigan, Hayes and Joyce,1995), the hegemonic interventions of industry in educational policy and practice (Wolf, 2002) and the role of skill attribution in maintain hegemonic dominance in the workplace (More, 1980).

Laclau and Mouffe specify two further conditions for hegemonic practices to take place – the existence of *antagonistic forces* and the instability of the political frontiers that divide them (Howarth, 2000:110). For Laclau and Mouffe politics is the organisation of society in a particular way which excludes all other ways (Phillips and Jorgensen, 2002:36). These political processes lead to an outcome in which certain meanings and constructions are *objectivised* as *natural perspectives*. Laclau and Mouffe see such *objective* meanings as the process of historical and political struggles which establish some discourses so securely that their inherent contingency is forgotten and they become *sedimented discourses* and naturalised as 'common sense' ways of viewing the world Laclau, 1990:34).

The view that discourses, for reasons of historical, political and ideological reasons become sedimented or objectivised is the position taken by Laclau and Mouffe in regard to ideology. For Laclau and Mouffe a society without ideology would be unthinkable since in discourse theory ideology is defined *as* objectivity. In support of this position they argue that if all meaning is fluid and all discourses are contingent it is objectivity which masks contingency and hides alternative possibilities (Laclau, 1990:89). In this way objectivity can be said to be ideological in that it promotes what Gramsci would term 'false consciousness' privileging one (contingent) view over another.

In moving from a position of conflict to one of objectivity, discourses are subject to *hegemonic interventions* in which alternative views of the world are suppressed and particular privileged perspectives are naturalised (Laclau and Mouffe, 1985:142).

3.4.5 Antagonism

Hegemonic interventions are theorised as a consequence of antagonistic forces which attempt to define the same terrain in conflicting ways (Laclau and Mouffe, 1985:125). In making contrasting demands in relation to the same actions within a common terrain social antagonisms are established. These antagonisms are dissolved through hegemonic interventions (Butler et al, 2000; Howarth, 2000:111). Antagonisms are found where discourses collide. They are dissolved through a process of hegemony, whereby one discourse conquers the terrain and comes to appear as objective reality (Phillips and Jorgensen, 2002:190). Fairclough (1992) also sees discursive practice as an aspect of hegemonic struggle that contributes to the transformation of discourse and that discursive change takes place when discursive elements are articulated in new ways (p.93).

3.4.6 Hegemony in the discursive realm of skill

Over the course of the past 30 years there appears to have been some profound paradigm shifts in the taken-for-granted (or naturalised) view of skill. These are analysed in some detail in later chapters but some examples may be helpful to frame the argument at this point. Examples include the move away from an historical understanding skills as a somaticised, practical and craft-based conception of demonstrable ability, towards a postmodern understanding of skills as a function of intellectual and cognitive ability such as *problem solving skills, analytical skills* and so on (Bennett et al, 2000, Corrigan et al, 1995, Warhurst et al, 2004). This seems to be part of a long established debate concerning mind/body dualism which appears to reach as far back as Plato and Aristotle (Ryle, 1949; Curtis and Boultwood, 1953; Tomlinson, 1997; Corrigan et al, 1995).

Another associated but distinct shift concerns what was once thought to be a direct relationship between training and skills. Where skills were once thought to be a function of training programmes – mostly 'on the job' training with some

inclusion of 'off the job' training - it now seems to find inclusion in the curricula of compulsory and post-compulsory education. (Peters, 1966; Minogue, 1973; Barnett 1994; Prickett, 1994; Assiter, 1995; Wolf, 2002).

Other shifts in the established paradigm include the contemporary relationship of skills with notions of credentialism rather than the historical association of skill as a directly demonstrable ability (Warhurst et al, 2004; Wolf, 2002; Spencer, 1995).

The acquisition of skills was historically seen as the 'mastery' of abilities which were - and for some still are - profoundly time contingent (Simon and Chase, 1973; More, 1980; Hayes, 1981; Bloom, 1985; Sloboda, 1986, 1996; Welford 1968, Ericsson and Smith 1991). Contemporary conceptions seem to place little value on chronological exposure as a mechanism for the acquisition of skills delivered through formal education (Spencer, 1995).

It seems clear that some transformation is taking place in the established discourse through conflictual contacts with other discourses all contributing the contemporary discourse of skill. These distinct usages seem likely to be the discursive practices which frame economics, industry and politics. It also seems clear that some form of hegemonic interventions have (and are) taking place within the wider order of discourse, interventions which are having profound and far-reaching effects on our conceptions of skill and its place in the education system. These hegemonic interventions and associated antagonisms are examined in detail in later chapters.

3.4.7 Establishing an appropriate methodology for this enquiry

As shown previously, discourse analysis is not one single or unified field of enquiry, nor does it provide an agreed or uncontentious set methodology with which to examine the social world (Howarth, 2000; Jawarski and Coupland 1999; Connolly, 1993; Parker, 1992). Many of the conceptual structures examined so far, find broad agreement within the wider field of discourse analysis. However there are many others which are allied to specific theories of discourse and would be of little value here, and crucially, there is no one particular theory which fits the nature of this enquiry in its entirety.

An example of this dichotomy might be helpful in illustrating the point. Laclau and Mouffe's theory of discourse analysis has as one of its central precepts *'the field of discursivity'*. This rather opaque concept refers to all the possibilities which a specific discourse excludes (Laclau and Mouffe, 1985:111). In this sense it seems to be an amalgam of all the meanings every sign has had (or could have) in other discourses, but which - in order to create a unity of meaning - are excluded by the discourse in question. The issue here seems to be that in constructing their *field of discursivity* Laclau and Mouffe do not make it clear whether this amalgam of residual meaning is itself structured by competing discourses (and therefore also discursively contingent on what it is not) or simply an unstructured morph of all possible meanings.

The work of Chouliaraki and Fairclough (1999) on the other hand provides a more focussed approach to this problem in that they propose *Orders of discourse* as a more appropriate way to theorise competing discourses. In this conception, meanings outside of the specific discourse are themselves structured and compete with other discourses within the same terrain to fill them with meaning in their own particular way (Phillips and Jorgensen' 2002:56). Theorising discourse in this way seems to provide a more structured approach to the issues of hegemony and antagonism advanced by Laclau and Mouffe and which seem to have relevance to competing discourses which comprise the orders of discourse which embrace skill, education, industry, economics, politics and so on.

Yet this particular difficulty notwithstanding, Laclau and Mouffe are able to provide profound insights with which to analyse complex and entangled discursive structures – *elements, moments, nodal points, floating signifiers, Articulation, interpellation, subject positioning, overdetermination, sedimentation, myth* and much more (Laclau and Mouffe, 1977, 1979, 1985, 1990; Butler et al, 2000). And their robust advocacy of postsructuralist epistemological and ontological positions together with a resolute defence of relativism as a necessary condition of the construction of meaning provides a wholly coherent and stable platform upon which to build appropriate analytical structures.

Other theorists are more circumspect in this regard. Parker, Chouliaraki and Fairclough adopt a more philosophical stance which seeks to combine the epistemological freedoms of a constructionist methodology with the certainties of a realist ontology. The *critical realist* position produced by such a position seems to occupy uncertain ground being neither foundationalist, essentialist or idealist yet seemingly unable to embrace the relativist position that all accounts of the world are of equal value.

There are many other examples of differences which might be cited, some of which have been alluded to in the preceding pages – hegemony, ideology, interpellation, historicity and so on, and as several of these will be closely analysed later when analysing the discourse of skill they will not be pursued further here.

The point being made is that discourse analysis is nothing if not a 'broad church' where many positions are understood and valued for their contribution to the ongoing process of discursive enquiry. It would seem then that adhering exclusively to one particular perspective runs somewhat counter to the overarching principles of discourse analysis as a valid methodology with which to examine the social world. And that the adoption of a multiperspectival approach would seem to be little more than the recognition of discourse analysis as a fluid methodology which offers different perspectives with which to analyse different forms of knowledge.

3.4.8 A Rationale for the defence of a multiperspectival research methodology

There are two justifications which may be advanced in defence of a multiperspectival approach to discourse analysis; methodological coherence and (some) support in the literature.

All theories of discourse analysis subscribe to the view that the formulation of one objectivised truth is to misunderstand what constitutes a valid epistemological basis for the verification of knowledge (Phillips and Jorgensen, 2002; Howarth, 2000; Jaworski and Coupland, 1999; Parker 1992). Most (although not all)

subscribe to the view that 'truth' is contingent, in that things could have been different and will change over time (Foucault, 1981; Laclau and Mouffe 1985). Versions of *objective truth* are seen as *sedimented discourses* where hegemonic practices and inter discursive antagonisms have striven to achieve the crystallisation of one dominant view or meaning (Laclau and Mouffe, 1985).

It seems uncontentious to suggest that discourse analysts are clear that one discourse can never establish itself so strongly that it becomes the only discourse able to structure the social (indeed the whole methodological paradigm of social constructionism appears to be predicated on just such a view). Moreover, discourse analysis is, for example comfortable with the notion that as subjects we are not only fragmented by the interpellations placed upon us by conflicting discourses (Althusser, 1971) but that we *overdetermined* by such interpellating interventions so that as subjects we are essentially contingently positioned in an undecidable terrain (Laclau and Mouffe, 1985).

Given that the contingent and undecidable nature of texts is the *Zeitgeist* of postmodern discourse analysis, what might support a suggestion that only one way of analysing the world might (or indeed ought) be considered appropriate? Is not the whole thrust of discourse analysis premised on the basis that seeking to objectify the subjective, and determining the undecidable is fundamentally to misunderstand the epistemological and ontological determinants of reality? It would seem rather incoherent to construct such a view for the investigation of the social world whilst at the same time failing to apply it to (certain aspects) of the instrument used in such an analysis; and it certainly not proposed to do this here.

However, this is not to suggest that undertaking discourse analysis is (or ought to be) a rule-free, self-referential, 'pick-and-mix' eclecticism. On the contrary, there are serious arguments to be advanced against unguarded eclecticism in the deployment of discourse analysis. Phillips and Jorgensen (2002) caution against stepping outside of the epistemological and ontological frameworks which support discourse analysis and detach discourse analysis from its methodological foundation:

> Discourse analysis... is not just a method for data analysis but a theoretical and methodological whole (p.3). [they further assert that] Researchers must accept the basic philosophical premises in order to use discourse analysis as their method of empirical study (p.4).

Howarth (2000) argues that effective and appropriate deployment of discourse analysis is contingent upon *"being sensitive to the various theoretical contexts it which it functions."* (p.3). Connolly (1993:10-44) indicates that the meaning, scope and application of discourse is relative to the different theoretical systems in which it is embedded. Both these latter positions would seem to imply that some degree of 'case sensitive' approach is appropriate in the deployment of discourse analysis and that ill considered eclecticism is unlikely to prove either empirically effective or methodologically appropriate.

Whilst recognising such difficulties and sensitivities are required in the deployment of discourse analysis, this enquiry has of necessity to engage with several competing discourses in order to deconstruct the concept of skill. The multiperspectival approach taken in the conduct of this research reflects the nature of this task and seeks to enable elements from different discourse perspectives to be combined into a new but integrated whole. There is some support in the literature for such a position. Phillips and Jorgensen indicate that *"multiperspectival work is not only permissable but positively valued in most forms of discourse analysis"* (pp.4 and 153-157, see also Kellner, 1995).

It would therefore seem appropriate to adopt a balanced and considered approach when choosing instruments of enquiry from across the spectrum of discourse analysis. At the same time it also seems essential to recognise that a strong theoretical consistency is required to bind the work together, and to provide a degree of conceptual clarity and academic coherence – without which the whole undertaking could stand in danger of descending into confusion, further atomising a currently disaggregated discourse.

3.5 Laclau and Mouffe's theory of discourse

To attempt to guard against such a possibility, the work of Ernesto Laclau and Chantal Mouffe will be used to unify the selection and deployment of various discourse analysis approaches. Laclau and Mouffe would seem to provide a strongly overarching yet suitably abstract methodological approach which is avowedly socially constructionist in its approach to social questions. Their approach would seem to offer an appropriate philosophical and unifying structure with which to analyse the discourse of skill, whilst allowing sufficient internal flexibility with which to import the insights and analytical perspectives of other theoreticians.

The founding principle and analytical driver of Laclau and Mouffe's theory is that all *articulation* (and therefore everything social) is contingent – in that it is possible but not necessary (Phillips and Jorgensen 2002:38). Laclau and Mouffe theorise that discourse may be understood as the partial fixation of meaning around particular privileged signs (*nodal points*) and it is from these *nodal points* other signs acquire their meaning. Laclau and Mouffe characterise discourse as a struggle between discursive forces which seek to fix the meaning of signs and thereby reduce their potential polysemy, and those forces which are constantly threatening to destabilise the establish structure of the discourse (Laclau and Mouffe, 1985:113). They theorise that this process aims to remove uncertainties and ambiguities of meaning by turning *elements* – signs with unfixed, polysemic meanings into *moments* – signs with fixed meaning. This is achieved by establishing *closure* – a temporary stop to the fluctuation of the meaning of signs. A process which they characterise as temporary since *"the transition from the 'elements' to the 'moments' is never entirely fulfilled"* (Laclau and Mouffe, 1985:110).

This process of transition displaces all the other possibilities of meaning from a particular discourse to the *field of discursivity* - the reservoir for the surplus of meaning which has been excluded by the specific discourse in order to create a unity of meaning – (Phillips and Jorgensen, 2002:27). This process can never be completely successful as these 'unwanted' possibilities of meaning displaced to the *field of discursivity* always remain threatening any established fixity of

meaning. In this way all *moments* remain potentially polysemic and by extension all moments are potentially *elements*.

The engine which drives the dynamic changes within and between discourses Laclau and Mouffe call *articulations* – these are practices which establish relationships between *elements* such that the meaning and identity of the *elements* is modified. *Articulations* may be understood as the agents of change which reproduce or challenge existing discourses by fixing meaning in particular ways. Laclau and Mouffe understand these not only as verbal or written expressions but (potentially) as including every social action (Laclau and Mouffe, 1985:104 –114).

Laclau and Mouffe make an important and crucial point here. If, as they assert, every verbal and written expression and all social actions are *articulations* able to fix meaning in particular ways, it follows that such discursive actions and events must draw upon earlier fixations of meaning from established discourses. They contend that these earlier fixations of meaning are not inserted into the discourse unchanged. But modified by the articulatory processes which draw them into the discursive realm (Laclau and Mouffe, 1985:113). By challenging the closed nature of the Saussurian linguistic model which reduces the polysemy of all *elements* to fixed and unchanging *moments*, Laclau and Mouffe show that without *articulation* every social practice simply repeats an already existing system of meaning. A process which would render all discourse as fixed and prevent the construction of new *nodal points* around which new discourses are built or modified (Howarth, 2000:103). In this way every expression is an active reduction of the possibilities of meaning as signs are organised and positioned in relation to one another in one way, excluding alternative conceptions. This in turn creates an understanding of discourse as a *reduction* rather than expansion of possibilities.

Laclau and Mouffe understand discourse as a structure in which the meaning of signs is positioned in a relational net. They differ from Saussurian notions of structuralism in that they contend that there are always many other potentialities of meaning which are able to challenge and transform accepted meanings through *articulatory processes*. Discourse is seen a temporary closure, that whilst fixing

meaning in a particular way does not dictate any permanent fixation or closure of meaning. For Laclau and Mouffe such articulations are contingent interventions in an undecidable terrain, in that *articulations* constantly shape and intervene in the structures of meaning in unpredictable ways (Phillips and Jorgensen 2002: 29, Howarth 2002: 102–4). In the same way that the ascription of meaning is contingent, discourses are also seen as incomplete structures in the same undecidable terrain. Structures which can never *articulate* all elements as there are always forces against which it is defined and which requires a discursive exterior to constitute itself (Laclau and Mouffe 1985: 110–111).

As previously indicated, in Laclau and Mouffe's conception of discourse, both the founding principle and analytical driver is that all *articulation* (and therefore everything social) is contingent. Therefore, inherent in the notion of discourse is the dominant characteristic of *struggle* - over what the structure should look like, what discourses should prevail and how meaning should be ascribed – and that these characteristics are fundamentally constitutive of its very existence (Jaworski and Coupland, 1999; Howarth, 2000:103; Phillips and Jorgensen, 2002:29).

3.5.1 Relating Laclau and Mouffe's theory of discourse to skill

As indicated in chapter one it is not intended to engage in specific, detailed textual analysis, as is the practice in some forms of discourse analysis. The discourse theories of Laclau and Mouffe have been selected *because* they do not provide specific concrete methods for discourse analysis (Phillips and Jorgensen (2002:165) and this is an *intended* design feature of the approach taken here. As mentioned earlier one of the principal difficulties in analysing the eclectic use of skill in the discourse is the highly divergent nature of the subject. Studies of skill are (generally) tightly focussed on a very specific area of skill within an already specialised and highly specific domain. It is this process of detailed analysis within tightly controlled parameters which would appear to have contributed (in part) to the highly divergent and compartmentalised view of skills, and may have contributed to the confused and fragmented notion of skill which is particularly evident within the discourse of education. Given the requirement to examine the several competing discourses which hold skill as a central construct the replication

of such approaches would hardly seem effective or appropriate in securing a more inclusive view of the issues.

The discourse theories of Laclau and Mouffe contend that discourse relates to the sum of all social exchanges and therefore all actions may be construed as discourse (Laclau and Mouffe, 1985). Detailed textual analysis is simply one aspect of discourse analysis and whilst it is that text necessarily forms the basis of this enquiry, the detailed analysis of specific utterances would not provide an appropriate methodology needed to conduct a meta-analysis of skills and their relationship to higher education (the intended outcome of this study). What Laclau and Mouffe do provide however, is a range of analytical focus points that can be extrapolated from their model of discourse (Phillips and Jorgensen, 2002: 166). Consequently, this enquiry will focus on the specific expression of skill within the several discourses examined and specifically the *articulations* and articulatory practices implicated in the modification of meanings within the discourse of education. It will seek to explore what particular meanings have been established, and what meanings these processes have excluded.

Specifically, this will be undertaken by exploring which discourse(s) specific *articulations* draw on, what discourses they reproduce, and what challenges and transformations to existing discourses are brought about by a redefinition of skill. This will entail an identification of *nodal points* within the discourse(s), why it is that the particular sign *skill* has a privileged status within the discourse of education and how skill is defined in relation other signs in the discourse(s). The various discourses will also be investigated as to how they define the same sign (skill) in alternative ways, and if it is that skill - being particularly open to different ascriptions of meaning - functions as a *floating signifier*. The enquiry will also seek to identify the struggles taking place over the meaning of skill in order to identify what signs are the objects of struggle over meaning between competing discourses of industry, national economic performance and education

The following chapters seek to explore these issues (some have already been explored in the preceding chapter). What follows from here begins with an enquiry into the definition and meaning of skill within and across the various discourses,

before moving on to examine the nature of skill in its several configurations. The analysis is drawn together towards the end in parts 4 and 5 of the dissertation where many of the discursive connections between the several aspects of the enquiry are made more explicit.

Part Two

Part two (chapters 4 and 5) is concerned with issues of definition and meaning examining the discourses of education and industry and applying a philosophical analysis to constructed notions of skill.

Chapter 4 Defining skill, a search for conceptual clarity

The rise of the 'skills rhetoric' appears to have proved possible, not because of a significant re-definition of the term skill which might be assumed would have been required to support such a large volume of rhetorical interventions, but rather paradoxically, because no significant definitions or re-definitions were advanced which might have slowed the process down. As the next section makes clear, much of the rhetoric was not so much founded on a misconceived concept of skill, as allowed to grow and flourish in the absence of any meaningful definition of the term.

The term skill is derived from two sources; old Norse *Skil* meaning knowledge / discernment, and from late old English *Scele* meaning knowledge (OED). It is perhaps an interesting measure of the distance that the concept has shifted that contemporary usage does not place skill and knowledge as coterminous. It is perhaps easy to appreciate that early usage of the term would, and in all probability did, apply to those who made artefacts, constructed buildings, healed the sick and so on, and that these skilled people were indeed repositories of knowledge, a knowledge which was made manifest through their ability to *do* things. There is plenty of evidence to indicate that in the past, skills were thought of as encompassing knowledge. Indeed, the formation of guilds in medieval times were successful attempts to restrict the control of knowledge associated with the practise of skills (Barnard, 1966).

4.1 Language and meaning

The use of the term today however, appears anything but clear-cut. Tomlinson argues that we have little if any remaining conceptual clarity about the use and communication of the term skill. He points out that the very familiarity of the term opens it up to a multitude of existing ideas and that our tendency to assume that words must have singular, shared and constant meanings is in direct contrast to the "evident but easily forgettable fact that the same word may be used to convey different meanings" (Tomlinson, 1997:2).

'Narrow' interpretations of what constitutes a skill have come in for substantive criticism. Jonathon (1983) points out that the more specific the skill, the shorter is their useful life. Indeed skills-based approaches to education have often be criticised for "producing list a of skills which, although definable are often trivial and demeaning" (Holt, 1987:28). The pressures of these twin criticisms seem to have pushed forward the notion of generic and transferable skills. Perry and Barnett (1985) describe these generic skills as fundamental to the performance of a number of activities carried out in a range of contexts, and that they are generic to a wide variety of occupations and are transferable between vocationally specific areas.

The more traditional notion of skill as being associated with craft work but increasingly required to function outside this arena is taken up by Wickham:

> In the past the notion of skill has been associated with craft work...under the aegis of the special programmes division [of the MSC] a much wider definition of skill came into use, skill was regarded more as a way of organising activity and involved a combination of what are now regarded as individual skills and generic skills (Wickham, 1985:104).

This re-definition has broadened further to include social and life skills, attitudinal and preparation for work skills, as Wellington (1987) indicates it is as if the concept of skill has ascended to a new level, to embrace not only competences but also abilities, aptitudes, dispositions and attitudes (p30).

The language used to describe and define skills is also seen as a barrier to clear understanding by Barnett (1994) and Holmes (1994) who ask whether the voices of the labour market and academe are speaking of the same thing when they talk of transferable skills. Barnett argues that they do not, since there are no universal forms of communication. The attempt to describe these skills is no more that the imposition of a favoured set of *'performativities'* backed by powerful alliances. Holmes, on the other hand, suggests that it is only through a common language that any judgement can be made on whether there is a gap between employers and University expectations of appropriate skills (Holmes, 1994). In reviewing the use of skills language used by employers Hirsch and Bevan (1988) conclude that

whilst there was evidence of an emerging single language, *"it existed in terms of common words but not in terms of meaning"* (p.78). There appears to be a general recognition that the language of skills is unclear when it comes to focussed definitions of the term. Bennett et al, (2000) point out that:

> The terms used to describe skills do not connote homogeneity. They hide substantial differences of definition and labelling and are shrouded in semantic confusion (p.21).

As Tomlinson (1997) indicates, the confused nature of the current skills debate seems to stem, at least in part, "...from a failure to confront issues of definition, meaning and value..." (p.2). Part of this problem is evidenced in the widespread use throughout education of the term skill, which appears to be used without any accompanying definitions, shared meaning or precision of use.

4.1.1 Some definitions and characteristics of skill

Few writers (even those who clearly have the concept of skill as central to their work) make any attempt to define what they understand by the term or concept. Indeed, the practice is so widespread that it would be reasonable to conclude that the concept was universal although any review of the literature reveals clearly that it is not.

Most writers appear to begin their analysis with a 'second order' definition. The work of Ryan (1991) is a good case in point. In wishing to locate the difficult business of international comparisons of skills-based vocational education and training, he begins not with a grounded definition of skills, but with the notion of *'intermediate skills'*. These he helpfully places above 'sub-craft skills' and 'routine skills' but below 'professional skills'. Intermediate skills (we are told) occupy ground "roughly analogous to craft and technician skills (but) are marked off from professional skills" (Ryan, 1991:2). Further definitions are neither offered or advanced, and the remaining 280 pages go on to discuss a concept which appears to have no definition other than that which is referent to itself, see also: Assiter, 1995; Bennett et al, 2000. This definition does not seem to have gained in clarity over subsequent years. The latest White Paper *21st Century Skills* (DfES 2003) 'defines' *intermediate skills* as:

> ...(associate professional, apprenticeship, technician or skilled craft or trade level) which comprise a level 3 qualification ... A level 3 qualification is comprised of intermediate skills (p19).

Without clear definition and with only self-referent grounding it's hard to see such arguments as more than extended tautologies or self-serving rhetoric.

4.1.2 'Common sense' definitions

Gellatly (1986) advances several 'Common sense' notions of skill. The notions are both reassuring and appealing. Their straight-forward language and comparison of 'professional' painting and decorating to DIY efforts strikes a chord with anyone who has tried to paint a door or hang ceiling paper, but whilst these may be engaging, they also appear largely uninformative (Gellatly,1986:4-6). These sorts of definitions are echoed elsewhere, such as "being good at something" (Tomlinson, 1997) or the slightly more structured "a relatively consistent ability to achieve a particular kind of goal through action on/in relevant kinds of contexts" (ibid). Such explanations seem sensible enough but also do little to provide a precise or workable definition (see also: Gellatly,1986; Sloboda,1985, 1996; Welford,1968). Attempts at more focussed definitions also seem unsatisfactory and appear to leave the concept something of a hostage to fortune. Take for example the definition used in the *Skills for Schools* document (1985) "A skill is the ability to undertake an action under given circumstances to a defined degree of expertise" (in Perry and Barnett, 1985:12). Leaving aside other difficulties inherent within this (such as the strongly psychomotor notion of skill and behaviourist views of education) what has actually been said might apply to any action undertaken to (or at) any level of activity. The 'definition' seems equally appropriate to "safely land an aircraft in a tropical storm" as it might to "walk between two lamp-posts without bumping into either".

4.1.3 Clarity, competence and confusion

Attempts to conceptualise and define more 'focussed' skills seem to have proved equally problematic. As indicated by Bennett et al (2000) the term 'core skill' has several synonyms including *personal transferable skills, key skills, generic skills, process skills, common skills, work-or-employment skills* and *soft skills* (p10). A

further semantic confusion arises as these skills may also be referred to as *competencies, meta-competences, generic competences, capabilities, elements or attributes* (ibid).

> ... the various lists of such skills derived from surveys of employers and those contained in government reports, are diverse in terminology, size and purpose, reflecting differences in definitions and interpretations of their significance (Bennett et al, 2000:10).

The increasing use of the term 'core skills' in documentation does not seem to have imbued it with any greater clarity of definition. It is still used interchangeably with the terms personal transferable skills and key skills (see for example: CBI report: *Towards a skills revolution*,1989*; Prosperity through skills* 1994; *Skills development in HE*, 1998; *Dearing Report* 1997; QCA Programme specifications 2000; QAA Guidelines 2001). Further confusion because as the (then) Department of Employment regarded such terms as identical arguing that skills which are transferable are by definition core skills (*Industry in Action* 1995). Others however, take a broader definition regarding not just all skills as potentially transferable but include *all* knowledge and understanding into this category (Jessup, 1997); yet others use an almost identical definition for attributes rather than skills (Association of Graduate Recruiters, 1995 and Harvey et al, 1997). This is an issue which is attended to chapter 5.

The relationship between notions of skill and competence also seem to have become bogged-down in semantic and conceptual confusion. Psychological definitions of skill include the notion that (through practice) performance becomes fast, accurate and efficient and that skill acquisition is seen as dynamic, focussing on acquisition and knowledge and modifying the process as the skill develops (Green, 1994; Williams et al, 1999). Competence on the other hand, is a description of what a person in a given occupational area is able to do "an action, a behaviour or outcome which a person should be able to demonstrate" (Training Agency, 1988:5). It seems clear that from the psychological perspective, skills encompass competences. However, it is also clear that the Training Agency expressed the opposite view in stating that competence is a concept which

"embodies the ability to transfer skills and knowledge to new situations within the occupational area" (Training Agency 1989).

There have been some attempts to restore clarity to the notion of core/transferable skills. Although for the most part these seem to have done little to advance this any distance. Hyland's (1998) thorough analysis of the differences surrounding competence concluded that the debate was characterised by conceptual fuzziness and equivocation and that new conceptions surrounding the use of core and generic skills have done little to help matters. The work of Cheetam and Chivers (1996) makes an attempt to clarify the relationship between skills and competences in their *Holistic Model of Professional Competence*. The model, which is a complex hierarchy of 3 levels interlinked with 4 'core components' each of which is made up of sub-sets of 'constituents' is 'over-arched' by a series of meta-competences does not appear to clarify some of the more difficult issues. Core skills (labelled as meta-competences by Cheetam and Chivers) are not always over-arching. The core skills of IT and communication skills are regarded as 'personal' or 'functional' competences, whereas 'problem solving' and 'learning how to learn' (Dearing 1997) qualify as 'meta-competences. The lack of agreement and homogeneity between this model and those of key and core skills now embedded in educational documentation seems to have done little to clarify the increasingly complex nature of the debate.

The status of certain skills has also been subject to attempts at definition and clarification. Anderson and Marshall advanced a model consisting of 6 skill areas on 3 hierarchical stages. The stages are linked, with skill acquisition at later stages being contingent upon success at earlier levels (Anderson and Marshall, 1996). Interestingly, and in contrast to policy papers alluded to earlier, core skills are located on all 3 levels providing a hierarchy (where none is assumed in 'policy definitions' of core skill) producing a further degree of theoretical confusion rather than clarity. In commenting on such attempts to 'clarify' notions of skill, Tribe (1996) concluded that many of the theoretical justifications for the characterisations of skills demonstrated an alarming circularity and lack of depth.

The lack of clarity and definition is not something which characterises all writings on the subject however, and whilst this may be lacking in many research papers, international comparative studies and (perhaps most problematically) policy documents, solid efforts have been made in cognitive psychology and sensorimotor approaches to reach a more meaningful definition of the term.

4.1.4 Early studies of skill

Scientific studies of skill were begun as early as 1820 (Wellford, 1968:11). This early work was followed by the famous studies by Bryan and Harter (1897 and 1899) on the skills needed to learn Morse code; by Woodworth (1899) on accuracy of voluntary movement; and Book's study (1908) on the acquisition of typewriting skills. In the seminal work *Fundamentals of Skil'* (1968) Welford indicates that such laboratory based studies gave way to 'Industrial work studies' during the 1920's and 30's before returning to a more scientific base at the start of the second world war. The ensuing collaboration between experimental psychologists, engineers and physiologists formed the basis of much of the work on skills undertaken from this point forward (Welford, 1968).

Exposure to 'industrial definitions and meanings' of skill (begun in the 1920's and referred to as 'unfortunate' by Welford, p.11) have introduced a bifurcation in the field of study. The 'industrial' definition of skill being associated with:

> Trade activities such as craft work acquired as a result of long training whereas the psychological use of the term is wider and attaches to a greater or lesser extent to any performance and is not limited to manual operations, but covers a whole range of mental activities as well (Welford, 1968:13).

In this discourse, the study of skills has largely divided into two broad areas; sensorimotor (one in which muscular movement is prominent) and cognitive psychology (Hildegard et al, 1972).

In several ways the sensorimotor tradition has proved much less problematical in defining potential characteristics of skill than its cognitive counterpart. Qualitative analysis of movement, motor-ability, visual acquisition and so on have done much to reveal the nature of skilled activity (Williams et al, 1999). Cybernetic approaches

have also contributed to a wider understanding of skilful behaviours. Psychophysics – the relating of sensory experience to physical measures (Welford, 1968:27) has been a useful point of entry into the study of skilled performance. The classical studies on skill in the late 1800's mentioned earlier (Bryan, Woodworth, Harter etc) stem from this psychophysical position, a body of knowledge which has a very strong scientific base of physiology, bio-mechanics and sensory analysis together with an equally strong tradition of behavioural and cognitive psychology (Williams et al, 1999).

It is outside of the complex (and strongly positivist) scientific realm of sensorimotor research activities that many of the difficulties of definition and lack of clarity - which were alluded to earlier - emerge. In this other non positivist paradigm, statements about skill seem either to increase in complexity and semantic confusion, or collapse downwards towards the glaringly obvious or banal. In an effort to get beyond this point cognitive psychologists have attempted to provide a framework by which the characteristics of skill might be revealed. One such analysis postulated by Sloboda (1986) suggests that skills are characterised by 5 principle constituents: *fluency, rapidity, automaticity, simultaneity and knowledge* (FRASK). Whilst Sloboda provides a coherent and persuasive account of the constituents of skilled behaviours, the difficulty remains that like much of the debate on skills the basic premise upon which much of the subsequent thinking is based appears to be somewhat self-serving. In the preface to Sloboda's work Angus Gellatly (1986:16-25) states: *"Cognition is a matter of skill, and cognitive skills are analogous to bodily skills".* In the analysis which follows, Sloboda moves seamlessly between the work of sensorimotor experimental designs and those of clearly theoretical cognitive construction, using aspects of one to justify outcomes of another. This is not a particular criticism of Sloboda's work; as has been shown earlier, many 'theories' seem to be equally poorly founded. Welford (1968) cautions against such summative approaches arguing that such broad generalisations applied to skill are a sign of 'immaturity' of the subject and that viewed in this way they do less than justice to the complexity of the subject and of its functioning, and that they are often so incomplete or so broad as to be of trivial explanatory value (p. 24).

4.1.5 **Postmodernism and beyond** - *Widening the definition*

Corrigan, Hayes and Joyce (1995) suggest that what we now take to be a workable concept of skill has in fact shifted ground quite profoundly. In their analysis, *pre-modern* concepts of teaching and learning are characterised by a traditional view of the role and value of higher education. The notion is formed around the expansion of knowledge through an historical process of advancing and extending knowledge, a process made possible by the results of research, intellectual work; adding new discoveries and new truth to the existing stock of educational wealth. In this analysis knowledge is preserved and carried through to new levels of education, expanded by fresh research and intellectual labours (Corrigan et al, 1995:33; see also Barnett, 1994).

In a *post-modern* situation they offer a different analysis. Their argument attempts to demonstrate that academics used their: "natural tendency towards knowledge-based educational practice to attempt to discover the truth about the ideological or linguistic codes shaping the demand for skills" (p.34). In doing so, they argue that the question was moved from "how could/should skills be developed?" to "why should they be developed? Who says so? And for what purpose?" (ibid p.35). This attempt to assert a "hegemony of knowledge over skill" was they claim, to render the notion of skill utterly changed and placed it "beyond the realm of the real" (ibid:35). Skills were now able to be posited as "an appearance lacking material basis, and skills could now become social constructions". In this way they argue, skills were turned from something which students should practice and develop, into a subject for knowledge and intellectual discourse. The outcome of which is said to be a 'radical subjectivism' in that there is "no such thing as skill-in-itself, but that skill is a label people put on themselves" (ibid:35). This categorisation might be said to be slightly misplaced in that it does not necessarily place skill 'beyond the real' (see chapter 5).

Post, *postmodernism* (described as *'new-modernism'* by Corrigan) aligns with the notions of skill advanced by Boyatzis (1982) and Bolton (2004) that skill is a property of a person; a persons ability to demonstrate a system and sequence of behaviours that are functionally related to attaining a performance goal. Corrigan et al, (1995) agree, arguing that a 'function' is the property of a job (selecting staff

for example) whereas a person uses a set of skills to perform a function effectively. This is an interesting area which has implications for the re-conceptualisation of skill and is returned to a little later in the chapter when considering influences exerted by the industrial discourse of skill.

Irrespective of whether we now find ourselves in a postmodern (or new) skills era, the understanding of what skill might be continues to show few signs of coalescing into an agreed definition.

4.2 Some Philosophical Considerations

Philosophical analysis has also been instrumental in helping to define skill and although this aspect of metaphysics has been badly side-lined in the 'great debate' it has, nonetheless, made some crucial interventions in the process.
It is perhaps helpful to begin with the notion of dualism as it is this which not only seems to stretch back the furthest but also appears to continue to underpin much of contemporary skills-based approaches to education.

The notion that 'education' is about some 'higher purpose' outside of 'mere instrumentalism' has a long and enduring history which dates back as far as Aristotle and Plato (Curtis and Boultwood, 1953). This view, alluded to by Corrigan et al (1995) as *pre-modern* (and still present in some universities today) makes a clear distinction between 'education', used in its most liberal sense as mechanism for intellectual growth and development of the individual, and that of 'training' construed as appropriate for more directed and instrumental pursuits (Peters 1966). This notion is reasonably captured by the concept of mind-body dualism - the splitting of a person into *mind* and *body*, which is seen as totally different in nature. In this conception, thinking, understanding, abstraction, reason and so on are seen as mental matters, ostensibly concerned with that part of the person known as *mind*. Whereas action and skill is about *doing* things. Dualism conceptualises *doing* as different from *thinking – doing* being a 'brute action' done by the physical body (Tomlinson, 1997). This would certainly seem to accord with the views of education held by Aristotle and Plato. 'Liberal' subjects, expressed as those subjects suitable for the free citizen were thought to be infinitely superior to skilled wage-earning abilities of which Aristotle wrote that "they absorb and

degrade the mind" (Politics: 1337). Plato asserted that there were only 3 studies suitable to be counted as education – arithmetic, measurement and the revolutions of the stars, all other forms of 'training' ought to be approached in a 'sprit of play' (Laws: 643). This way of thinking, that education for the mind is different from, and superior to education of the body Tomlinson describes as: "a way of thinking about persons that is deeply embedded in western culture". It is clear that it has had a long and enduring effect.

It would not seem appropriate to refer to dualism with also referring to Descartes' contribution. Cartesian dualism which essentially posits a bifurcation of nature between mind and matter, observer and observed, subject and object, is as Magee (1987) points out "built into the whole of Western man's way of looking at things, including the whole of our science" (p.86). Descartes was concerned not to proceed as has most before him with Aristotelian thought (he differentiated the historical authority of Aristotelian knowledge from that of the newly emergent first-order forms of research) but to pursue a search for the truth (*Discourse on the Method* first published 1637). Essentially Descartes believed if he were ever to be able to isolate the truth he would have to begin by first searching for certainty (Wlliams, 1987:81). This line of enquiry eventually led to his famous first certainty *Cogito ergo sum* (I think therefore I exist). The impact of Cartesian thought on Western philosophy could hardly be overstated. His enquiries 'what can I know?' rather than questions such as 'what is there?' or 'how is the world?' laid the foundations for the theory of knowledge together with much of the process of epistemic thought and (for this enquiry) a legacy that education is for and of the mind.

Cartesian dualism was clearly of concern to Gilbert Ryle when he wrote *The concept of mind* (1949) but Ryle, rather than supporting the notion of dualism sought to approach the problem from another direction. Ryle is important here because his work has been used to justify and underpin a great deal of rather threadbare epistemology advanced in support of competence-based education. Ryle's argument for the reunification of mind and body finds a strong resonance in an educational environment concerned with the transmission of skills. His assertion that in doing a thing intelligently a person is *thinking* about what they are

doing and that in undertaking such a thing "[we are] doing one thing and not two" (p.32) seems rational enough. What is less so, is that Ryle's distinction between *Knowing-that* and *Knowing-how* is used by those who seek to promote the view that the dissolution of a mind-body dualism is coterminous with the subjugation of *Knowing-that* by *Knowing-how*. The view adopted here is that it is possible – and beneficial – to separate practical outcomes and behaviours from both the knowledge and understanding upon which such behaviours are predicated and the process by which they are acquired (cf. Jessup, 1991). Barnett (1994) points out that Ryle's position lacks coherence: "Knowing-how cannot be reduced to Knowing-that but neither can Knowing-that be reduced to Knowing-how" (p.176).

It is of interest here that whilst the architects of the competence-based approaches such as Jessup (1991) are happy to agree with Peters (1966) assertion that: "skill is not learnt from a flash of insight or simply from reading books or instruction alone" (p.14) they do not consider - as Barnett (1994) indicates – that the compression of *Knowing-how* and *Knowing-that* into one conflated notion provides an equal and opposite intellectual obligation, that skills are constituted from knowledge and understanding. Barnett's (1994) critique of Ryle is trenchant:

> ...for all its lucidity Ryle's argument is inadequate ... Ryle has left us with not much more than an intelligent machine ... knowing-how cannot be defined in terms of knowing-that; but that [simply] leaves us with knowing-that and knowing-how...Ryle proceeds as if human being is just a matter of intelligently knowing-how (p.176)

Ryle's influence has been profound. Definitions of skill (as conceptualised by NCVQ) are clearly predicated on the notion that knowledge (and particularly understanding) is subservient to the demonstration of competence (Wolf 2002, Barnett 1994; Robinson 1996; Bennett et al, 2000. See also, Jessup 1991, 1997) NCVQ definitions of skill are just as opaque as most other forays into the field, with NCVQ preferring to focus on the structure rather than the nature of competence. But without some meta-defintion of skill to counter the atomistic and reductionist nature of 'competencies' the NCVQ's obsessive detailing of 'units' and 'elements' of competence are no more illuminating than other attempts. What is clear from this position is that if it is - as Wittgenstein (1953) suggests - the definition of something lies in examining its use rather than any detached etymological

distillation of meaning (Searle, 1987:329) then the definition of skills in this case is one which is entirely inimical to higher education. It is one which clearly places *knowing-how* over *knowing-that* and in doing so seeks to privilege the outcome of education over the process of education – that is to pre-determine the end point through the application of processes which simply seek to achieve these known outcomes. (For a detailed critique of Gilbert Ryle's position see Barnett 1994).

There is a further aspect to dualism which needs to be considered here; the separation of training and education. Peters (1966) was arguing almost 40 years ago for a clearer distinction to be made between what constitutes an education (his principal concern) and what might constitute training. It ought to be said that his concerns were with training and not with skills perse, so whilst he does not offer a definition directly he provides a clear exposition of the relationship which skills and training might have to education and in doing so he helps to reveal something of the view of skills held at that time.

In examining the *educational process,* Peters characterised skill as: "presenting itself as a task to the learner"; and that the learner presented with a paradigm of skilled performance, through a mixture of constant practice and imitation may eventually come to master it (p.14). Here skill is seen as task focussed rather than process focussed, something which is both imitative and repetitive ('qualities' which Peters does not ascribe to education). Peters asserts that:

> Skill is not by its very nature something that can be learnt [...] in a flash of insight. Neither can it be learnt by reading books or by instruction alone [and that] constant practice is absolutely essential (p.14).

His analysis whilst accepting that certain skills such reading writing and computation have to be "mastered' (sic) before education can proceed, essentially places skills within the ambit of training. This is a process he characterises as having a specifiable performance that has to be mastered, where practice is required in order to master it and in which little emphasis is placed on the underlying *rationale*. Whist Peters conceives of training as more than the learning

of skills he postulates that whist skills might in some particular cases be construed as an (early) part *of* an education they could never be conceived of *as* education.

> We do not call a person educated who has simply mastered a skill ... for a man to be educated it is insufficient that he should posses a 'know-how' or knack, he must also know that certain things are the case (Peters 1966:6).

Early conceptions of dualism do not concern themselves with skills directly, but it seems clear that their separation of mind-body has enabled a conception of education (mind) and skill (body) to be powerfully inferred from such a bifurcation. What also seems clear is that the definition of skill (in that it exists at all in such inferential contexts) is only ever partial and incomplete. It is as it were, a side-show to the main event of education and that its meaning and definition are derivative of this process. But given that the 'side-show' now appears to becoming the main event with the incursion of more and more skills into the body of higher education, a sharper metaphysical tool is needed to cut away the surrounding material and reveal a picture of the definition in use. Just such a tool appears to be provided by Ludwig Wittgenstein.

Of Wittgenstein's two philosophical works the more important for this enquiry is his later work *Philosophical Investigations* (1953) but his earlier work *Taractatus Logico-Philosophicus* (1921) has something important to say about the nature of language and its relationship to the reality of skill.

In *Tractatus,* Wittgenstein postulated that language is drawn from the real world and that every meaningful sentence corresponds to a possible fact, and that every true sentence corresponds to an actual fact. In this way he conceived that it is the mirroring of one structure (the real world) by another (language) which makes meaningful discourse possible. He theorised that just as the elements in a picture correspond to possible arrangements of objects in reality, so sentences contain words which correspond to objects in the real world (Searle, 1987:323). This conception, if true, would provide an interesting kind of metaphysical lever in that it would enable the structure of reality to be read off from the structure of language. Whilst he was to refute these ideas in later writings, Wittgenstein's insight reveals a form of logical positivism which locks together the relationship between reality (of

skill) and the way we are able to speak of it. A property which might 'fix' a clear definition of skill and place it out of the reach of a postmodernist conception and transmutation into a form of social construction. This is an important point which is attended to a little later.

In his later work *Philosophical Investigations* (1953), Wittgenstein reversed his view that the 'the real world determines the structure of language' to ' the structure of language determines the way we think of the real world' (Searle, 1987:326). This represents a shift in understanding from language as a picture (describing a possible state of affairs) to language as a tool, a shift which recognises that it is in the nature of a picture to *depict* something whereas it's in the nature of a tool that it can be used to *construct* something. This is of particular importance for this particular enquiry into skill as (as will be shown later) skill has come to be conceptualised (and function) as social construction within the discourse.

Wittgenstein theorises that there is no single essence of language which is able to bind it all together and further, that this premise can be extended to words, in that there need not be any particular essence which constitutes the definition of a particular word. Wittgenstein asserts that the meaning of a word is the sum of all its possible uses and that words derive their strength of meaning from the *family resemblance* amongst the different cases of its usage and not from the fact of a single essence of meaning (1953:66-69). The thrust of this analysis is that in order to understand the meaning of a word it is essential to look closely at how it is actually used in the particular area of discourse under consideration and not at a detached etymological definition. In supporting this point John Searle (1987) remarks that: "one of [Wittgenstein's] favourite slogans was 'don't ask for the meaning, ask for the use' (p.329).

Whilst Wittgenstein asserts that language is essentially rule-governed and systematic he allows that there remains substantial room for interpretation, and that it is a mistake to conceive of any current discourse as the only possible one; and that if we or the world were different we might use words differently (1953:70-91). This relationship between language and reality is an important one. Wittgenstein postulates that we are always working within language – that we are

bounded by it, and that because of this it is impossible to make any transcendental appraisal of its use (the relationship between language and reality for example) and that given this there isn't any point from which we can assess the success (or otherwise) of language representing the real world. This looks (on the face of it at least) like a form of linguistic idealism in that the only things which seem to exist are words, but this does not seem to be Wittgenstein's position. It seems clear that we can talk about real objects in the real world (skill for example) and that there is no denial that words refer to real objects. But in using words to refer to real objects in the real world we are obliged to operate within the confines of our contingent concept of the world, and that how we categorise and characterise the world is conditioned by the structure of language (Searle 1987:332). This point was discussed in some detail in chapter 3.

It now seems appropriate to square this particular circle of definitional difficulty. Wittgenstein (1953) proposed that the understanding of a particular discourse lies in understanding the role that such a discourse actually plays in people's lives (ibid:335). And that (crucially) many of the problems associated with language arise when we take a mode of language as functioning in one discourse, when its' rightful place is in another. This he asserted was what happened when 'Language goes on holiday' that is when a word is no longer doing the work for which it is properly fitted and that we examine words outside of the discourses which give them meaning (1953:70-91). It seems clear then that if we are to derive a definition from such 'language in use' then we need to look at how it is that words derive their meaning from the discourses in which they are situated (this is an area, which is considered in following chapters).

Before leaving definitional difficulties there is one other useful avenue to explore which unlike Wittgenstein's concept of *similarities* (family resemblance) focuses on that of *difference*. Here the argument turns not on the assertion that words derive their meaning from a family resemblance in the different cases of usage but rather, that in order to function appropriately words (signs) derive their meaning from everything they are not – that is signs are defined by *difference from* everything else and not their *similarity to* anything else. This point which is fundamental

predicate of both structuralist and poststructuralist linguistics will be attended to directly but first there is one other related point to be made.

4.3 Ubiquity

Skill now appears everywhere in education and has seemingly become the dominant concept and in this regard, ubiquity is left open to the particular charge of redundancy. Poulantzas (1978) advances the argument that in seeing power as part of everything or as being constitutive of everything (in much the same way as skill in now used in educational discourse) it is negated as an object. As a construct Poulanzas argues that it is seen to apply to all things at all times, it is pointless to refer to it and fruitless to attack it. Parker (1992) picks up on this same theme in speaking of ideologies: "seeing ideologies everywhere makes any use of the term redundant" (p.17). It would seem that this line of thinking might be usefully extended to the term skill in educational discourse. To pick up the point made by Poulantzas (1978), Parker (1992) and Macdonell (1986) that if a particular construct is to be found everywhere and in everything what might be the point of referring to it? And how might such a universal construct be differentiated from what it is not? It would seem from this particular reasoning that a peculiar consequence of using the term skill so indiscriminately is to render is invisible; to stand in danger of divesting it of any meaning and to render it redundant.

4.4 On 'Difference'

To return to the earlier point of *difference*; the structuralist and poststructuralist position is more problematic than the 'redundancy' argument advanced above. It is a fundamental tenet of both structuralist and poststructutalist lingusitics that signs are differentiated one from another by the concept of *difference*. There is an important point to be made here. Whether one takes the view of structuralists such as Sassure (1960) that a sign gains its meaning from being different from other signs and that this is a fixed and unchanging relationship (*langue*), or that of poststructuralists such as Laclau and Mouffe (1985) who argue that whilst signs are not fixed in a relational net which permanently locates their meaning (as Sassure postulated), they still acquire their meaning from being different from other signs (see Laclau, 1993:433). Or to take the line of Wittgenstein's early view that words directly reflect reality, it remains the case that what locates skill is its

difference from that which it not. This conception which would be very hard to apply to the term skill within contemporary educational discourse, as its very ubiquity appears to place it *everywhere* and in *everything.*

Given the preceding argument it seems logical to assert that in each of these theories of discourse, skills must be separate *from* education or skills would surely *be* education (and education, skills). If such views of language construction and their discursive impact upon the world of the social are accepted, then the current concept which sees the acquisition of skills as the acquisition of education must surely be misconceived.

The view of skill as coterminous with education appears to be the concomitant of a postmodernist construction of skill. This is a view which is attended to in chapter 5.

4.5 Higher Education – *Intrinsic worth or instrumental utility?*

It is not the purpose of this enquiry to engage in a debate about what higher education is for (this is done admirably elsewhere in the literature, see Barnett, 1990, 1994, 2000; Minogue, 1973; Assiter, 1995 and Corrigan et al, 1995) but rather to focus on structural issues related to skill and its relation to higher education. However, it would seem inappropriate to conclude this aspect of the enquiry without a brief consideration of the issue.

The rationale that universities existed for the pursuit of learning for its own sake is well established in the literature (Curtis and Boultwood, 1966; Dent, 1965; Holt, 1987; Assiter, 1995; Barnett, 1990, 1994, 2000; Rowland, 2000; Peters, 1966) and whilst it would be true to say that this idea has not gone unopposed - from the Greek Sophists in the 5th century to modern-day vocationalists, it does appear to have dominated the shape and content of University curricula for most of this time. John Dewey (1916:60) writing in *Democracy and Education*, at a time when technological innovation and change were rapidly accelerating, stated that: "There is nothing to which education is subordinate, save more education. The educational process has no end beyond itself – it is its own end". Echoing this view, Bertrand Russell (1926) concurred: "I regard disinterested learning as a matter of great importance, and I should wish to see its place in academic life

increased, not diminished". The antithetical, almost inimical relationship between the Universities desire for 'education' and that of a growing societal demand for vocational skills is well demonstrated by Barnard (1966:) speaking of the rapid development of 'provincial Universities in the mid to late 1800's and their reluctance to make any provision for the teaching of skills:

> There were doubtless criticisms that their courses were not sufficiently 'practical'; but university attitude when it was explicitly thought out, was that they should teach people to think, and that practical applications were in no way part of their business (p.94).

4.6 **Modern dualism** – *training and education; skills and knowledge*

This concern about the purpose of higher education has remained a consistent theme. Peters (1966) influential philosphical writings in the mid sixties differentiated between education and training by revealing a slightly modified duality*:*

> There is an antithesis between two sets of concepts: training, skills, narrowness of application, instrumental value, on the one hand, and education, knowledge, understanding, broad cognitive perspective and intrinsic value on the other (p.14).

Educational dualists like Minogue (1973) made it clear that education was the business of Universities whereas training was not. The distinction made by Minogue was one between academic inquiry and other forms of inquiry. And specifically that academic inquiry is *intellectual* and is not concerned with practical matters. He argues that there is a consistent difference in the kind of meaning found in academic discourse, by contrast to that found in the world at large. Assiter (1995) also raises the issue of dualism and reveals some of the inherent tensions still prevalent in higher education (although she does not ascribe to this view herself):

> I frequently hear this view expressed in my own institution [that there are those] who would want to break down the divide between education and training, but who would wish to hang on to a distinction between skills on the one hand and knowledge on the other (p.13).

More critical assertions of dualism such as those made by Prickett (1994) and much more pointedly by Barnett (1994) centre on concerns that previous (and appropriate) notions of higher education are being subverted by societal pressures. Barnett contends that these forces place much greater importance on instrumental ends such as economic and social survival and that in a complete reversal of previously valued models of University education, that it is the market-place and industry which now shapes higher education.

4.12 Summary

This chapter has attempted to show that the nature of meaning and definition is complex and problematic and that over the period covered by the study there has been little if any conceptual clarity regarding skill. Whilst it seems clear that some fields of study have particular and focussed definitions (Welford, 1968) other users seem less able to ascribe meaningful definitions. Such definitions – when advanced - appear to relate to a *classification* rather than *clarification* skills (Bennett et al, 2000) and attempts at clarification have often added to the confusion (Tribe, 1996). The notion of *competence* - which emerged as a supposedly rational view of skill acquisition and deployment - does not appear to have increased clarification and has been subject to substantive criticism for the impoverished approach the concept of *competence* has brought to notions of education (Barnett, 1994; Ashworth and Saxton, 1990). Philosophical issues of meaning and definition - where these have been deployed - appear to have had little effect on clarifying important issues. Historical notions of dualism would seem to have helped to frame modern conceptions of and attitudes towards skill, more recent understandings of dualism however, may help to restore some clarity to the concept of skill (Peters, 1966; Ryle, 1949; Searle, 1987). Wittgenstein's (1953) concept of *family resemblance* was contrasted with that of poststructuralist notions of *difference* (Laclau and Mouffe, 1985) in an attempt to inject some linguistic clarity. The chapter concluded by suggesting that the linguistic and philosophical analyses appear to indicate that a contemporary (and growing) understanding of *skill as education* is a misconception.

Chapter 5 Examining the industrial discourse of skill

5.1 Introduction

It is not the purpose of this enquiry to focus on an examination of industrial understandings of skill (there is a flourishing literature in this area, see for example, More, 1980; Braverman, 1974; Drucker, 1993; Warhurst, 2004) but, since it has been shown that the previously separate notions of skill, education and national economic performance have been conflated into one notion - one in which it now seems that it is the task of education to provide the skills needed to secure national economic imperatives (Drew, 1998) - some exploration would seem to be appropriate.

At the outset it perhaps ought to be said that there appears to be no more agreement among contemporary industrial definitions of skill than there is within the discourse of education. Whilst some authors suggest that there may be a consensus in approaches to defining skill (cf. Cockburn, 1983; Thompson, 1989; Noon and Blyton, 2002) these mask some fundamental differences and many others are more sceptical. Bolton (2004) asserts that "The debate on skill has always been troubled by conceptual confusions" (p.20). Felstead et al (2004) conclude that, despite an enormous interest in Britain, "there is surprisingly little agreement on what skills actually refer to" (p.149). They point out that different authors often refer to different aspects of skill and are influenced by their own theoretical standpoints (ibid:149). This is a point which is echoed by Adler (2003) who asserts that not only is defining skill a difficult and complex task, but that such difficulties are further complicated by "economic, institutional and political factors involved in reaching any meaningful definition of skill" (p.242). The increasing complexity of meaning attributed to skills is picked up by Westwood (2004) who asks, "Exactly when and where did we loose track of the meaning of skills?" and adds that, "In the past it used to be such a simple issue" (p.38).

These are all indications of what Grugulis et al (2004) suggest are the concomitants of attempting to 'unpack' the simple words 'skill' or 'skills'. They assert (rather colourfully) that such undertakings are analogous to 'bomb disposal'

in that the term skill comes with 'anti-handling devices' and that as a consequence: "attempts at desconstruction are liable to come to grief" (p.130. They conclude that far from any agreed definition of skill emerging from the discourse, "The broadening definition attached to skill may be getting worse" (p.10).

This is not to say however, that there are no shared conceptions of skill within the discourse – there are, but such conceptions appear to be predicated on fundamentally different understandings and would seem to share little common ground.

5.2 Some shared conceptions of skill

There appear to be three broad areas of agreement. The first relates to an approach where skill is said to reside in the person (worker). This approach holds that skill is a property of the person and a function of human capital and is an approach which tends to be adopted by those favouring an 'economics model' of skill. In this conception, through the enhancement of human capital (increasing skills in the workforce) positive effects are reflected in industrial productivity (Becker, 1964). This is often referred to as 'linear' and embodies the notion that such personal expertise is, and will continue to be the basis for competitive advantage (Bolton, 2004:21). This is of particular interest to this enquiry as writers such as Drucker (1993) assert that as productivity becomes more dependent on the exercise of specialist knowledge and competences and the 'knowledge economy' develops, it will become more dependent on the contributions of such 'specialist knowledge workers' in whom the skill is invested.

This understanding of skill as a property of the person may be contrasted with a second conception which sees skill not as a property of the individual but as belonging to society (Collins, 1989:82). In this conception skills and competences belong to the collective knowledge developed in society through its division of labour and skill (Ainley, 1993). This second, sociological approach, carries with it a requirement to examine job design, forms of control, the nature of the employment relationship together with the nature of the task to be undertaken (Littler, 1982). This conception also relates to Braverman's (1974) concerns that skill is a function related to a job and as such, changes to the nature of employment such as

increasing technology, advances in industrialisation and increased automation contain the potential to produce a process of 'deskilling'(pp.3-4) through the application of Fordist and Taylorist principles (Grugulis et al, 2004:3).

This in turn needs contrasting with the view which holds that whilst skill, seen as a property of the task or job may be subject to 'deskilling', the opposite view – that through the application of technologies and access to education – 'upskilling' will come to predominate industrial notions of skill (Bell, 1973:115). There is some evidence within the literature however, that the major tendency with the western labour process is that of 'deskilling' and that it has perhaps reached it's apotheosis with the McDonaldisation of employment practice (Ritzer, 1998; see also,Thompson, 1989; Baldry et al, 1998; Beirne et al, 1998).

The third broad area of agreement relates to what is expressed in this literature as *socially constructed* views of skill. Essentially, although there are many variations, this construct arises from the negotiation between the 'economic actors' either collectively (as for example in management or union power) or individually (Grugulis et al, 2004:5-6). The intention of such constructions of skill is to advantage particular groupings such as professional bodies or craft unions, by artificially delimiting access to skill and skilled activities (Turner, 1962:108-14; Braverman, 1974:109-112; More, 1980:16). This understanding of skill as a *social construct* is particularly relevant to this enquiry (and methodologically problematic) and is subjected to a detailed analysis in chapters 6 and 8.

5.2.1 Towards more diverse understandings

Whilst there appears to be broad agreement within the industrial discourse that skill can be a property of the person, a property of the task or job, or a social construction designed to delimit human agency, many substantial differences remain. Mournier (2001) argues that searching for homogeneous and substantive definitions of skill is fruitless in that there is not one single logic which allows definitions of skill to be compared through time and space (p.28). Instead, Mournier advances a notion of *'three logics'* of skill: *Technical* – related to the exercise of labour power, equipment and methods of production; *Behavioural* – related to the subordination of employment, and interpersonal relationships within

the context of subordinated labour; and *Cognitive* – related to the level and type of general education which allows a population to understand and to act in the world (p.28). In this way, *technical skill* concerns the development of workers' potential to perform; *behavioural skill* primarily concerns issues associated with the realisation of labour potential on the job; and (crucially) *cognitive skill* which is functionally related to notions of citizenship and employment – the state's underlying interest in the capacity of its citizens to engage with work. It is an approach which emphasises the interface between skill, work and education and seeks to structure each of these notions into a *skills regime* (Mournier, 2001:28).

Adler (2004) argues for a two component model of skill: "mastery of the complexity of the tasks required of workers in their jobs, and mastery of the relations that co-ordinate activity across these tasks" (p.246). He goes on to suggest the social construction of skill should be seen as 'superstructural overlay' over the first two componets. In this respect the definitions of Mournier (2001) and Adler (2004) are in broad agreement in that not only do they see the exercise of personal and procedural mastery as constitutive of skilled processes but in positing a form of unifying construction which determines the value, utility and societal conception of skills they open up an interface between skill (as an industrial artefact) and skill (as a social construction). It is an interface which appears to have led to the development of a new conception of skill. This is considered next.

5.2.2 New 'Skills'?

It is tempting to think of the broadly consensual understandings of skill within the industrial discourse as conferring some kind of unity. However, to do so would be to mistake the profound differences within the discourse (about which there is some agreement) for an agreement about the nature of skill itself (about which there is little if any agreement). As shown, the discourse contains contra-notions of skill as a property of the person (in that skill is an internal property of the worker), skill as a property of the job (in that it relates to job complexity and is open to market-based adjustments of what constitutes 'skilled' activity) and conceptions of skill as a social construction, designed to delimit access to 'skilled' occupations and place restrictions on human agency. These last two constructions could hardly be more opposed to conceptions of skill as constitutive of education, suggested by

authors such as Jessup (1991). The first would seem to place skills in the hands of the 'market' where their value, utility and function are open to the vicissitudes of economic forces (such as Fordist and Tayrorist tendencies). The second would seem antithetical to any reasonable construction of education which seeks to enable the development personal growth and advancement and to extend (rather than delimit) agency.

What seems apparent from an analysis of the industrial discourse is that there are profound, structural differences and conflicting ideologies which appear to be engaged in a long-standing conflict for hegemonic dominance. Many of the positions appear to be rooted in notions of historical or dialectical materialism or Fordist conception of production, Taylorist ideas of 'scientific management' and managerialist conceptions of power, labour, employment and capital. In such circumstances it would perhaps be little more than an interesting aside to the main business of this enquiry were it not that such hegemonic articulations within the industrial discourse appear to have crossed over into the discourse of education. And, through (what appears to be) a 'Trojan horse' of 'transferable' skills seems to have opened up a new set of inter-discursive antagonisms across several fronts. It is a 'battle' which education appears to be loosing.

5.3 We are all skilled now

It is not proposed to examine all of these hegemonic articulations and antagonisms here (this is not a dissertation on the industrial discourse of skill) but there do appear to be several candidates which seem to be strongly implicated in the changed (and changing) ascriptions of meaning of skill within educational discourse.

The first of these relates to the increased ubiquity of the term skill. Payne (1999) asserts:

> We are all skilled now, regardless of the type or quality of the job we do and the level of personal control, autonomy or power we enjoy. This, then, is the most fundamental difference in how skill is officially conceptualised today compared to the past, when to be skilled

> implied some level of real market power and personal direction over one's work (Payne 1999:42).

The implicit understanding here is that some form of transformation has taken place. A transformation which appears to recognise that all tasks now contain skills, (whereas they didn't before) and that as a consequence, all workers require skills. It is an understanding which would seem to find resonance within the discourse of education where, the substitution of *education* for tasks and *student* for worker in the last sentence would provide an accurate reflection of the current approach. For the industrial discourse at least there would seem to be three principal factors at work. First, the recent classification of personal attributes as skills; secondly, the creation of 'skill proxies' whereby notions of skill and qualification become conflated into one notion and thirdly, the 'inflationary spiral' of skills. Each of these will now be considered.

5.3.1 Attitudes, aptitudes, dispositions or skill?

One of the most fundamental changes to conceptions of skill over the past two decades is the tendency to label personal characteristics, attitudes and predispositions as skills (Grugulis et al, 2004:6). Examples of such personal characteristics would include *motivation, leadership. Positive attitudes towards change and authority, politeness, respect for others, team working* and so on, all of which now find themselves included in policy documents, reports and papers as 'core', 'key' or 'transferable skills'. Grugulis et al (2004) indicate that employers desires for workers with such qualities is well established in the literature (cf. Reeder, 1979; Oliver and Turton ,1982) but whereas these were once though of a describing behavioural characteristics they have been re-labelled and are now conceived of as 'skills' both by employers and policy makers alike (Lafer, 2004; see also LSC reports 2001, 2002, 2003). This reclassification can be seen in the inclusion of such personal qualities in 'key skills (Westwood 2004:51) and in the many policy documents throughout the 1990's, examples of which would be*; improving own learning and performance, Personal values, attitudes, motivation, discipline, judgement, leadership and initiative* (DfEE, 1999:3.8). These are issues, which with the inclusion of 'employability skills' within the curriculum of higher education have a direct resonance with this enquiry (see: the nature of skill in this

work). They are not a particularly new phenomenon, as Wellington remarked in 1987: "It is as if the concept of skill has ascended to a new level to embrace…abilities, aptitudes, dispositions and attitudes" (Wellington, 1987:30).

The general drive by both policy-makers and employers has seen the emergence of a new conception of skill. Drawn from earlier understandings of personal abilities and aptitudes, such 'generic skills' now seem to be widely accepted as a suitable basis for general, further and higher education policy. Whilst some critics continue to argue that these are personal attributes rather than 'skills' (Keep and Mayhew, 1999), the 'key skills' of *problem solving, improving own learning and performance* and *team working* are now embedded in the curriculum and employers increasingly report the lack of such attributes in employees as skills shortages and skills gaps (DfEE 2003, LSC, 2003). This particular set of conversions does not appear to have established a delimitation in the conversion to personal qualities to skills, in fact quite the reverse would appear to be true. The growing literature on *emotional and aesthetic work* (cf. Hochschild, 1983; Macdonald and Sirianni, 1996; Warhurst and Nickson, 2001; McDowell, 1997; Bolton, 2004) suggests that with the increasing importance of the service industries to economic prosperity, new conceptions of *emotional skill*s and *aesthetic skills* are emerging (Grugulis et al 2004; Bolton 2004).

5.3.2 Skill by proxy?

The second factor relates to an understanding that conflates becoming qualified with becoming skilled. There is a substantial body of work in the literature which cautions against taking just such an approach. A useful example of this is extended by Warhurst (2004) "The pragmatics that drive policy-makers, privilege definitions of skill that can be more readily achieved or measured" (p.1). This would appear to reasonably capture the notion that qualifications are increasingly being seen as reliable proxies of skill. This may be, as Grugulis et al (2004) suggest, a consequence of the difficulty experienced in defining and quantifying skill, so that through the accumulation of qualifications the workforce is *assumed* to be more skilled (p.5). They point out that one important consequence of such an approach is that it is the *possession* of qualifications rather than the *acquisition* of

skills which takes precedence in policy-making, academic debate and analysis (ibid:5).

An indication of this approach - which conflates the increasing numbers of employees gaining qualifications with increasing levels of skill in the workforce - is that (to date) *all the targets* set for increasing skills in the workforce relate to qualifications awarded (Wolf, 2002; Warhurst et al, 2004; Parsons and Marshall, 1995; NAC, 1995; LSC, 2001, 2002, 2003). This is not to suggest that there is no relational connection between qualifications and skills (there may well be) however, the nature of the 'skills' being gained does seem open to question.

Employer's demands in surveys conducted by the LSC, DfEE, DfES and others over the past several years, indicate that the workforce is lacking in key employability skills: "The key skill areas in which employees were thought to be lacking were mainly generic ones, i.e. communication, customer handling, team working and problem solving" (LSC, *Skills in England* 2003:1.3). Over this same period however, figures from the Learning and Skills Council indicate that qualifications in the employed workforce rose from 50 percent in 1993 to around 90 percent in 2003 (LSC, 2003:1.18). This would seem to suggest, that over the past ten years, despite a substantial rise in vocational *qualifications*, vocational *skills* have not kept pace. The Learning and Skills Council also reported the previous year (2002) that : "Despite unprecedented increases in the average levels of qualifications being held by the workforce...employers continue to complain that they are not able to find the skills they require" (LSC, 2002:1.4).

In this second factor, it would seem to be the case (as with the creation of 'new skills' alluded to earlier) that whilst there is apparent motion and forward progress, this may not be entirely as appearances suggest. The rise in qualifications *perse* does not seem to entrain an equal rise in skills *perse* (at least not in the 'employability skills' demanded by industry). Indeed, from these first two factors it would seem reasonable to suppose that the metamorphosis of personal attributes and dispositions into 'skills' is rendered questionable by the absence of such 'skills' in the workforce. Further, it would also seem reasonable to suppose that whilst the level and numbers of qualifications in the workforce are rising they ought

not to be taken as an appropriate proxy of (rising) skills. The third factor (skills inflation) further ties these two aspects of 'skills-conversion' and 'skills-conflation' together.

5.3.3 The inflationary spiral

Dench et al (1999) suggest that with the emergence of key skills there is a tendency to assume that workers, employers and policy-makers gain a false perception of the 'knowledge economy'. They point out that, for example, the rise of IT mediated tilling arrangements in large retail stores brought with it the ostensive requirement that shop workers should be both IT literate and fully numerate. Whereas, in most cases the introduction of such new technology has reduced both numeracy (the till now 'tells' the assistant how much change to give the customer) and, through the use of bar code readers eradicated the requirement both for IT knowledge (most tills now have 'product buttons' and can be 'mastered' in minutes) and for product knowledge, a feature which was once deemed essential for any sales person.

Leaving the specifics aside, the argument for an inflationary skills spiral runs as follows: as workers and employers have internalised the widening definition of skill there appears to have been an equal tendency to define more jobs as skilled (Westwood, 2004). This process is assisted by policy makers who (for the past 20 years or so) have claimed that our international competitors' skill levels have been rising and that the economy needs ever-higher levels of skills if it is to remain competitive (Wolf, 2002). Individuals exposed to this rhetoric begin to report that they are using higher levels of skill (see arguments advanced above) a reinforcement which has seemed to assist policy-makers in the belief that the economy is being transformed into a knowledge economy (Lloyd and Payne, 2001). The outcome (supported the by policy documents indicated earlier) would seem to be a re-calibration of the projections of future skills and an increase in the rhetoric to support and further inflate the process (for a full discussion see: Grugulis, 2003:458-470; Grugulis et al, 2004:10-15).

This is an important argument and it would seem to be substantiated by the obvious (if somewhat uncomfortable) fact that despite the several billions of

pounds spent on vocationalising the education system over the past 25 years, as a nation we continue to compare unfavourably with our international competitors in respect of a skilled workforce and measures of productivity (Wolf, 2002; DfEE, 1998, 1999; DfES, 2003; LSC, 2002, 2003) yet, paradoxically we remain amongst the very highest performing economies in the developed world.

This mismatch between the rhetoric and the reality of skills has some deeply worrying implications. It might be argued for example, that configuring skills as a social construction is a harmless or even benign undertaking as jobs previously undervalued as 'unskilled' now find they require team working and motivational skills, and may also require sets of 'aesthetic' and 'emotional' skills. However, this apparent 'upskilling' of hitherto low-status jobs does not appear to have resulted in movement through the occupational hierarchy or in increased payment for this (now) 'skilled' activity (Felstead et al, 2001; Payne 1999). Grugulis et al, (2004) assert that conceiving of skills in this way is no more than : "a rhetorical device which carries with it no material benefits" (p.12) they also suggest that that in constructing skills in this way we stand in danger of damaging the currency value of skill itself (ibid:12).

There is a further, and for this enquiry, highly significant site of damage which needs consideration. The three factors of proxy, ubiquity and inflation discussed earlier - however benign or malign they are taken to be within the industrial discourse - have clearly had a significant impact both on the discourse *of* education and the discursive practices relating *to* education. There can be little doubt that the corrosive rhetoric responsible for conflating skills, economic performance and the role of education over the past three decades, together with the inter-discursive effects such constructions have initiated and fostered within the discourse of education, have displaced not only previous understandings of vocational education and training but have significantly impacted higher education. These inter-discursive articulations and hegemonic antagonisms are discussed and analysed in chapters 8 and 9.

5.4 Summary

In the industrial discourse there is an ostensibly more unified view of skill than in the discourse of education. Socially bounded constructions of skill may be contrasted with other understandings such as grounded skill and the emergence of new understandings such as 'aesthetic' and 'emotional' skills. Definitions from the industrial discourse would seem to be of particular importance as these appear to have significantly influenced the discourse of education. In the industrial discourse, skills are problematised as relating to a person (Bolton, 2004) or to a task (Collins, 1982) and this would seem to have important and significant outcomes for an understanding of skill as either enhancing or delimiting human agency (Grugulis et al, 2004).

The ongoing creation of 'new skills' would seem to suggest that a conception of skills by employers is more fluid than is suggested in governmental rhetoric and policy (Payne, 1999). The transformation of personal attributes, dispositions and attitudes into key generic skills seems to have this understanding as its progenitor (Warhurst et al, 2004) and it is suggested that the discourse of education has been strongly influenced by this commercial understanding of skill as being functionally related to both personal attributes and employment.

The conflation of skills with qualifications may be advanced as a possible reason why the workforce is assumed to be more skilled (Parsons and Marshall, 1995) and contrasted with the view that qualifications are taken to be an appropriate *proxy of skill.* This may be related to concerns that skills are rising more slowly than qualifications (LSC, 2003). There would seem to be a mismatch between the rhetoric of skills advanced by industry (and the agencies of government) and the reality of need, deployment and acquisition. And, it would seem that particular constructions of skill which have found their way into the discourse of education may not confer any benefit on their recipients and may be involved in an 'inflationary spiral' of skills.

Part Three

Part three (Chapters 6 and 7) deals with the nature of skill and attempts to reveal some of the complexities, ambiguities and tensions inherent within current (and historical) notions of skill.

Chapter 6 The Nature of Skill

6.1 Introduction

It would seem reasonable to assert from the evidence examined so far that skill has become something of a contested concept. Indeed it would be possible to go beyond this and assert that skill can be legitimately posited as a divided construct with substantial epistemological and ontological differences supporting fundamentally separate understandings of the term. This chapter seeks to explore the first of these understandings - expressed in the literature as 'real' or 'genuine' skill – before attending (later in the chapter) to a second conception of skill which is expressed in the literature as a 'social construction'. It might also be helpful to indicate at this point that this enquiry posits a third principal conception of skill as a *mythic construction* and this is explored chapter 8.

Before proceeding with the discussion on the nature of skill it would seem important to address the particular methodological difficulties posed by differentiating skill as 'real' or 'socially constructed'.

6.2 Representations of Skill

As has been shown earlier, there are several representations of skill within the discourse and whilst there are some significant differences between them they are broadly represented within the literature in two ways - as relating to *real* or *genuine skill* or *socially constructed* skill (More, 1980; Turner, 1962; Braverman, 1974; Felstead et al, 2002; Payne, 1999; Grugulis et al, 2004).

Represented in this way – as *real* or *socially constructed* - these understandings have an inherent problem which relates to the nature of discourse analysis in general and social constructionism in particular. A further difficulty is that not only are these terms methodologically and ontologically problematic for social constructionism, they are commonly used – without difficulty - within the discourse of industrial relations, sociology of work, business and management. This presents something of a methodological problem in that it would seem important to remain connected to understandings of skill posited within the influential discourse of work

and employment. Yet it would also seem inappropriate to maintain a categorisation of *skill as a social construction* when methodologically speaking it is possible to regard all conceptions of skill in this way - as discursively constructed and therefore open to contingent ascriptions of meaning and interpretation (Laclau and Mouffe, 1987; Fairclough and Wodak, 1997; Howarth, 2000) it logically follows from this understanding that it is not possible to differentiate a categorisation of skill *as* a social construction as *all skill* may be understood as socially constructed. Equally, from an ontological perspective – within the methodological parameters of social constructionism - the designation of a particular construction as *real* suggests that other related but different constructions are *not real*. This poses substantive difficulties for a coherent deployment of social constructionist theory, in that such an understanding regards the constructed world *as the real world* for those who inhabit it, and whilst we can agree that reality may be bounded by a physical constraint on perception and thought and that some realities may be considered 'more real' than others (the position of *critical realists* such as Bhaskar, 1986; Parker, 1992 and Willig, 1999) it is not possible to deploy a social constructivist methodology whilst regarding particular social constructions as *not real*.

To square this methodological circle it is proposed to recast the existing typology of skill from *real* or *genuine skill* (More, 1980) to a new typology of *grounded skill* - that is to say, skill *grounded* in the essential requirements *necessary* to bring it into being (these aspects are discussed in this and following chapters). And similarly, to recast *socially constructed skill* (Warhurst et al, 2004) to a new designation of *bounded skill* - that is to say skill which is *bounded* by other powerful forces such as socio-economic, industrial and political forces, in such a way as to modify the purpose, process or outcome of *grounded* skill (these issues are also discussed in this and following chapters).

6.3 Some initial considerations

Skill appears to resist easy definition within the discourse. It is not altogether clear whether this is an inevitable consequence of what Wittgenstein (1953) described as a *family resemblance* - that a sign is the sum of all its potential meanings and therefore (essentially) undefinable; or due to the continuing difficulties brought

about by forms of dualistic thinking which persist in injecting an unhelpful bifurcation of meaning; or what Roland Barthes (1974) colourfully described as *'language robbery'*, or perhaps some other mechanism (chapters 4 and 8). However, it does not seem unreasonable to suggest that another explanation might also be advanced – that of intention. It seems likely that those who have sought to utilise skills as a central component of their particular educational agenda have also implicitly avoided adopting those aspects of skill which find no resonance with their particular intentions. An illustration of this approach is provided by the National Council for Vocational Qualifications (NCVQ). Throughout their entire history the NCVQ refused to be 'deflected' by reasoned argument or educational concerns about the separation of knowledge and understanding from 'skilled' *performance*. They remained convinced that NVQs had value to industry (in the face of extensive industrial apathy for the support and adoption of NVQ programmes in the workplace); and convinced of the value NVQs might make to an individual's education despite the vanishingly small take-up and completion rates of NVQ's (Wolf, 2002:75-6).

This competence based notion of skills advanced by those concerned to 'embed' them within higher education is only a partial rendering of the construct within the discourse, but it is an understanding which appears to have led to the reinforcement and acceptance of empirically bare notions of skill. The problematization of skill (in its relationship to education) seems to have had the unfortunate consequence of reinforcing a negative and shallow view of skills and one which has sought to position skills-based approaches as a wholly rational and reasonable vector for the transmission of higher education (which appearances would suggest that they are not).

Chapter 4 showed that definitions advanced in support of such initiatives were described by many writers as *'educationally and empirically threadbare; confused; lacking in depth, lacking homogeneity'* (cf. Tomlinson, 1997; Bennett et a, 2000; Hyland, 1994; Tribe, 1996; Barnett, 1994; Assiter ,1995). In many cases skill has been 'defined' by simply conjoining one noun with another, or by linking it to other signs, which have an adjectival function with little if any increased clarity of meaning as a result. For many users of the term over the past 25 years it would

seem that is has been sufficient to *classify* skill rather that to *clarify* its meaning. In this way, core-skills, key-skills, employability-skills and large numbers of other conjoined constructions have led to the creation of a form where the meaning (if any) resides in one half of the conjoined term, the other half (skill) is left undefined being required to draw its 'meaning' from the first half of the couplet.

This process appears to have left the discourse of skill particularly open to what Barthes (1974) describes as 'multiple contingencies' - a state of affairs where other constructions of meaning are able to grow and develop within the discourse (p.132). The concomitant of this appears to be a discourse which embraces a praxis without first embracing a principle and one in which there is a ubiquity of use over a unity of meaning.

This is not to say that skill in some peculiar sense is resistant to meaningful definition. A review of the historical record would disabuse any reader of this notion and such a reading would have had little trouble in ascribing an agreed meaning to skill, as it is hoped this chapter will make clear.

6.4 In defence of skill

If there is to be any appropriate understanding of skill as an important, valuable and meaningful educational construct it first seems necessary to demolish the shallow and impoverished epistemological and ontological view championed by the NCVQ. A view which has come (through the conflation of competence with skill and education) to predominate and create a particular conception of skill. It is not proposed to engage in a detailed critique of the NCVQ here but it is important to recognise that in pursuing their conception of competence the NCVQ sought to separate skill - in the guise of 'competences', from knowledge and particularly from understanding (Barnett, 1994:75-6).

It ought to be stated directly that this conception of skill - as (essentially) a demonstration of what a person 'can do' (or to use the expression of Ryle's, 1949, discussed above: "knowing-how") disconnected both from the process of acquisition and from the knowledge and understanding which connects praxis with a wider cognitive perspective (*knowing-that*) - is a construction entirely of the

NCVQ's own making. And further, it is a conception which does not appear to find any agreement or connection with interdiscursive or intertextual notions of skill in the historical discourse. It is in short, non-skill, a form of postmodernist social construction which appears to designate particular activities *as skills* without providing them with the inherent characteristics *of skills*.

6.5 Postmodernism and skills

Skills ought not to be confused with competences, not least because (to take a postmodernist understanding), skills are not defined by, or related to some 'grand design' or metatheory of education. Competences on the other hand would seem to appear both modernist *and* postmodernist in that they are technicist, relate directly to some particular design and construction of society and are conceived as appropriate mechanisms with which to implement change and progress in the pursuit of a particular 'grand design'. In this case, a grand design - as envisioned by the NCVQ – which appears to require the interpellation of education into an economic, market-based understanding of the value and purpose of education. Yet competences may also be characterised as postmodernist construction and it this modern/postmodern birfurcation which is now explored a little further.

Some critics of competency based education and training (CBET) have indicated that the inclusion of CBET into the curricula of higher education is a manifestation of a postmodernist agenda in that it seeks to privilege the local and specific against the universal and the abstract (Usher, 1997:100 in Barnett and Griffen, 1997). If this is so, the question arises, might skills also be considered as part of the postmodernist assault on the academy? or (given the long-standing and largely unproblematic relationship between the academy and skill) might some separation between skills and competence be appropriate?

To state this briskly, skills ought not to be confused with competences, nor does it seem appropriate to say (as would many proponents of CBET) that competences are built up of skills or that skills are comprised of competences (cf. Jessup, 1991; Perry and Barnett, 1985; Cheetam and Chivers, 1996; Anderson and Marshall, 1996; Training Agency, 1988, 1989). It is important to be clear about this distinction. The term 'competence' as used here refers to a particular ascription of

meaning and its use in the discourse of CBET and not to any general understanding of the term competence in use outside of this particular discourse. There is one further definitional point to be made here relating to understandings of the terms postmodernity and postmodernism. Barnett (2000) draws an important distinction between postmodernity as a condition "[a] descriptive and neutral term [which] attempts to capture something of the flavour of the constituents of the emerging era" and postmodernism as an intellectual and cultural movement which refers to "hopes and values; [which] proclaim[s] a new world order" (p.4).

This important distinction is echoed by Usher (1997) who indicates that whilst postmodernity as a condition and postmodernism as a philosophy can be separated they are also dynamically interrelated and interactive, and that "postmodernism can be seen as both evidence of and a contribution to the linked socio-economic shifts that constitute the condition of postmodernity" (p.100). Following this understanding, competence appears to be something of a fractured construct in that it seems to give way to a postmodernist conception in both its formulation and character, yet rather paradoxically appears configured to deliver a modernist agenda.

6.5.1 Competence as a postmodernist construction?

The term postmodernism resists full definition since, as Griffen (1997) points out, its major thrust is to recognise that all knowledge claims are partial (p.5). However, it would still seem possible to apply the essential predicates of postmodernism to the notion of competency-based education in order to determine how, and in what way each might fit the other.

Usher and Edwards (1994) indicate postmodernism's rejection of the universal and the transcendental foundations of knowledge and its heightened awareness of the significance of language, discourse and socio-cultural locatedness in the making of any knowledge claim (p.10). Following this understanding it would seem that the position of competence-based approaches is to value the local and specific and that notions of the universal are of little value or relevance to the acquisition of competency-based outcomes. Jessup (1991) illustrates this point well arguing for:

"Education [to be] defined by its outcomes [and that] it opens access to learning and assessment in ways which are not possible in traditional…systems" (p.89).

The view that postmodernism is constituted by a set of ideas and theorisations which problematize and imposed singular definitions of reality (Usher 1997:100) would seem to be reflected in the conception of CBET as a deliberate and intended mechanism to problematize existing notions of education. Such a position would seem to resonate with the NCVQ's attempts to impose a hegemonic relationship through a singular definition of the purpose and value of education, and to reduce the pluralities of meaning and definition within the existing educational provision. This is perhaps best exemplified by the *Review of Vocational Qualifications*, 1985 (a process which led to the formation the following year of the NCVQ) and which swept away established and existing vocational qualifications and attempted to replace these with various levels of National Vocational Qualifications (Wolf, 2002:68). It was a process which led Gilbert Jessup (the architect of the NCVQ) to remark that the new approach of the NCVQ would: "force a fundamental review of the objectives of education…" (Jessup 1991:135).

The rejection of modernist views of enlightenment is a key precept of postmodernist thinking. In speaking for the NCVQ Jessup (1991) asserted that there is: "[a] need to make assessment [of learning] independent of programmes of learning" (p.18). In this regard Barnett's (1994) analysis of the NCVQ's separation of knowledge and understanding from the outcome of CBET is a clear illustration of how the philosophy of the NCVQ finds itself devoid of enlightenment and critical reason (p.77). It might also be said of competence-based initiatives that they appear avowedly postmodernist (rather than postmodern) in that they are not value neutral but seek a transfomative engagement with the world (Barnett, 2000:4) together with a redefinition of what constitutes 'worthwhile' knowledge, and a vocationalism which prepares people for the market place (Kenway et al, 1993).

There seems something of a paradox here however, for despite the seemingly postmodernist constitution of competence-based approaches to education, the

outcomes of a competence-based approach appear to reflect more modernist intentions.

6.5.2 Competence as a Modernist conception?

Harvey (1992) indicates that modernist ideas reflect: "a belief in linear progress ... the rational planning of ideal social orders, a standardisation of knowledge and production" (p.9) all of which might be said to apply to CBET, in that hierarchical notions of knowledge are constructed through detailed, tiered levels of competence. Through this process knowledge comes to be standardised and because the outcomes of learning are specified ahead of the process of learning, knowledge comes to be seen as specifiable, technicist and unproblematic in nature.

Further, competences may also be thought of as modernist in that they appear to embrace a 'grand design'. In the sense that they are engaged in pursuing the long-standing 'economy project' which has a long history extending as back as far as 1868 (Wolf, 2002:63-66). Further, this 'grand design' envisioned by DeVille (1985), Jessup (1991) the CBI and others appears closed to new ascriptions of meaning and fixed by the parameters laid down by the NCVQ (Wolf, 2002:72-74). Jessup (1991) asserts that the 'old' system (sic) of education with its "unnecessary restrictions" and "discouragements" (p.8) will be replaced by one which through industrially specified standards: "would provide the key to unlocking the... system [creating] a more highly skilled workforce" (p.10-11). This would also seem to be indicative of a modernist approach in that it seeks to privilege the implementation of particular instrumental, societal goals and outcomes over those of the individual: "the human being dominated by instrumental rationality" (Adorno and Horkheimer 1989, quoted in Barnett 1994:4). Yet it is a process in which skills have come to be seen as a 'property of the person' (Boyatzis, 1982; Bolton, 2004) and in this sense they may be reasonably aligned with a more diffuse and postmodernist conception. In contrast, skills (as competences) appear to be much more related to *function* and would seem to align themselves with a modernist perspective as a property of the task or job (Corrigan et al, 1995; Braverman, 1974).

Competences might also be regarded as modernist in that they appear to be subject to a metalanguage and theory which purports to have the forces of reason and rationality on its side (who would wish to argue that *incompetence* is desirable?). It is a theorisation which (according to the protagonists of CBET) if followed "would enable an efficient, unproblematic and neutral structure" (Jessup 1991:5) one which would "bring a coherence to education (p.137) and place the "learner at the centre of the system" (p.115). These discursive illustrations reflect not only a desire to underpin notions of competence as entirely reasonable and rational behaviour but also reflect a form of metalanguage which attempts to exert hegemonic articulation over the pre-existing discourse (Laclau and Mouffe, 1985). Such assertions (like all 'text') carry more meaning that that which is simply visible on the surface (Usher 1997). For example, Jessup's assertions that an "efficient, unproblematic and neutral" structure would result from the adoption of CBET carries the clear implication that existing educational process may be thought of as inefficient, problematic and biased. In this same way, Jessup's assertions of "coherence"' and placing the learner at "the centre of the system" imply that existing processes may be construed a lacking coherence and that they have concerns which seek to place something other than the learner as central to their purpose (a rather nice irony this, given the strongly extrinsic and national economic imperatives upon which the metalanguage of CBET is based).

This separation between the constitution of CBET as postmodernist and the intent which appears to be modernist in action, may simply be a function of postmodernism itself. Barnett (2000) points out that the terms which postmodernism puts to its own use are: "Terms [which] purport to be describing the world but, in fact, are engaged on the task of transforming it" (p.4). And moreover, as Usher (1997) asserts, texts are complex constructions which although they may convey and disseminate a regulatory discourse (such as that of the NCVQ) they do not "wear their hearts on their sleeve" or work through imposition, and that "[texts] always say more than they appear to be saying" (p.107).

It may well be that there is no paradox here. Indeed it would seem inconceivable to suppose that CBET could be engaged on a modernist agenda given its strongly

atomistic and reductionist approach to the structure of knowledge; an epistemology which separates the processes of education from the means of demonstrating its acquisition and the omission of knowledge and understanding from the process of 'education'. Yet there remains a puzzling degree of confusion here which seems to surface when any analysis of CBET is undertaken. However, it is the contention of this enquiry that the issues and problems which deeply fracture CBET do not relate to skill *per-se* but that they are a function of a *competence-based view* of skill. It would therefore seem important to make a clear differentiation between competences and skills. Competence appears to be a deeply fractured construct whereas skills (it is argued) are not. And that further, it is the association with postmodernist notions of *skill as competence* which has led to the misconception and conflation of skill *with* competence.

It also seems important to point out that this dominant and narrow concept of skill exemplified by the NCVQ is not simply the outcome of the strong and persistent rhetoric detailed in chapter 2. It is also a partial consequence of the 'skills/education debate' which stretches back for some considerable period of time.

It may be a consequence of dualism that there remains such a separation between the notions of education and skill - notions which have often been crudely characterised as *thinking* and *doing* (Tomlinson 1997:2-6). It seems an unhelpful distinction, but it is one which has been the subject of much debate for a prolonged period of time and in reviewing this issue, it is perhaps useful to extend two lines of thinking; one backwards towards Aristotelian understandings; the other forwards from our current position.

6.6 The 'rear' view

Ryle (1970) suggests that translators and subsequent commentators have been "unjust to Aristotle" in transcribing his views of skills and training as 'habits' (p.109). Ryle asserts that this risks confusing trivial actions such as tying shoelaces (automatically and without thinking) and other similar actions of 'blind habit' (sic) with those of the well drilled soldier who – although he might shoulder his rifle automatically - would not shoot automatically, or read a map like a

marionette (ibid:109). It may well be that Aristotle has been judged harshly in this regard but it seems fair to say that notions of dualism which began in that epoch remain (in some form) until the present time.

Whist many philosophers have argued for a distinction to be made between skills and education in what are often reassuring and emollient terms (for the value of skill within the notion of education, that is) the application of some modest discourse analysis reveals a less inclusive tone. For example this passage taken from an essay on 'Two types of teaching' by John Wilson (1972):

> It now becomes clear that as one might expect, most of the essential tools are *skills*. (Many of them such as walking, eating, talking and keeping ourselves clean and so on, we learn at home when we are young) (p.169. emphasis and parenthesis in original).

An analysis of the language shows an interesting relationship between the language and the implied meaning. The equation of skills with *tools* for example, equates the concept of skill with a somatic rather than intellectual discourse. His four examples of skills (*eating, walking, talking and keeping ourselves clean),* are not only supportive of this somatic conception but in choosing such basic examples of 'skills' Wilson chooses structures which resonate with the language of the nursery (*at home when we are young)* rather than the classroom.

A further example from the philosopher of education R.S.Peters (1970) also illustrates the point:

> We do not call a person educated who has simply mastered a skill even though that skill may be very worthwhile like that of moulding clay (p.6)

The use of the term *mastered* is normally advanced in any discourse as a definitive statement of ability, but here it is qualified by the prefix *simply*. To reinforce what now seems like an oxymoron (simple-mastery), Peters links the phrase *very worthwhile* to the banal and rather lumpen exemplar of *moulding clay*.

The whole sentence takes on an entirely different character with the removal of *simply* and the addition of a different somatic skill thus:

> We do not call a person educated who has mastered a skill even though that skill may be very worthwhile like that of cardio-vascular surgery.

Most people would understand the meaning in the original sentence (that skill of even the highest order does not qualify as creating an educated person). But in the revised sentence they might now wonder what point was being made (that a surgeon, even one with exemplary skills could not be thought of as educated?) such an assertion seems a contradiction in terms. Of course, this is not Peters' point at all. In choosing the words to exemplify his meaning, he seems to be doing what many writers before (and since) have chosen to do – apply a reductionist philosophy to skill.

It would be possible to continue in this vein, but the point being made here is that the view taken by NCVQ and others, that skill might be rendered simply and easily into a construct appropriate for training is common in the discourse of this time. This is not to equate the philosophical position of Richard Peters with that of the NCVQ for they have nothing in common. But it is to provide an illustration of the prevailing view of skill (in the context of education) held by many in the run-up to the extensive changes which began to emerge in the late 1970's.

The language, which like the two previous illustrations appears to ascribe to skills an inherent and valuable quality but which also contains a rebarbative twist is not confined to writings of the 1960's and 70's. Ronald Barnett's (1994) *Limits of Competence* offers a clear and incisive analysis of skills in relation to higher education.

> Skills are not to be down valued [...] to cause something to happen *with skill* is normally to achieve something worthwhile [...] To describe an activity as having been performed with skill is both to categorise the activity and to place a high mark on it (p.56. Italics in original).

This initial and rather up-beat criterion for the application skill gives way through a detailed analysis which reveals the complex nature of the concept before being put through the analytical wringer of his 'ten theses' (pp.58-61) to emerge at the other end "damned with faint praise":

> The collective point [...] is simple; and it should not be shirked. To say of someone that he or she is skilful is to damn with faint praise. It is to imply that he or she is merely skilful, no matter how complex the skill in question (p.61).

Barnett's assertion which follows, *that a higher education which is designed around skills is no higher education*, reinforces the notion that skills have value, but crucially, that this is constitutive of skilled performance and not constitutive of (higher) education. This follows the previous line of philosophical analysis in that skills are seen to have (extrinsic) worth and value but are not thought to be an appropriate medium for the transmission of higher education. It is an analysis which, by extension, appears to indicate that conflating the concepts of skill and (higher) education is to profoundly misconstrue the value of either and the differences between both. This is a line of reasoning which is pursued in chapters 7, 8 and 9.

6.6.1 The forward view

The second line of thinking is (of necessity) somewhat speculative but it seems useful to briefly consider what might be the corollary of a view which unites the concept of skill with that of education. To some extent this is already apparent in the literature critical of the conflation of education with skills and national economic performance, where the 'collateral damage' inflicted on higher education by such a conflated notion of education is discussed. From some of the difficulties reviewed so far, it seems apparent that these are issues which many see as antithetical to an appropriate notion of higher education. Issues for example, such as: *the pre-determination of outcomes* – that skill is positioned as an undertaking which requires that the outcome be known in advance of the process which is designed to bring the process about (Barnett, 1994). *Metrics* – that the emphasis placed upon known outcomes has brought with it an increasing reliance upon the measurement of these outcomes (Wolf, 2002). *Atomistic and reductionist* – that (in

the case of competence-based education) the deconstruction of skills into smaller and smaller components has reduced the process to one in which the outcome is less than the sum of it's individual parts (Bennett et al, 2000). *Lacking knowledge and understanding* – that too much attention has been given to the demonstration of *know-how* at the expense of appropriate underpinning knowledge (and particularly understanding) that would be required to support a process which claimed to be engaged in delivering educational outcomes (Barnett, 1994).

It is of course possible to show how each of these (and several other) issues related to conceptions of skill have, and continue to damage the process and outcomes of higher education, but given the eminent list of commentators on this subject these need not be pursued further at this point. (cf. Wolf, 2002; Bennett et al, 2000; Barnett, 1990, 1994, 2000; Barnett and Griffin, 1997; Corrigan et al, 1995;Assiter, 1995; Prickett, 1994; Minogue, 1973).

There is however another less-well attended to, but just as significant site of damage – that is to the conception of skill itself – and it is this issue which is considered next.

6.7 Skill as *different from* education

Earlier in this chapter it was suggested that it would seem important to separate the notion of skill - conceptualised in governmental rhetoric by agencies such as the MSC, NCVQ, DfEE, DTI, DfES, QCA and others over the past 25 years - with other pre-established and now subsumed conceptualisations of skill such as those sustained by the (now defunct) Industrial Training Boards (ITB's), apprenticeships, craft guilds, professional bodies, examination boards and previous governmental initiatives (Wolf, 2002). These are conceptions which differ profoundly from the more postmodern understandings of the term which (as has been shown) have come to dominate contemporary educational initiatives and educational debate.

Claims that a skills-based approach leads to outcomes which delimit the nature and purpose of higher education are serious charges with a substantive, rational and coherent set of arguments advanced in support of such a position. And, whilst not minimising such a position, it seems important to ask the question: 'Is this

delimitation a particular function of skills *per-se* or is it the outcome of a different (contemporary) understanding of what skills are (and are not) able to do?'

It is of course, perfectly possible to be not very skilled just as it is equally possible to be not very educated but this - whilst saying something about the particular outcome of a process in each case - reveals nothing about the inherent properties of either. Equally, when we conflate together the notions of skill and education it does not necessarily follow that it is possible to read off from the outcome of one, an inference of the other. It seems clear that there are two separate things going on here. Concerns about higher education have focussed on the (negative) impact of skills-based approaches and their discursive and transformative effects on higher education. This form of thinking seems to have as its master metaphor a conception of skill as a form of disease that has 'infected' higher education (although as will be shown later it seem more likely to be a process of iatrogenesis). This form of understanding seems profoundly unhelpful either to understandings of skill or to higher education. But it is perhaps neither of these positions which is ultimately worth pursuing, rather it would seem to be the notion of skills which is an appropriate focus for analysis rather than (simply) the impact of skill on higher education.

There seems little doubt that skills have had a transformative effect upon higher education. But focussing exclusively on this particular issue is to miss an equally important outcome - that skills have themselves undergone a transformation wrought by exactly the same processes which have sought to transform the nature, purpose and process of higher education. Those concerned with the impact of skills on higher education have been properly concerned to point-up the actual and potential problems of engaging with a skill-based approach (cf. Barnett, 1994; 2000; Assiter, 1995; Wolf, 2002; Minogue, 1973). But this has had the unfortunate corollary (unintended or otherwise) of maintaining a silence regarding the *impact higher education has had on skill*. Writings which focus on the intrinsic value of higher education 'writ large' and the extrinsic value of skills 'writ small' have seemed to exacerbate this position. The analysis which follows in chapter 7 attempts to establish what skills are rather than what they are often assumed to be and in doing so seeks to debate their real value, purpose and limitations within

higher education. However before this analysis there remains a further understanding of skill to be investigated.

6.8 Skill as a socially bounded construction

There are two further principal constructions of skill requiring some attention. Both are what might be termed *socially bounded constructions* in that they relate directly to social rather than technical impacts of skill.

It is fully accepted - as indicated earlier - that it is possible to regard all conceptions of skill as social in that (to take a social constructionist perspective) all things are discursively constructed and therefore open to contingent ascriptions of meaning and interpretation (Laclau and Mouffe, 1987; Fairclough and Wodak, 1997; Howarth, 2000). However, there is an established differentiation in the literature which acknowledges a separation between skill as a 'real' construct related (for example) to the physical production of real artefacts (cf. Turner, 1962; Braverman, 1973; More, 1980; Warhurst et al, 2004) and intellectual skills of medical or legal practitioners for example (Ericsson and Smith, 1991) and that of understandings related to the positioning of skills within industrial or societal contexts (ibid). It can be difficult to separate these two conceptions within the discourse as there is a strong relational connection between them and it can be argued that each contains aspects of the other. In practising medicine for example, a skilled practitioner may be both engaged in the application of 'real skill' in that they may perform a surgical intervention which requires great skill, and the same time be engaged in socially constructed understandings of skill through their position as 'expert' - doctor/patient relationships are particularly open to socially constructed understandings (Wodak, 1997), in their relationship to other colleagues in the medical hierarchy (relating to restrictions in engaging in particular medical practices), in their capacity as members of medical schools (engaged in admitting students to the profession), as managers of the medical resource, and so on (Gunnarson et al, 1997).

Without becoming too deeply embroiled within the industrial discourse of skill, it seems safe to separate notions of skill as a *socially bounded constructios* into two distinct categorisations. The first is historical in that it relates to particular work-

based social practices allied to accessing skills training and skilled work and is considered directly. The second is the construction established by this enquiry and relates to a *mythic* construction of skill where skill is discursively reconfigured to provide an altogether different understanding of skill, which has very little in common with either of the first two notions. This second 'mythic' conception is attended to in chapter 8.

6.8.1 Skill as 'grounded'

The first two constructions (socially bounded skill and grounded skill) have much more in common than might be supposed. A more extended consideration of key aspects of the construct of *grounded skill* is undertaken in chapter 7 however, this may be summarised as (essentially) being composed of particular tasks which require an extended period of training to master (Sloboda et al, 1996), where the acquisition of this form of skill is contingent upon the appropriateness of the training process (Billett, 2001) together with sufficient time and repetitive practice to acquire the skill in question (Ericsson, 1997). In this understanding skill is conceived of as a property of the person (Becker, 1964; Bolton, 2004) and is specific to particular domains and occupational situations (Lajoie, 2003; Ericsson and Lehmann, 1996).

6.8.2 Skill as bounded

Here skill is seen differently. Essentially, this construct arises from the negotiation between the 'economic actors' either collectively (as for example in management or union power) or individually (Grugulis et al, 2004:5-6). The intention of such constructions of skill is to advantage particular groupings such as professional bodies or craft unions, by artificially delimiting the access of others to skill and skilled activities (Turner, 1962:108-14; Braverman, 1974:109-112; More, 1980:16). Further analysis reveals that like the first conception of skill it is composed of tasks which require some 'mastery', but in this conception it is the differences in the particular processes whereby the 'skilled' person comes to 'master' the task which are of importance. Rather than a process of extended training predicated in the first conception, here the process is often characterised by advances in industrialisation and technology which place the 'skill' into the 'hands' of the machine and leave the 'skilled person' hostage to changing industrial

circumstance (Warhurst et al, 2004). As indicated previously, the rise of Taylorist conceptions of 'scientific management' and Fordist conceptions of industrial processes have done much to remove the locus of control both from the hands of the skilled worker and their collective groupings (Littler, 1982). This has resulted in an ongoing debate related to 'deskilling', for example, the location of 'skill' as a function of management through their 'agreement' that particular activities (and therefore people) are 'skilled, semi-skilled or unskilled; the acceptance of 'demarcated' roles, the determination of wage structures related to 'skilled activity' and so on, (Braverman, 1974; Ritzer, 1998; Baldry et al, 1998). It can be seen from this understanding that time and practice, essential to conceptions of grounded skill, are here contingent upon factors related to conceptions of economic production and performance, reduced labour costs and deskilling (a feature which appears to have found its way into educational approaches to skill).

This ought not to be thought of as a particular function of management however. The discourse of industrial skills has many examples in which unions, professional bodies and craft guilds conspire to restrict access to skilled occupations in an attempt to retain control of the supply of skills and manage the demand for skilled people (More, 1980). There is also some evidence that the same groupings occasionally attempted to control the categorisation of what constituted skilled work in that they attempted (albeit rarely) to engineer artificial levels of 'skill' in order to maintain wages or pay differentials - cotton spinners and riveters for example (More, 1980; Westwood et al, 2004).

Perhaps the most important point here is that the relationship between this particular kind of socially bounded skill and the practice of grounded skill is very closely linked whereby it is difficult to engage in one without undertaking aspects of the other. Whilst it has been argued for example, that a socially bounded understanding of skill privileges access to skills for certain groups of people and denies it to others (apprenticeships, medical and legal training) there is no implicit assumption that this is in some way inherently antithetical to the acquisition of skills. Following this approach, restrictions *are* placed on skill acquisition, but such bounded constructions are predicated on the notion that actual (grounded) skills *will* be acquired and that having secured the 'right' to practise, all such people do

in fact gain the necessary skills to undertake the task (More, 1980). This form of socially bounded construction is not a proxy for skill but a methodology of accessing and controlling important aspects of skill acquisition and practice. It is a socially bounded construction, but one which is contingent upon the acquisition of grounded skills.

This much is known – that a societally bounded construction of skill relates to delimitations of access and practice (Warhurst et al, 2004) as much as it does to understandings of what society does (and does not) recognise as skilled activity (Ericsson and Smith, 1991; Sloboda et al, 1996). But neither of these understandings appropriately describes current conceptions of skill.

A new and altogether different construction of skill now appears to have emerged out of the discourses of industry, economics and education. It is a conception which has placed greater emphasis on access to, and acquisition of skills - as a key driver of economic success - than at any other time over the past several decades. Yet paradoxically, although it purports to herald a new renaissance of skills where industry, politics and education conjoin in placing skills at the centre of societal and economic well-being, it appears to be a construction cut off from historical and empirical understandings of what it is that constitutes skill. It would seem to be an *evocation* rather than an *invocation* of the past, a construction which seeks to engage with the perceived benefits of skill whilst actively disengaging from the mechanisms which are required to bring this about.

It would seem from an analysis of the discourse, that in place of a structure which builds upon known and accepted underlying principles of skill acquisition, a new understanding has arisen. It is an understanding which attempts to radicalise notions of education and employment and has sought to reconfigure the social by reconfiguring skill itself. The policy decisions and rhetoric of government (and its agencies) do appear to have secured substantial change, but this would seem to be a change in perception rather than reality. In this way, skill is now 'known' to transfer between domains of knowledge and occupations, it is now 'known' skill no longer needs to be acquired through a deliberate and careful process of practice and repetition but can be secured in time frames of vanishingly small proportions.

And it is 'known' that not only can skill be separated from notions knowledge and understanding, but that it is the function of the education system to provide such '(un)skilled' people for industry.

It seems that we may have created a set of circumstances in which it is that both the academy *and* skills have lost certainty in their purpose and function. We have, it seems created a *myth* of skill rather than *more* skill. Some of the underpinning issues which appear to support such a *myth* are considered next.

Chapter 7 Some Fundamentals of Skill

The first part of this chapter explores a fundamental rationale for the inclusion of skills in higher education – that of transferability. The second half of the chapter deals with some of the essential underpinning predicates of skill acquisition and investigates whether such underpinnings are incommensurable with the principles and practices of higher education.

Section one: Transferable skills – *an unsupportable premise?*

7.1 Introduction

At the heart of the skills-based revolution in education lies the proposition that skills learned in particular situations and contexts are transferable to new situations and new circumstances. This appears to be a fundamental upon which skills-based approaches are predicated. Whilst this proposition appears to have gone (largely) unchallenged, and seems to be implicated in allowing notions of skill and education to be seamlessly conflated into one construct, this does not seem to be the solid proposition it might first appear. This section explores this issue and argues that (in the majority of contexts) the notion of *transferable skill* might be characterised as an oxymoron containing inherent contradictions relating both to purpose and intent.

The arguments advanced here are principally based on two grounds. The first is that any meaningful transfer of skills is not possible (or more precisely it has not yet proved to be possible) and that to construct a system as if were possible is to engage in both an irrational and (ultimately) pointless undertaking. Secondly it will be argued that skills are specific not generic constructions and that they are established to differentiate, not unite skilled behaviours.

A wider definition of 'skills' appears to have gained increasing acceptance throughout the 80's and 90's and, as indicated earlier, there is now a large and increasing body of skills which fit into the various *transferable skills* categorised as *core, key, generic, employability, learning skills* and so on. At the conceptual heart

of this skills-based revolution is the notion that such skills are *'transferable'* to new circumstances and situations. Given the (largely) uncritical acceptance that the notion of transferable skills appears to have received, the assumption would seem to be that such skills transfer easily or automatically across educational situations and from educational contexts to work contexts (Warhurst et al, 2004), and that the acquisition of these skills will enhance learner flexibility, adaptability and autonomy (Bennett et al 2000). However, it seems clear that a consideration of the literature on transfer of learning does not support such assumptions.

7.2 Some early work on transfer of learning

Attempts to establish the value of transfer of learning were first advanced in the early 1900's through the doctrine of *formal discipline* which held that keeping classical subjects such as Latin and Greek in the school curriculum strengthened mental faculties. These assumptions which were later largely discredited (Hilgard and Atkinson, 1971; Billet 2001).

Experiments in transfer which changed either stimulus or response in S-R pairings provided both evidence of positive and negative transfer, the results of which were said *"not to be clear-cut"* (Hilgard and Atkinson, 1971:255). There were further examples of transfer, many of which proved too complex to be analysed in terms of S-R similarity. Many of these complex experimental issues of transfer involved *mediated transfer*. These experiments, largely lab-based concentrated on paired associative learning tasks, concluded that whilst it was clear that some positive transfer occurred, this occurred only after extensive practice on a particular kind of problem, and crucially, that if practice was discontinued too soon, there was little transfer to the next series of problems (for a full discussion see Levinson and Reese, 1963).

Perhaps of greatest interest to educationalists (and certainly to this particular enquiry) is the extent to which a transfer of *principles* occurs. Early work in this area by Henrickson and Schroeder (1941) showed promise, but subsequent and extensive studies showed that transfer was much less likely than had been supposed (Hildgard and Atkinson,1971:260). Later work by Postman (1969) concluded that principles are more readily transferred when the student had

practised the basic problem to a high degree of mastery and had experienced a variety of similar problems to ensure a generalisation of the principle, and concluded that: "If the student is presented with a wide variety of problems but does not have time to learn any one to a moderate degree of mastery there will be little transfer" (Postman 1969). Welford (1968) expressed similar concerns indicating that:

> Transfer of skill from one task to another will depend not so much on the extent to which methods possible for one are applied to the other, but the extent to which methods which have been selected for one are applied to the other (Welford 1968:315).

Studies by Gagne(1970) and others have shown that certain 'learning skills', for example, efficient memorising and 'study skills' such as learning to use reference books, interpret charts, summarise and outline results and so on, produced gains which could transfer to other courses (Gagne, 1970). It is perhaps, worth pointing out however, with reference to Gagne's work, that such transfers appear to be more related to specific aspects of classroom-based learning rather than those proposed in the wider context of skill transfer where transfer is required from one situation (education) to another (work) (cf. Eraut, 2001). This is a point which is also raised by Barnett (1994) who argues for a distinction to be made between those 'transferable skills' which appear to have currency in the corporate world (of work) and those which relate to "fundamentally different interests and understanding [in higher education]" (p.168).

It is perhaps also worth pointing out, that at the time of the initial emergence of transferable skills into seminal government policy documents, not all those charged with their development felt the process altogether viable.

> There is insufficient collective wisdom for this [core transferable skills] and that worse still for levels two and three – personal effectiveness and transferability – we are on much thinner ice (IMS report No39,1982:46-7).

And in commenting on the apparent lack of solid educational foundations for this 'core skills' programme in the early 1980's Ruth Jonathon stated:

> In the development of the core [transferable] skills programme it's not that the cart has been put before the horse: all the horses have been ceremonially shot dead at the outset (Jonathon, 1987:102).

Such criticisms do not appear to have held up the progress of, or the belief in, transferibility and by the early 1990's transferable skills, in the form of 'core skills' (later re-titled 'key skills' in the Dearing report of 1996) were finding their way into the national curriculum and were on track to be incorporated into all post 16 education and training including A/AS levels and NVQ's (Drew 1998:34). And, although they became more explicitly part of the discourse of higher education around this time, they were not yet integrated into the curricula of higher education (Barnett, 1990:77) however, the absence of generic, transferable skills in higher education was not to last too much longer.

7.2.1 Later Studies – *some sceptical voices*

It seems that irrespective of the uncertain cognitive psychological basis for transferable skills, the belief that such an approach would prove to be effective has remained undiminished. This level of uncertainty in the belief of the transferability of skills does not seem to be confined simply to psychological matters. As Barnett (1994) makes clear, in expressing reservations about transferability:

> ...the literature, especially that of the philosophy of education has generated a near consensus in expressing doubt over whether transferable skills...exist (p.64).

As has already been shown, the rise in the 'rhetoric of skills' together with the concomitant, implicit assumptions relating to the value and utility of transferable skills, has risen steadily throughout the past 20 years. Perhaps unsurprisingly, given this mind-set, a growing body of much more contemporary research into the transferability of skills seems to have had no more effect than that achieved by earlier studies.

Work by Perkins and Salomon published in 1994 categorised transfer into *'near transfer'* and *'far transfer'*. *'Near transfer'* refers to the application of knowledge or skill in very similar circumstances to those in which the original learning took place. *'Far transfer'* refers to transfer which seems different or remote (Perkins and

Salomon, 1994). Perkins concludes a century of research has shown that *near transfer* appears to have better prospects for successful skill transfer than *far transfer* (Perkins, 1995). This finding seems to be crucial for the notion of *transferable skills* advanced in the UK, where the intention underpinning transferable skill is clearly not predicated on the basis of the transfer of skills to similar or analogous situations (examples of which might be the transfer of learning within particular domain specific situations) but for different and remote transfer, utilising skills such as *problem solving* and *judgement skills* to different and non-analogous situations (Wolf, 1995). There have been some positive outcomes of research but these have established that the distance of transfer is dependent upon the amount of practice undertaken - a facet which does not seem to be envisaged in the 'assumption of easy and natural transfer of skill' - for a more complete discussion see: Wolf et al, 1990; Blagg et al, 1993; Anderson et al, 1996 Warhurst et al, 2004.

Whilst most of the work in this area has been undertaken from a cognitive perspective – an approach which assumes that knowledge and skills are internal properties of the individual – an alternative view is that of *situated learning*. This view holds that learning is inseparable from situation and that it is the nature of the situation and circumstances in which the knowledge is acquired which is most likely to influence the subsequent transfer and deployment of this knowledge in other situations and settings (see for example: Brown et al, 1989 and Claxton, 1996). In this view, learning is held to be context embedded and the problem of transfer is not that of the cognitive perspective (*how knowledge and skills* are transported whole from one setting to another) but *how learning and performance* in one setting prepares one to learn the rules, habits and knowledge appropriate to a new setting (Resnick and Collins, 1994).

It would seem that irrespective of approach, the in-built assumptions in papers, policy documents and reports over the past 25 years, that skill is something which is easily and simply transferred, does not appear to be a tenable proposition.

> There is little research evidence that skills are transferable, yet it is widely assumed that they are (Oats, 1992).

> Research evidence has not yet made out an effective case for the transferability of broad skills (Drew 1998:22).
>
> ...there are questions to be raised about the reality of 'transferability'...the introduction of initiatives carrying this label is being effected on the basis of assumption and hope (Barnett 1994:44).
>
> The term generic or transferable skill does not connote homogeneity...typical lists of skills are theoretically and empirically threadbare and the implicit assumptions about their context independence and transferability probably untenable (Bennett et al, 2000. P21).

Given the extent to which transferability appears to be an unsupportable premise in the literature, the question arises as to why it continues to be such a favoured construct in the discourse of skills-based education. There would seem to be two fundamental reasons for this continuing belief in the transferability of skills.

The first reason can be disposed of quickly in that seems to relate to the view that in all aspects of education a belief in transferability is almost an article of faith. Singley and Anderson (1989) capture this nicely:

> One reason why the notion of general transfer keeps arising from the grave is that it is such an attractive proposition for psychologists and educationalists alike. It is the one effect that, if discovered and engineered, could liberate students and teachers from the shackles of narrow, disciplinary education (Singley and Anderson, 1989:25).

The second is more complex and relates to the fundamental positioning of the notion of transferability in a skills-based approach to education. In this understanding, education (and specifically higher education) has historically included what some writers have categorised as an early understanding of 'core' or 'key' skills. Newman's *Idea of a University* (1853) for example, included the notion that it was essential for a University education to develop a range of intellectual and personal attributes which could be used in other situations (Barnett, 2000). It is not suggested here that Newman's understanding of an education relates to the prescriptive notions which characterise contemporary notions of 'key skills' but it is a feature which some writers have construed as

relating to 'transferable skills' (Drew 1998:20). However, this (more liberal) understanding of the nature of what it is which is being transferred does not seem to be the position adopted by those who would wish to see the inclusion of such 'skills' in contemporary University curricula.

In this regard, the distinction drawn by Barnett (1994) is useful. His analysis between two forms of 'transferable competence' (*operational competence* and *academic competence*) makes a clear separation between the 'transfer' (and intrinsic value) of academic competences which he relates to notions of: "intellectual skills [and] the transference of understandings from one cognitive situation to another" - a conception which might reasonably equate with the spirit of Newman's notion of a 'transferable attribute' - and that of '*operational competence*' which has an extrinsic value and relates to transfer: "across domains of performative skill" (pp.64-66, 161, 181).

It would seem that it is this distinction - between the *use and purposes* of 'transferable competences' which separates the value of transferability *within* higher education from those of corporate and commercial interests - which is of fundamental importance in considering the validity of transferability. The notion which equates transferability of academic skills *within* higher education - a notion which although it has more credibility than other conceptions of transfer is still open to question as to whether or not it can be said to exist - to that of such skills being transferable *outside* higher education would seem to be on rather more uncertain ground. As Barnett (1994) pointedly indicates that if the 'transferable skills' of academe are equally applicable to the world of business why is it that: "...graduate employers are so insistent that their graduate employees are deficient in transferable skills?" (p.168). This is a concern which is also present in the industrial discourse (cf. Rainbird et al, 2004; Grugulis et al, 2004). It would seem here that the transferable skills of academe and business (in so far as either of them can be said to exist at all) are fundamentally different and ought not to be confused or conflated together as one notion.

However, the line of reasoning which has sought to position 'core transferable skills' within higher education seems to extend well beyond any notions of shared

interests between education and national economic imperatives. It would seem that there is a vested interest in declaiming that transfer exists. Indeed, it would seem that without such a clear positioning of both the value and veracity of transferable skills, the 'educational' aspirations of programmes of study rendered through skills-based approaches would be open to question.

There is much more which may be said of transferable generic skills than space allows; can, for example, *problem solving* be knowledge and context independent as seems to be suggested by those regarding it as a skill? Perhaps, but only if one chooses to ignore the large body of research to the contrary. What of *decision making* for example, is there any evidence to suggest that decision making in cooking is transferable to plumbing? Or that the 'skill' of *diagnosis* gained in motor vehicle engineering might be applicable to medicine? Such claims do not appear to be sustainable (or more pertinently) provable (cf. Wolf, 1995 for a trenchant critique of problem solving as a 'transferable skill'). Belief in transferable skills, it seems, is more of an article of faith than a matter of empirical fact. Indeed the whole notion of transferable skill may well be one of those 'pseudo-scientific hypotheses which Popper (1959) indicated were *"incapable of falsification"* and perhaps as Singley and Anderson (1989) suggest: "Sustaining these longings [for transferability] is the fact that it is very difficult to prove that something does not exist" (p.25).

7.3 **Transfer, skill and education** – *conflation, or contradiction?*

The proposition that skills learned in particular situations and contexts are transferable to new situations and new circumstances appears to be a fundamental predicate upon which skills-based approaches are constructed, but as indicated earlier this does not seem to be as solid a proposition as it might first appear.

There would seem to be two intrinsic aspects related to notions of skill and education which would appear to militate against such a proposition. These relate to the purpose and function of education *qua* education and the purpose and function of skill *qua* skill.

To begin with education; it does not seem particularly contentious to assert that one of the principal functions of an education is to provide the necessary cognitive and intellectual capacities which enable the educated person to engage - through the means of their education - in new, novel and untried circumstances. Indeed it would seem axiomatic that a fundamental *intention* of an education provides the recipient not with specific sets of pre-determined actions (as might training for a specific task) but with a much more open-ended set of capacities with which to resolve unrehearsed problems and difficulties (Minogue, 1973; Barnett, 1990,1994, 2000).

On the other hand, it would seem to be the function of skill (historically at least) that it relates directly and specifically to a particular context and situation. And that in engaging in a skills-based approach it is necessary to provide practice at predetermined processes and outcomes until one becomes skilled (Welford, 1968; Sloboda et al, 1996; Williams et al, 1999; Ste Marie, 2003; Flick and Lederman, 2001; Ericsson and Crutcher, 1996). It is a function which would seem to underpin the whole notion of what it means to acquire a skill, in that skilled behaviour is measured against pre-existing and known outcomes (a feature which would seem to be in logical opposition to the previously stated purpose of education).

This is not to say that there is some (necessarily) incommensurable quality which precludes the inclusion of skill in education, but it would seem to indicate that there are fundamental differences in *intention* between notions of skill and education and that the inclusion of the one into the other ought to be considered carefully.

7.3.1 'Multi-skilled'?

Returning to the notion of *transferability*, this would seem to be a key unifying principle, which would - if it could be said to exist - allow some conflation between the notions of education and skill. To take the perspective of skill, if transfer could be said to exist then this would seem to enable the acquisition of particular skills in specific contexts and situations to be transferred to new and *unknown* applications, this would seem to be what is implied in the notion of transfer. To state this briskly, it would mean that skills specifically related to (say) motor vehicle engineering could be applied through some (as yet) unknown process, to surgery,

computing, classical literature, metaphysics or quantum mechanics – a position which however desirable, hardly seems tenable.

In taking the notion of education, the position would appear to be no more tenable than when applied to skill. Following this understanding, it would mean that skills (of any stripe) would be entirely commensurable with notions of education, as, irrespective of the particular circumstance, process or specificity of any learned skill, they would always contain the *inherent* capacity to be transferred to new and unknown situations. To state this directly; skills (any skills) could, in this way, be posited as an entirely appropriate subject for higher education as they would *inherently* fulfil a key function and purpose *of* education, in that skills studied in one sphere would *necessarily* transfer to spheres of activity for which they had not been specifically designed or intended, and such a property (were it to exist) would seem to be a fairly useful working definition of what it means to deploy an 'education'.

The insistence in the transferability of 'core' or 'key' skills in the face of solid empirical evidence which appears to point to the contrary conclusion is puzzling. Indeed, there would seem to be something of a paradox here, skills have historically been conceived as relating to a specificity of performance. The function of an extended period of training in a particular skill, whilst it enabled the holder of the skills to practise within their particular field did not qualify them to apply those skills to a different discipline (More, 1980). Indeed, this was an essential aspect of investing in skilled activity, in that it both qualified the recipient to engage in certain specified activities whilst simultaneously disqualifying them from engaging in others. This has often been characterised as little more than covert demarcation (the purposeful restriction of activities which could be done by others). However, studies by Turner (1962) and Seymour (1967) have shown that whilst such restrictive practices did exist they were not widespread.

It would seem that in the majority of cases, skills were conceived as relating to highly specific skilled activities. This appears to be more than simply a social construction, rather it would seem to be a necessary factor relating to the actual

nature of skill, in that becoming skilled in one area clearly does not enable skilled performance in another.

Were this not to be true we might say of someone that (having mastered a complex set of practical skills for example) they were *'practically skilled'* and therefore anything which required the application of practical skills would be able to be undertaken (with skill) by such a person. Following this line of reasoning the skilled cabinet maker would (in learning how to make furniture) be able to build a wall, and conversely, the skilled bricklayer through dint of their practical skills would be able to make furniture. Put like this the premise appears foolish, yet this appears to be exactly analogous to the position adopted when considering 'intellectual skills'. Where, for example, problem solving skills learned in one context are assumed to transfer to other non-analogous contexts (Wolf, 1995).

7.3.2 High level skills

Nor is the historical record the only place in which such seemingly incommensurable problems reside. Previous indications of the uncertain nature of the transferability of learning are brought into even sharper focus in considering *high level skills*. Lajoie (2003) indicates that a key constraint in their development is that they are domain specific, and that people are skilled *at something*, be it chess or avionics (p.21). The importance of this would seem to be the indication that such skills are specific not generic and as Lajoie suggests it demonstrates the deployment of such *high level skills* is more than simply the deployment of general intelligence (ibid). Ericsson and Lehmann (1996) also assert that *high level skills* are essentially domain specific and strongly resistant to transfer. They argue that measures of general basic capacities do not predict success in a particular domain and that performance is not only very domain specific but that any transference outside of the narrow area of skills is surprisingly (sic) limited (p.274). The consideration that it is possible to become a generically skilled person - as implied by notions of transferability between vocations - is considered by Billett (2001) who suggests that there may be: "...no such thing as vocational expert *per se*" and argues that skills can only understood within particular domains of knowledge (p.12).

It would also seem important to consider that despite the rhetoric which has successfully positioned skills as transferable (Jessup 1991, 1997), there may be another aspect which militates strongly against such a position and which relates to the irreducible nature of skill as a domain specific construct. Following this understanding it may be that skill *is* skill because it relates *to* something and not - as implied in conceptions of transfer - everything. This follows the line of reasoning discussed earlier in considering issues of definition and meaning within the discourse of skill.

7.3.4 Some further considerations – *paradox and purpose*

There is an interesting paradox to be considered here, as to how it is that something understood to be both highly specific and functionally related to a particular domain or occupational area should come to be regarded as being both generic in nature and transferable in practice. This paradox is explored through some rhetorical and ideological considerations and might be understood as being drawn from an ideological base rather than from any existing realities related to established notions of skill.

It would seem that through the historical depletion of large numbers of skilled workers within society we may have become less exposed to the discourse of 'old' skills (apprenticeships, 'improvers', journeymen, hierarchies of skill and so on), and increasingly exposed to the discourse of 'new' skills (competences, occupational standards, NVQ's, levels, assessment, verification and so on). The discourse of 'new skills' is a language which has come to see qualifications as appropriate and relaible proxies for skill (Warhurst et al, 2004) and as serving a wider economic and social purpose (Eraut, 2001). It appears to be a conception where skills are seen as essential in creating a more flexible labour market and enhancing 'employability', a concept which seems to have linked the skills of the workforce (at any skill level) with a policy that puts work at the centre of the social inclusion agenda (Eraut, 2001:88). Given the extensive and purposeful rhetoric advanced in support of a position which has argued *for* transferability (of generic skills), by arguing *against* the specificity and singularity of skills (a classical function of rhetoric in arguing *for* something by arguing *against* something else), it

is perhaps unsurprising that we now feel comfortable with the almost intuitive notion that skills are transferable.

This may also be a function of an ideological position in that the structure designed to develop the skills needed for economic development (Wolf, 2002; Eraut, 2001; Drew, 1998; Jessup, 1991) has sought to privilege one particular position - skills as attainable through particular sets of qualifications which inherently consider skills as transferable – over others, most of which do not see this as a required function of skill. In doing so, this appears to have created a classic ' false consciousness' where one view has come to be accepted as 'common sense' and by dominating the debate has excluded all other conceptions (Laclau and Mouffe 1985). This capacity to secure hegemony over pre-existing notions through specific articulations has proved very successful. For example, the projection of national economic performance as dependent on a workforce with the 'right' skills, and that it is the purpose of education to supply these skills rather than (in previous times) the function of industry. The rhetorical language which has argued against the established purposes of education by arguing for a new order, where for example, notions of increased participation have produced articulatory practices claiming that universities had 'unnecessary' restrictions on entry and have led to the creation of an office for admissions to oversee the process. And where it has been possible to establish a hegemony of short term industrial and economic requirements over those of education.

There is a further point to be made here regarding hegemonic outcomes. It seems clear from the 'guidance notes' issued by the Training Agency in 1988 that understandings of transfer, whilst stated explicitly, were somewhat guarded in their tone. Claims of skill transfer are confined to assertions that competence is:

> ...a wide concept which embodies the ability to transfer skill and knowledge to new situations *within* the occupational area (Training Agency 1988, emphasis added).

This claim - whilst still largely unsupportable within the literature - does at least have the virtue of restricting notions of transfer *within* domain specific areas. It is not altogether clear when this more restricted notion of transfer gave way to the

much more contentious and uncertain notion of core and key skills as transferable *between* domain specific situations and contexts. But as evidenced in the industrial discourse the 'demands' of industry - or more properly civil servants acting on behalf of industry (Smithers, 1993; Warhurst et al, 2004) - were for skills which could be transferred not only from education to industry but from job to job (Wolf, 2002). However, it seems clear that by the early 1990's transferability had become an accepted tenet of competency based education and training.

7.3.5 Some conclusions

It was asserted earlier that the terms *transferable* and *skill* far from being coterminous ought more properly to be characterised as oxymoronic and inherently contradictory both in purpose and in intent. The evidence from the discourse would seem to suggest that there is (at best) still some considerable way to go before transfer is an established and agreed empirical 'fact', and that (at worst) it may be regarded as an untenable proposition. And that whilst a separation between *transferable* and *intellectual* competence is proposed (Barnett, 1994) either or both would seem to founder on this first principle.

The inherent intentions within education and skill would appear to require some substantial degree of separation between these two notions, with one being configured against a known and predetermined set of outcomes (skill) and the other positioned in opposition to this notion (education). Resolving the disparities between skill as a singular and non-transferable construct, and skill as indicative of generic transfer is also shown to be problematic.

It would seem that skills are functionally related (both within the historical intertextual record and the discourse of cognitive psychology) to particular domain specific areas. It would also seem that skills have substantial difficulties when required to function in other occupational areas or domains of knowledge. In this way it would seem reasonable to suggest that it is in the nature of skills to be singular and not transferable constructs. Indeed, it would seem logical to suppose that if this were this not so, a practical skill (of any kind) could logically be transferred to any other practical undertaking – analogous or otherwise. We know

this is not so, yet we assume that 'intellectual skills' can and do function in this way.

It will be argued that this is known and that intellectual skills are of a different kind to somatic and practical skills and that it is this difference which might make transfer possible. It is perfectly possible that this might be true, but it would seem that in order for this to be the case, it presupposes some separation between tacit and explicit knowledge (Eraut ,2001:89) between a *knowing-how* and a *knowing-that* (a function which, as indicated earlier is relational to notions of competence rather than skill), of social rather than empirical constructions and (as will be shown later) of *mythical* rather than 'real' conceptions of skill.

The question arises as to what might be the value of designating something *as a skill* if it does not share the fundamental properties *of a skill*? This is not a question of semantics, there is a deeply structural issue here which relates equally to the nature of both skill and education. If it is accepted that there is no one particular path to acquiring an education (without instigating philosophical debate, this would not seem to be contentious) it would seem safe to assert that whilst we may experience many different and varied forms of learning, we are able to emerge from the experience informed and educated (that is to say to have added to our stock of knowledge and understanding and - in however small a way - to have augmented our education). In this way it would seem reasonable to assert that this is what it means to engage in an education, that whilst the precise outcome may not be known, we can know that we will learn. Engaging in an education which did not have *becoming educated* as an outcome would be a logical aporia.

However, if the arguments advanced earlier are taken to be the case – that *transferable* skills are structurally incapable of being transferred – the question arises; 'how might it be possible to learn a 'skill' (which has ostensibly been transferred from one situation to another) when the outcome of 'learning' the 'skill' results in not being skilled?

This would seem to be an important issue; if skills *could* be transferred, there would be no argument to be had and the world would be an entirely different place

from the one in which we currently find ourselves. Plumbers through their acquisition of practical pipe fitting skills would also be able to repair cars, medical doctors would gain the intellectual skills whist at medical school with which to practise law, and philosophers teach economics (perhaps this is stretching things a little too far!). If they do not *transfer* then it would seem that we have an education system which is engaged (at least in part) in a profoundly pointless activity and predicated on a fundamentally unachievable proposition.

It would seem logical to assume that without some form of transfer we would have to learn anew about everything in each and every particular case and moreover, re-learn it for every new situation and context. As the former does not *seem* to be the case, and the latter *cannot* be the case, it seems reasonable to assume that *something* does transfer, but that *something* is unlikely to be skill.

The contention that nothing transfers is not the argument being made here. It seems that there is some evidence to suggest that transfer *within* domains of knowledge and occupational areas does take place. Rather, it is the notion that it is possible to extrapolate this (and in the face of empirical evidence to the contrary) that transfer of skills between domains and occupations which is called into question.

Section Two: Time and the acquisition of skill – *a suitable prospect for higher education?*

This second half of the chapter deals with some of the essential underpinning predicates of skill acquisition and investigates whether such underpinnings are incommensurable with the principles and practices of higher education.

7.4 Introduction

In order to determine the full extent of the relationship between skills and higher education and to establish the potential limits of skill as an educative function within higher education it is necessary to briefly explore some particular issues of skill acquisition. It is not proposed to engage with the underpinning processes of skill acquisition here – there is a large and robust literature in this area (cf. Welford, 1962; Williams et al, 1999; Ericsson and Smith, 1991; Sloboda, 1996; Billett, 2001) and, skill acquisition is a stated delimitation of this study but a consideration of the pragmatics of skill requires a brief consideration of two specific aspects within the discourse of cognitive psychology. These relate to *domain specificity* (and therefore transfer of skill) an aspect already explored a little earlier, and *performance* – the role of practice in developing skilled performance and specifically, the time taken to acquire skill.

It will be argued that a fundamental predicate of skill acquisition is consistent and repetitive practice over a protracted period of time and that this is a property of skills which is antithetical to the purpose of higher education and incompatible with the processes of higher education.

7.5 Skills and 'expertise'

The discourse chosen within cognitive psychology to examine the argument is that concerned with 'expertise' (cf. Ericsson and Smith, 1991; Simon and Chase, 1973; Ericsson, 1997; Sloboda, 1991; Sloboda et al, 1996; Chi et al, 1988, Glaser 1996). The definition of expertise (like skill) is something of an ongoing project in itself. It is perhaps important to note that like skill, expertise can be conceptualised in several ways. As a social act, for example the designation of expertise in this way

may or may not correspond to any intrinsic characteristics of the person so designated (Sloboda, 1991:154). This is an issue amplified by Billett (2001) who argues that expertise can be held to be an "interpretative construction arising from an individual's engagement in social practice" (p. 431). Other theorists have this as "someone who performs a task significantly better than the majority of people" (Ericsson, 1991), whilst others equate expertise with competence (Newell and Simon 1994), skilled performance (Sloboda, 1991), superior performance (Ericsson and Lehmann, 1996). It is in short, subject to the same level of exploration of how it might be achieved and transmitted as skill. Sloboda (1991) points out that there is no lower limit to the specificity or simplicity of a task to which the term 'expert might be applied and cites the fact that most people are 'expert' speakers of their own language as an example of the difficulty in defining the term (p.155). However all authors appear to agree that expertise is a function of acquired skill in the same way that we might think of education as constituted by learning.

Using the discourse of expertise would appear to make sense for this enquiry as it is within this body of work that 'expertise' is used to unite specific skills with more purposeful and summative performance. Much of the literature of skill acquisition relates (rather depressingly) to laboratory-based studies which are not analogous to skilled performance in the social world (Welford, 1968; Williams et al, 1999) whereas studies of expertise appear to recognise that (like education) skill does not function in a social vacuum (Billett, 2001). In this way, the use of the term expertise as the sum of the skills which comprise skilled performance within a particular domain is analogous with education as the sum of learning within a wider cognitive social project. This is of importance, as the stated purpose for skills gained in higher education is to function in this way, that is as a means of 'transferring' skills from the situation in which they were learned to a wider set of circumstances external to domain-specific applications.

There is perhaps one further point relating to skill and expertise which needs to be made here. The concept of skill as a reductivist construction, divested of understanding, represented solely as what someone is able to demonstrate (knowing-how separated from knowing-that) and split from any real sense of

underpinning knowledge, is a definition of 'competence', this is not, (as previously argued) an appropriate understanding of skill. Following Sloboda's view that skills have no lower limit – it is claimed equally that they have no upper limit (Rohlen and LeTendre,1998; Ukai-Russell, 1994). Skilled people do see themselves as experts and for the reasons advanced, it seems reasonable to regard studies of expertise as a suitable proxy for the exploration of skill within the context of higher education. Some caution is needed not to claim an excessive correspondence between the two notions, and in this regard, an attempt is made to establish a suitable delimitation in the analysis which follows.

7.6 Time and the development of Skill

The proposition advanced below is that the discourse on the acquisition of skill supports the notion that acquiring skill is contingent on time and practice, and that this is evidenced both in the historical record and in the empirical data. And that further, these two properties of skill (time and repetitive practice) are inimical to the purpose and processes of higher education.

7.6.1 Intertextual Considerations - skill – *"History is a nightmare from which I am trying to escape"* (James Joyce 1882 – 1941).

Joyce's wry observation seems entirely apposite here. Skills may have been 'forged anew' under the aegis of the National Council for Vocational Qualifications but prior to this intervention they were a construct of particular substance and significance. It seems clear from the discourse examined so far that the QCA (nee NCVQ) would like to 'escape' from historical understandings of skill as requiring substantial time and practice to develop – this was certainly Gilbert Jessup's view (Jessup, 1991, 1997) but here it seems important to ask – can the acquisition of skill be divorced from extensive periods of time and practice and still function as a skill? The historical evidence would seem to suggest not.

An exploration of apprenticeships would seem a good place to start. More (1980) indicates that periods of indenture during which apprentices would acquire their skills were typically between three and seven years duration. After which they would engage in another extended period as a 'journeyman' or 'improver' travelling

around improving their skills before eventually taking a position as a fully skilled employee or opening a business and employing others (master). This would seem to support the notion that many years were required to become 'fully skilled'. However, this view of apprenticeships as a well constructed and efficient system for the acquisition of skills does not go uncontested.

The influential writings of H.A. Turner in the early 1960's had a profound impact on the discourse of skill. Turner (1962) contended that skill was a social artefact rather than a product of training and was critical of the role and purpose of apprenticeships, asserting that "the sharp demarcation between skilled and unskilled workers is largely a product of the traditional apprenticeship system " (p.111). He went on to question the role of apprenticeships as the sole legitimate access to skills training, arguing that such approaches created 'monopolies' the function of which was to 'keep a narrow entrance' and to artificially and deliberately delimit access to skilled occupations (ibid). Lee (1979) in reinforcing this view indicated that, "those who follow this line of analysis...doubt whether [craftsmen] have undergone training in conjunction with apprenticeship so much as a period of ritual servitude designed to reinforce exclusive unionism" (in More, 1980:19). This line of thinking that skill was a *social construction* (bounded skill) led Turner and others to question the traditional relationship between the time taken to undertake an apprenticeship and the time taken to acquire skill (Braverman, 1974).

Of the total number of apprenticeships undertaken in the early 1900's (around 370,000 -1925 census data) the length of apprenticeships bore no particular relationship to the amount of training undertaken (More, 1980:70). Apprenticeships typically ranged between four and seven years and many firms were willing to adjust the length of the apprenticeship according to the age of entry in order to preserve the traditional finishing age of 21 years. More argues that the most popular period of training (5 years) was a product of custom rather than technical necessity (More,1980: 70).

This message - that access to skills could operate both as a restriction on access to training and that the acquisition of skills was unrelated to the length of training –

appears to be the message which has made the intertextual journey from the early 1960's to impact the educational discourse of the 1980's. Jessup (1991) reprised the same arguments when he asserted that UK systems of vocational training were not only delimiting access through "unnecessary entry restrictions" (p.8) and that "educators and trainers exert a proprietary control over the process of learning" (p.4), but that training was unnecessarily attenuated and had "discontinuities and overlaps" (p.8). It perhaps unsurprising that one of the reforms introduced by the NCVQ was to de-couple time from skill acquisition.

There seems little doubt that there were widely differing periods of apprenticeship together with considerable flexibility of these periods (More, 1980). There was also a highly differentiated nature of what might be classed as skilled work (Semour, 1967; Braverman, 1973). In this context concerns about socially bounded (constructed) views of skill (Turner, 1962) are appropriate, however, whilst there is some evidence to suggest that some skills are a function of a socially bounded understanding, the contention that time and the acquisition of skills (through this rather narrow view point of apprenticeships) can be substantially de-coupled is on much more uncertain ground.

More (1980) researched the historical record for the time taken for a worker to reach 'experienced worker standard' as opposed to the length of time an apprenticeship lasted, and concluded that there was nothing which separated non-apprentice trades from apprentice trades in terms of skill (p.144). Both apprentices and non-apprentices learned their skills in the same way (through working) (p.243). And (crucially) that "three years or so [of full time training] was needed before...they became even moderately productive" (141). More concludes that Turner mistakenly conflated the role of apprenticeship with that of skill and in doing so over emphasised the socially constructed (bounded) notion of skill, a mistake which also led Turner (and others) to conclude that the time taken had no relationship to skill acquisition (More, 1980: 154-163). In fact, More's estimate from the historical record that it took three years of full time training to acquire a productive level of skill is supported by a substantial body of empirical evidence from the discourse of cognitive psychology.

7.6.2 Chess, games, and rock and roll – *a contemporary perspective on skill acquisition.*

Empirical studies show that there is a direct and stable correlation between the amount of time it takes to acquire a particular skill and the degree of mastery over its performance (Ericsson and Smith, 1991). Work undertaken by Simon and Chase (1973); Hayes (1981) and Bloom (1985) established that ten years or more of full time and singular preparation was required to acquire the skills necessary to attain an international level of performance in a specific area of skilled activity. Ericsson and Crutcher (1990) subsequently found that this period (10 years – around 30,000 hours) related to a wide range of studies both cognitive and somatic.

Considerations of expert performance at this level are perhaps misplaced when discussing skill acquisition within the context of an educational framework. However, Simon and Chase made clear that whilst some 30,000 hours were required to become a chess master a much lower figure of 3,000 hours of full time focussed study was required to become 'expert' (p.279). Such figures are not easily placed in context but some indication of the degree of difficulty and commitment may be gauged from a less rarefied example. Ericsson et al (1993) state that whist around 5,000 hours of solitary practice was required for "The least accomplished expert musician" 'only' 2,000 hours was spent by a serious amateur pianist". More pointed perhaps is a comparison with the time allocated for study within most higher education curricula. Using a base line of 14 hours of classroom-based study per week (UK average) it would take just under 6 years to complete 2,000 hours of study and almost 9 years to complete 3,000 hours. It is of course fully accepted that much learning takes place outside of the narrow confines of organised study but it should also be taken into account that the definitions explored so far, which assume a singular focus of study (indeed, one of the characteristics of expertise is that 'experts' develop very domain-specific skills which have little or no application outside of their highly specific area), whereas a very large number of students in higher education now study modular-based course with multiple subjects and a semesterised delivery programme.

More generally however, the accumulated amount of *deliberate practice* is closely related to the attained level of performance in (for example) musicians (Ericsson et al, 1993; Sloboda et al, 1996), chess players (Charness et al, 1996), athletes (Starkes et al, 1996), auditors, computer scientists and medical doctors (Ericsson, 1997). This is a point picked up by Flick and Lederman (2001) who indicate that improvements in skill acquisition are 'proportional with time' (p.346). Billett (2001 argues similarly that "engagement over [considerable] time is required for the appropriation of situationally germane ...skilfulness" (p.447) as do Ericsson and Lehmann (1996) asserting that the difference between skilful performance and less proficient performance is almost always a reflection of the attributes acquired during lengthy training.

It is perhaps important here to distinguish between exposure to experience and exposure to training. Flick and Lederman (2001) argue that whilst skill is proportional to time it also requires 'effortful practice' and concentration. This relationship with purposeful effort and singular focus is also advanced by Ste Marie (1999) who indicates that skill is not attained as an automatic consequence of experience but as a consequence of structured and effortful training (cf. Ericsson and Lehman, 1996; Billett 2001).

There is much more which may be said of this relationship between the extended periods of time required to acquire skill and the secure acquisition of the skill itself than space allows. But (as indicated) there is a substantial body of evidence both within the discourse of skill (as an industrial construction) and in the discourse of cognitive psychology to support the notion that skills have historically required (and continue to require) a substantial commitment of time and focus in order to ensure their acquisition. It is of significance for this enquiry that whether this relates to the historical record (More, 1980; Turner, 1962; Braverman, 1973) when it might be argued that skills were configured differently from today, or in contemporary understandings of skill (Ericsson and Smith 1991; Ericsson 1997; Billett 2001), the requirement which links skill acquisition with time appears to remain constant (this can also be seen in the extended periods of time taken in medical training to become a doctor, or training to be an pilot for example). This is a particular issue which (like transfer of skill) has an almost universal consensus in

the literature and which (also like transfer) is almost completely disregarded in practice, yet has a direct bearing on the conduct of higher education.

7.6.3 Some Implications

There would seem to be something of an intractable problem here. It seems clear from the literature that high level skills take several hundreds if not thousands of hours to develop (Ericsson and Smith, 1991). Even if one were to discount the 10 years postulated by Simon and Chase, Hayes, Bloom, and others as relating to a level of expertise beyond the scope of higher education, there still remain the accounts of many other cognitive psychologists which, whilst they indicate much lower thresholds are needed for the acquisition of higher level skills than those indicated above, they are still typically in the region of 2,000 to 3,000 hours (Sloboda et al, 1996; Ericsson, 1997; Charness et al, 1996; Billett, 2001; Gosper, 2003), thresholds which still place the acquisition of high level skills outside of the chronological boundaries of almost all higher education courses.

There is a significant and important tension here. On the one hand, there is the domain specific knowledge and understanding which has come to dominate the curriculum of higher education, aspects which are not only being increasingly reconfigured as 'skills' themselves, but which are now conflated with further sets of 'skills' (core skills, key skills graduate skills, employability skills and so forth) and inserted into existing curricula. And, on the other hand, the time which is required to acquire such an increasing portfolio of high level skills.

It can be seen from the foregoing that the acquisition of domain-specific skills (of the level required by higher education) is seriously challenging within the normal time frame of an undergraduate programme of study since most courses of full time study consist of less than 300 hours formal study per year. (QCA, 2003). And, since it has also been established that to acquire such high level skills requires more than merely prolonged exposure but is consequent on structured training (cf. Ericsson and Lehman, 1996; Flick and Lederman, 2001; Gosper, 2003; Billett, 2001) the argument which might be advanced that personal study time - which characterises all higher education – could be included in the total amount of time available (as a suitable proxy for structured skills training) ought not be taken into

the equation. To extend this line of reasoning a little further, if we *really are* dealing with skills here it would seem to require not only a fundamental revision of the time allocated to their acquisition but an equally fundamental revision of the *process* of higher education, for skill, as the philosopher Richard Peters remarked "is not learnt from a flash of insight or from simply reading books or instruction alone" (Peters, 1966:14). This raises a question which not only relates to the earlier considerations as to whether skills *ought* to be a key function *of* higher education but also (and crucially) whether it is *possible* for skills to be transmitted *by* higher education.

This more pragmatic question is one which needs careful consideration. It would seem that time and practice are *necessary conditions* for the acquisition of skill and that the more complex the skill the more time and practice is required to master it (here it is assumed that if the skills in question were not of this order or they ought not to form part of a higher education). Equally, it would seem that there is neither the time available to undertake an education predicated on skill acquisition (pressure appears to be for shorter not longer undergraduate programmes), nor, as a contingent principle, does higher education require systematic repetition to form part of the process of learning.

It will be argued that the 'skills' required of higher education are of a different sort than the ones referred to above and that conceptions of high level skills refer to a summative acquisition (expertise) rather than a developmental process. And that whilst such skills may be begun and developed within higher education they are not required to attain the levels suggested here and that this is something which will reach such levels of mastery subsequent to higher education (in employment for example).

This does not seem an unreasonable position for it could be argued that this might apply to many extrinsic aims which underpin the notion of higher education. However, some caution is needed as there would seem to be several arguments which might be advanced against such a position.

The first of these can be disposed of quickly. The implicit assumption that high level skills are only required to be *begun* in higher education and that they are able to be brought to mastery in industry is open to question. The clamour from industry is for *completed skills* rather than any understanding that they might (or ought) to participate in their development. This is both the substance and the nature of the rhetoric advanced over the past 30 years in that it is the job of education to provide the 'right skills' for economic growth and international competitiveness (Wolf, 2002; Drew, 1998 Parsons and Marshall, 1995). There is a further point to be made here. The rhetoric has successfully orchestrated a fundamental shift in relocating the acquisition of significant skills away from the workplace and into education, As Grugulis, Warhurst and Keep (2004) point out:

> ...great efforts have been made to shift the focus of attention away from the workplace and those who manage it, onto schools, colleges and universities, all of which have failed , it is alleged, to imbue their students with appropriate skills...it is as if [skills] have been subcontracted and outsourced to education (p.12).

This 'demand' for work ready graduates is also evident in the latest reports from the Learning and Skills Council which indicate that employers are still 'concerned' about the 'lack of appropriate skills' in graduates' (LSC, 2002, 2003).

A second objection relates to the acquisition of such skills and the explicit requirements of transferability. It was shown earlier that the skills under discussion here are included in the curriculum of higher education precisely because they are assumed to transfer from domain-specific contexts to other non analogous and non context-dependent situations. It would therefore seem axiomatic that there is a process to transfer something real and tangible. Given that higher education is assumed to provide a process whereby its recipients acquire knowledge and understanding of a higher level it does not seem unreasonable to suggest that this ought to apply to the skills which are now said to constitute it. Mastery of such skills would therefore seem a *necessary condition* for their transfer with and between domain specific situations. For if this were not to be the case such skills could hardly be conceived of as the meta-skills which they are purported to be.

A further objection relates to the structure of skills within higher education. It has been argued that a principle and significant difference between skills and other forms of knowledge is that the pursuit of a skill requires that the intended outcome be known in advance of the process, whereas education is not predicated on previously known outcomes (Barnett, 1994). In this way, skills of whatever level require a specification to be set out in advance of the process of acquisition and therefore must logically and necessarily be predicated on a predetermined standard of mastery. That is to say, built into the very fabric of such skills is the notion that they are achievable within the structures set out to facilitate their acquisition. They are not a general aim of education but a construct which requires a known and mandatory outcome. In this way there seems to be a logical determinism which suggests that if skills are to be included in higher education they must achieve the outcomes of higher education. However, constructed in this way skills are shown to be summative (in that they rely on a specific and predetermined outcome to support the process of acquisition), rather than formative constructions which would seem to resonate with inherent notions of what constitutes higher education.

The final point relates to the evidence that a process of skill acquisition is possible within a current construct of higher education – the evidence looks unpromising. It has been previously indicated that industry complained that it was not getting graduates with the 'right stuff' and that what was needed were graduates with more 'employability skills'. Many of the changes to higher education over the past several years have sought to address just this very 'problem', yet reports from industry and governmental agencies over the past five years have shown that they feel universities are still 'failing' to provide graduates with transferable skills required for employment (DfES, 1998, 1999, 2003; LSC, 2001, 2002, 2003). The question now arises as to whether graduates in failing to grasp such skills are demonstrating that this is a function of insufficient time and practice; or possibly that the skills which they do acquire are of such a low level of expertise that they are invisible to the end-user (employer *and* employee); or perhaps it is that such skills remain domain-specific and are non-transferable. Whatever the possible reason(s) might be it would seem to be clear that such skills are not transferring out of higher education and in to the workplace.

It would seem to be largely immaterial for higher education which of the three possible reasons indicated were to be discovered to be the barrier to acquiring skills within an institution of higher education. If it were found to relate to an *insufficiency of time or practice* – a rationale strongly supported in the discourse of cognitive psychology, there would seem little prospect of levering-in more time without displacing some or all of the existing content and educational provision. Or perhaps more problematically, changing any of the principle constructs upon which higher education is based. In this respect it does not seem reasonable to suppose that established styles of teaching and learning within universities might be expected to give way to processes which relied for their efficacy on a process of tutored repetition and practice. Such a task, which was shown earlier to have been historically the role of industry, ought to remain within a context where practice and repetition are the core purpose of its existence – such a place would seem to be industry rather than education. On the other hand, if it is that skills *are* acquired but to an *insufficiently appropriate leve*l this would seem to indicate that, as in the first case the process of skill acquisition is incompatible with current higher education practice, in that whilst the process of skill acquisition might seem to be working (albeit at a low level) more time would be required to reach an appropriate level of acquisition and mastery. And if it is that it relates to *intractable problems of transfer* (as is overwhelmingly indicated in the discourse) then it would seem that irrespective of how well such skills might be grasped within any specific domain of activity, they would not transfer to other contexts and situations. An outcome which not only calls into question the fundamental predicates upon which a skills-based approach to higher education is based, but renders the pursuance of such skills within higher education pointless.

There is one further and final point to be made here in concluding this aspect of the discussion. There appears to be an implicit assumption that in designating particular learning outcomes or activities *as skills* they adopt the characteristics *of skills*. Indeed, it is possible to go further and state that the rhetoric, which over the past 30 years has done so much to alter the discursive landscape of higher education, has been shown to have this as an implicit aim. Billig's (1990) assertion that discursive rhetoric gains much of it's persuasive power from arguing *for*

something by arguing *against* something else is a useful reminder that the industrial and governmental rhetoric *for skills* is also an argument *against higher education* (as least as it is currently constituted). And it is this which appears to have placed higher education in the position of attempting to hold on to a set of established principles whilst being required to embrace a structure which appears inimical the process of higher education.

There *ought not* to be any confusion between rhetoric and reality here. The rhetoric has argued *for* skills (or at least their perceived beneficial outcomes) by arguing *against* the 'failings' of education in delivering the 'required' outcomes. There is of course a deeply fractured logic at play here. Higher education has never sought to deliver skills in the way suggested in the rhetoric (indeed, as the previous discussion indicates it may be *structurally incapable* of doing so). But as Usher (1997) points out, an essential quality of rhetoric is to engage with discourse in order to convey meanings which have real effects, to go beyond a referential reflection of circumstances creating a performative process and a transformative outcome.

Reality on the other hand would seem to reassert that something so fundamental to human understandings of performative action as the acquisition of skills appears to be, is perhaps not so easily subsumed by discursive articulations, hegemonic interventions and postmodernist ideas as might be supposed. And whilst it seems clear that the rhetoric has driven skills deeply into the discourse of education it does not appear (as evidenced by the inherent properties of skill) to have changed the fundamental characteristics of skill although it may well have changed some important and valuable aspects of education.

It would seem from the arguments advanced here, that if skill is going to function *as a skill* (and this must be the real intention behind the rhetoric as it seems clear that industry needs people with *grounded skills*) then skill must be taught and learnt *as a skill* and not function as some weak (or strong) proxy of education. Conversely, it would also seem that higher education is *structurally incapable* of sustaining itself as a skills-based delivery system and that the outcomes of higher education also ought not to function as some weak (or strong) proxy of skill.

Part Four

Part four (chapter 8) sets out the general arguments for the establishment of particular societal constructs as *myths* and explores specific issues which relate to the current conception of skill as a social *myth.*

Chapter 8 The 'Myth' of Skill

8.1 Introduction

This chapter sets out the general arguments for the establishment of particular societal constructs as *myths* and explores specific issues which relate to the conception of skill as a social myth.

The first part of the chapter deals with structuralist and poststructuralist conceptions of myth together with some related metaphysical constructs. The second part of the chapter examines the case for the conceptualisation of skill as a modern social myth and details the related poststructuralist discourse theories of Ernesto Laclau and Chantal Mouffe before moving on to discuss the particular implications that mythologising skill has for both skill and higher education. The chapter concludes with a discussion which contends that the current social construction of skill represented in the discourse, is antithetical to an appropriate understanding of skill and iatrogenic to higher education.

It is not the intention of this chapter to suggest that skill (as such) is a mythological construct but to argue that particular current social constructions of skill may be categorised as functioning as myths within the discourse.

8.2 Conceptualising myth in the discourse

It is perhaps important to state at the outset that the frequent neologisms adopted by many writers of discourse theory do little to assist the process of understanding in what are all too often difficult conceptual structures (Cf. Derrida, Gramsci, Althusser, Lacan, Foucault). This is particularly true when – like myth – the changed ascription of meaning is sufficiently different from its accepted meaning to render the accepted meaning unhelpful in myth's reformed neologistic and reconceptualised state, yet allow myth to retain sufficient meaning to keep it connected to 'common sense' applications of the term. This represents a serious barrier to understanding and in such cases I will try to clarify both the similarities to accepted meanings whilst attempting to represent the specific differences of

definition inherent within the term used in the theoretical constructs of discourse theory.

The term myth is defined by the OED as: "*a widely held but false belief or idea; a misrepresentation of the truth; a fictitious or imaginary [...] thing";* and "*an exaggerated or idealised conception of a [...] thing".* These are of course detached definitions and whilst they convey something of the intention of discourse theorists in that they show a false, fictitious or imaginary relation to (social) reality, they differ in representing the alternative to falsity, imaginative or fictitious beliefs as *truth.* In concert with many other social constructionists Laclau and Mouffe hold that truth is not an absolute but relative term (Laclau and Mouffe, 1985; see also: Foucault, 1972; Fairclough, 1992:160, Haraway, 1992:313; Burr, 1995:3; Gergen, 1985:266; Phillips and Jorgensen, 2002:175-6). The important distinction to be made here is between myth as non-truth and with the conception of something being mythical but not a lie. Mary Midgley, the moral philosopher makes an important distinction between constructed representations of social reality and misrepresentations of truth:

> Myths are not lies. Nor are they detached stories. They are imaginative patterns, networks of powerful symbols that suggest particular ways of interpreting the world. They shape its meaning (Midgley, 2003:1-4)

So whilst it is that Laclau and Mouffe's understanding of myth shares some conceptual structure with more widely used discursive understandings of the term it also refers to other more abstract conceptions of myth represented by other discourse theories. Some of these are considered next.

8.3 **The concept of myth** – *some linguistic and metaphysical considerations*

Poststructuralists such as Laclau and Mouffe conceive of myths as the outcome of particular discursive articulations which mask contingency and promote a distorted representation of reality (Laclau, 1990:61). The discursive concept of myth as advanced here has a specific relational connection to the theories of Laclau and Mouffe but before proceeding with an explanation of these specific theories it

would seem useful to locate the understandings of myth within a wider discursive context.

8.3.1 Structuralist conceptions of myth

Structuralist conceptions of myth such as those advanced by Levi-Strauss (1968) and Barthes (1974) conceive of myth through a structural explanation of discourse. Levi-Strauss argues that myths cannot be understood discretely in the various societies in which they occur, but that they should be understood in relation to the differences and oppositions that exist between their constituent elements (Levi-Strauss, 1968:209). In this sense Levi-Strauss both reflects and goes beyond the Saussurian model of linguistic theory in that myths are theorised as combining the properties of both *langue* and *parole* (rather than seeing these as discrete functions). Levi-Strauss holds that this is because myths are not simply located within particular times and places but that they also perform the universal function of speaking to all people in all societies (Levi-Strauss, 1968:210). To account for this conflation of both *langue* and *parole*, Levi-Strauss distinguishes myths from speech and language by asserting that myths are both synchronic (timeless) and diachronic (linear) phenomena and that in this respect myths belong to a more complex and 'higher order' of discursive understanding than either speech or language (Levi-Strauss, 1968:211).

Barthes (1974) also asserts that myths occupy a position which is separate from agreed notions of language but unlike Levi-Strauss he positions myth as a 'type of speech' and argues that myth functions as both a "system of communication [and] a message" (p.109). Barthes construes myth as a distinct part of a semiological system and he argues that myths are constructed from the semiological chains (*signifier – signified - sign*) which pre-exist them. In this way Barthes conceives of myths as a *second-order semiological system*, in that (however different at the outset) once 'caught' by myth, a sign (the associative total of concept and image) in the first system becomes a 'mere' (sic) signifier in the second (Barthes, 1974:114). Myths, he argues see all signs as a 'global sign', a "sum of all signs" which forms the final term in the first semiological chain and the first term of the greater system which it [the myth] creates (ibid:115). The relationship between the linguistic system and the myth is established through this process of construction.

Barthes sees myth not as something other than language or speech (as Levi-Strauss) but as a *metalanguage* asserting that it is "a second language *in which* one speaks about the first" (Barthes, 1974:115 italics in original).

The understanding of myth as a semiological system is clearly drawn from a structuralist perspective of language. There are however several other important issues relating to the myth in the discourse which reflect and go beyond such understandings.

8.4 Some Further Considerations

As previously indicated myths are not represented in the literature as lies or detached stories but as imaginative patterns and networks of powerful symbols that not only suggest particular ways of interpreting the world but also shape its meaning (Barthes, 1974; Loughran and Russell, 2002; Howarth, 2000; Gunnarson et al, 1997; Phillips and Jorgensen, 2002; Midgley, 2003). They can be seen on the one hand as a distorted representation of reality, but on the other, an inevitable distortion which establishes a necessary horizon for our acts (Phillips and Jorgensen' 2002; Howarth, 2000). For example, Midgley (2003) suggests that particular forms of machine imagery which began to influence our thought processes in the seventeenth century are still potent today and that, for example, we still tend to see ourselves and the living things around us as pieces of clockwork: items of a kind that we ourselves could make and might decide to remake if it suits us better. This she asserts leads to the "confident language of genetic engineering" and references to the 'building blocks of life' (Midgley, 2003:1)

Such transposed imagery is also used to express ideas in the (cognitive) discourse of education. Drawn from the discourse of somaticised skills, practitioners of education now find themselves using the discourse of somatic skills to engage in purely cognitive processes. In this way we find ourselves conducting ***workshops***, using diagnostic ***tools*** with which to ***hammer-out*** problems. In order to reach ***workable*** solutions we ***map*** and ***navigate*** our way through difficulties; ***construct*** concepts and ***tailor*** specific outcomes. We ***build, join, dissect*** and ***apply*** ideas; ***dovetail*** thoughts and ***mark-out*** our differences. We ***cement*** notions, ***drive***

projects through; ***paint with a broad brush*** before ***sketching*** out ***plans***. We ***un-pick*** issues before ***cobbling*** them back together and ***engineering*** a way forward. We often strive to ***strike the right note*** and keep our thinking ***in tune*** with others. We ***underpin*** our theories, ***cutting out dead wood*** in our ***hunt*** for appropriate intellectual ***mechanisms*** which will allow us to ***reap*** the benefits from the intellectual ideas we have ***sown....***

There is of course nothing new in pointing out that discourses are constructed and reconstructed from established reservoirs of meaning created by language in use. Indeed, this is an aspect of what both Laclau and Mouffe have in mind when they speak of the field of discursivity (Laclau and Mouffe, 1985:111) and Fairclough's conception of Interdiscursivity (Fairclough, 1995:56, see also: Fairclough, 1993:137, 1992:102, and Kristeva, 1986:39). However, as Midgley (2003) suggests, when we become aware of such imagery we often think of it as a kind of surface dressing of isolated metaphors – a kind of optional paint added to make ideas clearer to those on the outside of the discourse. Whereas in reality such symbolism is an integral part of our thought structure, one which is central to our thinking and that: "the way in which we imagine the world determines what we think important in it" (Ibid:2).

Such images are drawn from our everyday experiences because – as indicated by Laclau and Mouffe, Fairclough, Kristeva and others – this is the only place to get them. They appear appropriate and powerful because they relate to everyday life and are meant to influence it. Theories of discourse show that such concepts and images change as the discursive practice around them changes (Parker, 1992; Howarth, 2000; Foucault ,1972; Wodak, 1990; Laclau and Mouffe, 1985 and 1987) and many appear to be reflected back into everyday life in altered forms charged with a new authority drawn from their new ascription of meaning (Midgley, 2003:3). This is a concept which Roland Barthes (1974) must also have had in mind when he asserted that:

> Myth is speech *stolen and restored*. Only, speech which is restored is not quite that which was stolen: when it was brought back, it was not put exactly back in its place (Barthes 1974:125 italics in original)

In this way they seem to have substantial influence, they are active parts of powerful myths which shape the mental maps that we refer to when we want to place something. They do not appear to be external to our concepts but central to them. They are as Midgley (2003) suggests the matrix of thought, the background that shapes our mental habits deciding what we think important and what we ignore and: "that it is for this reason that we need to watch them so carefully" (ibid:4). Myths it seems, distort our perceptions of reality and whilst they may be as Phillips and Jorgensen (2002) suggest an inevitable distortion, they also appear capable of inflicting substantial harm by distorting our understanding and slanting our thinking (Midgley, 2003:4).

An indication of this potential conversion from metaphor to 'fact' (or in Laclau and Mouffe's terms – *Myth*) can be seen in many fields. An example of which might be the tendency to turn people into things, such as the view of behaviourists for example, in treating human subjects as objects (of study) divorced from considerations of human feelings and the associated complexities which understandings of 'mind' engender (Noble, 1991:199-219). Or the (initially behaviourist) view that the human brain is a form of organic computer, a metaphor which has proved very durable and still constitutes 'cognitive science'. As Costall (1991) remarks: "cognitive psychologists have perhaps been too busy congratulating themselves on not being behaviourists to notice that they themselves treat people as machines" (p.163). It is as Midgley (2003) points out often seen as 'scientific' to talk as if people were actually and literally machines and that many people no longer think of this as a metaphor at all but as a scientific fact (p.19). This is not to suggest that metaphors are myths for they clearly are not, but they do appear to be implicated in helping to create the transformative conditions necessary to establish 'facts' as myths. In discourse analysis terms this transformation appears to be contingent on several further factors.

8.4.1 'Stealing' the language

Barthes (1974) postulates that myth might be regarded as a *stolen language* (p.131, italics in original) in that it transforms meaning into form and that through this process of 'language robbery' historical understandings are converted into manufactured versions of reality, and contingent ascriptions of meaning into fixed

and permanent understandings (Passerini,1990:50). Barthes advances another form of *language robbery* – that of *robbery by colonisation*. In this conception he indicates that language is very vulnerable to myth in that it is very rare that language imposes a full meaning which is impossible [for myth] to distort (Barthes, 1974132). For Barthes, the abstract nature of language lends itself to 'multiple contingencies' (ibid:132) a notion which also lies at the heart of much of poststructural theorising in general and discourse theories of Laclau and Mouffe in particular (Laclau and Mouffe, 1985:105-112). Barthes's (1974) claim that language offers an easy opening for myth to grow and develop (p.132) is a point also taken up by Howarth (2000); Samuel and Thompson, (1990); Loughran and Russell, (2002); Parker, (1992); Wodak, (1997); and Phillips and Jorgensen, (2002) and others.

Interestingly, Barthes (1974) ascribes another more 'complete' process of 'robbery' in relating myth to mathematical language – which he suggests cannot be distorted by myth as its meanings are not subject to interpretation but represent 'pure' constructions of meaning and are therefore 'too full' for myth to be able to 'invade' it. In such cases Barthes suggests that myth (which in this context he describes as a "parasitical worm") "carries it [the language] away bodily" (p.132). He asserts that: "It [myth] takes a certain mathematical formula ($E = mc_2$) and makes of this unalterable meaning the pure signifier of mathematicity" (ibid:132). In doing so Barthes suggests that myth takes what many regard as the expression of pure and structured reasoning - the fixed and unalterable language of mathematics - and "takes it [mathematics] away en bloc" (ibid:132). This phenomenon can also be glimpsed in the hypothetical behaviour of 'Schrodinger's cat', the complex world of eleven dimensional space, string theory and quantum mechanics (cf. Bohm, 1996).

Barthes temporal contention that mathematical language is a *finished* language which derives its perfection of meaning from an acceptance of 'death' (sic) he contrasts with the concept of myth – a language which does not and cannot die – and which he asserts draws sustenance from those languages it corrupts and colonises, is perhaps, a rather extreme view (Barthes, 1974: 133). Other thinkers have suggested that we ought not to see myths in this way – as a kind of "external

parasite" which might be "cleared away with the right insecticide" (Midgley, 2003:4) rather, they are organic parts of our lives, of our cognitive and emotional habits which shape our thinking and are more durable than might be supposed (ibid:4). Midgley indicates that myths do not alter in the brisk, wholesale way of much of contemporary imagery and that a belief in instant ideological change is itself becoming a popular modern myth (ibid:4).

8.5 Towards a more focussed understanding

Myths appear to function in the discourse in three important ways. Louie, et al, (2002) suggest that these are: "[that myths] point out and notify; [that they] make us understand something; and [they] impose it on us" (ibid:194). This is clearly a view drawn from Barthes construction of myth (cf. *Mythologies* 1974:117) but is further amplified by their contention that myths serve as antecedents to attitudes and ultimately, behaviour (Louie et al, 2002:194). In this way myths are able to impose constraints on individuals requiring them to act in a manner consistent with the beliefs generated by the myths (Briscoe, 1993:972). This is conception Laclau and Mouffe have in mind when they indicate that whereas *nodal points* organise discourses, *myths* organise a social space (Laclau, 1990:61) and it is this more discursive and constitutive understanding of myth that is considered next.

8.5.1 Laclau and Mouffe's conception of social myth formation

In attempting to understand how Laclau and Mouffe's conceive of myths as derived from the discourse it is perhaps helpful to outline the particular transformative conditions which they theorise as necessary to bring myths into being.

Laclau and Mouffe contend that both people and society may be understood as historical phenomena that are required to function on the basis of existing social structures, structures which presuppose and ensure continuity in the social realm (Laclau and Mouffe, 1985:113). In advancing this notion they contend that society is *an impossibility* and (as such) does not exist. This seems somewhat paradoxical given the first assertion but it may be resolved through their conception of an *objective totality*. Through this conception they replace the Saussurian structuralist tradition, in which all signs relate unambiguously to one another – producing a

stable position of fixed meaning – with one in which signs are structured in relation to one another but which retain their potential for new ascriptions of meaning (Laclau and Mouffe, 1985:111).

Laclau and Mouffe refer to the Saussurian structuralist position of fixed meaning as a *totality*, and to the more fluid conception which retains the potential for the creation of new meanings and new understandings as *discourse*. In their conception of discourse, signs never finish up articulating a *totality* (that is fixed and certain structures) but are always temporary fixations of meaning in what is fundamentally undecidable terrain (Laclau and Mouffe, 1985). In this sense Laclau and Mouffe's refutation of the existence of society is founded on the notion that what we take to be fixed and stable (a *totality*) is in reality fluid, containing an infinite number of possible configurations and ascriptions of meaning. The contrast here is between those who see society or particular social theories (such as *historical materialism* for example) as stable, *objective totalities*, and those like Laclau and Mouffe who contend that society - and by extension social structures – are at all times only partly structured and where temporary closures of meaning marginalise or exclude other possibilities (Laclau and Mouffe, 1985:110-13).

The term *objective* is used here in the sense proposed by Laclau (1990) that the historical outcome of particular political struggles and processes is the production of *sedimented* discourse. *Objectivity* is here related to the notion of *ideology* in that, such 'sedimentation' in the discourse is the outcome of a political construction of the social world where the processes and evidence of what constructed the object have 'faded' from open view and where it has been 'forgotten' that the social world has been politically constructed (Laclau, 1990:60; see also Phillips and Jorgensen, 2002:38; Howarth, 2000:101-5). Laclau and Mouffe contend that we continually produce such societal structures and - crucially for this enquiry - act *as if* they exist as *objective totalities* and in this way we come to verbalise them in the discourse *as objective totalities*. As Laclau points out, when politicians from opposing ideologies speak of 'doing their best for the country' they almost certainly hold very different images of what they mean by 'country' and what they construe as 'the best' course of action (Laclau, 1993:287).

As indicated previously, signs which draw their meaning from the signs which surround them within particular discourses are the *nodal points* of those discourses. They are the essential constructs around which the discourse is organised. In this way signs such as 'the country' or 'the people' are central constructs invested with particular meanings in specific discourses. Where these *nodal points* can be invested with different meanings by other competing discourses Laclau and Mouffe term them *floating signifiers* (Laclau, 1990:28, Laclau, 1993:287). A useful example here would be the term 'body'. Not only is this a *nodal point* in that it is 'empty' of meaning until located within the discourse of (say) medicine but crucially this same term functions as a *nodal point* in the discourses of theology, sport, ballet, art, pornography and so on. In each case it not only functions as a central construct of the particular discourse in which it is a *nodal point*, but can (and is) invested with different meanings by competing discourses thereby becoming both a *nodal point within a discourse and a floating signifier* contested between discourses.

Myths are derived from, and relate to, this concept of *floating signifiers*. Laclau and Mouffe contend that *floating signifiers* that refer to, and therefore support *objective totalities* become established in the discourse as myths. In this way a myth may be understood as that which is established in the discourse as a stable and fixed understanding and which supports the existence of a particular societal structure (Laclau, 1990:61). This fixity of meaning is as has been indicated earlier, the outcome of a sedimentation in the discourse, an attempt at permanence which masks the contingent nature of particular meanings and seeks to replace such contingent understandings with a taken-for-granted, objectivised view which hides alternative possibilities (Phillips and Jorgensen, 2002:37).

An example here might be of value in relating these rather abstract discursive notions of *nodal points* and *floating signifiers* to that of skill. The industrial discourse invests skill with meanings which seem to support the notion of a fixed stable and *objectivised totality*. In this discourse, skills are often presented as hierarchical constructs with human subjects placed on a continuum which locates them as; unskilled, semi-skilled or skilled, where the acquisition of skill confers status and financial benefit (More, 1980; Grugulis 2003). It is also a construction

which supports other interdependent notions such as those relating to qualifications and credentialism, the demarcation of labour and differential pay and reward systems (Turner, 1962; Braverman 1974; Westwood, 2004) and where skill is seen as property of the person rather than a function of the task (Boystzis, 1982; Corrigan et al, 1995; Bolton, 2004).

This common and rather comfortable projection of skill is not as unified a conception as might be supposed. In the industrial discourse, skill is the *nodal point* for two radically different conceptions of skill, each of which has profound implications for this particular debate. Both are characterised (in part) by the previous description of skill – hierarchical, incremental, stratified, status dependent with associated structures of qualification, demarcation of labour and a differential pay and reward system. One is presented as leading to directly to grounded skill in that it relates to the mastery of complex and technological tasks and is the outcome of an extensive period of training and/or education (More, 1980:16). The other conception presents skill as a socially bounded construction, and whilst this has also been shown to lead to the acquisition of 'real' skill (chapter 4), it is also a social artefact produced by restricting entry to certain trades; the aim of which is to artificially delimit access to particular tasks, thereby upholding the privilege of those who have secured access (through apprenticeships and training) and militating against those who have been prevented from doing so (Turner, 1962:108-14; Braverman, 1974:109-112).

A further example would be the discourse related to competence. Here the organising principle (*nodal point*) is clearly also that of skill. Whilst skill functions as a *nodal point* in other discourses, for example not only the sociology of work (as just shown) but also in the discourses of employment, of expertise and (to an increasing extent) education, it can also be conceptualised as a *floating signifier*. In this way, the conception of skill (as competence) became *objectivised* within the discourse as a *totality* and other, pre-existing notions of skill were displaced by this *sedimentation* of contingent meaning. It is a sedimentation of skill for example in which qualifications have become the principal concern in the process of becoming skilled, and as a consequence, one in which qualifications have come to

be seen as a legitimate proxy for skill within the discourses of work and education (Warhurst, 2004).

These opposing conceptions of skill *within* and *between* discourses provide some indication of the difficulties involved in considering skill as a fixed conceptual structure without contingency. The conception of *grounded skill* appears to have formed the basis of the accepted understanding of skills for the past several hundreds of years More (1980). However as the previous chapters have made clear, conceptions of skill have become more diffuse and complex and seem to have opened the way for a change in the discourse.

A transformation appears to have taken place. It is a transformation which appears to have reconfigured skill as a particular kind of socially bounded construction, masking earlier conceptions of skill and creating a new sedimentation in the discourse, where skill is seen not as a contingent conception which functions differently in different structures but as an *objective totality*. It is an approach which appears to have led directly to the mythologisation of skill within the discourse of education.

8.5.2 Skill as a Social Myth

The principle of myth formation proposed by Laclau and Mouffe (1990:61) is that *nodal points* (in this case *skill*) in competing discourses become (through sharing the same *nodal point*) a *floating signifier*. A *myth* is formed when this *floating signifier*, through a process of articulation and hegemonic practice creates a sedimentation of the discourse, privileging one view over others, masking contingency and replacing a pluralistic view of skill with a single objectivised viewpoint where skill is taken to be a uniform construction and comes to dominate the discourse (*a totality*).

It was shown (in chapters 2, 4 and 5) how skill functions as an organising construct (*nodal point*) in the various discourses investigated. In this way, skill can be seen as functioning not only as a *nodal point* but also as a *floating signifier* in the discourses of work (of industrial and national economic performance), in the rhetoric and policies advanced in the area of employment and education over the

past several years, in cognitive psychology (expertise and skill acquisition), and (crucially for this enquiry) education (where it is now deemed sufficiently significant to form part of the title – *Department for Education and Skills*). And further, that in functioning as a *floating signifier* it has been shown how each of these discourses struggles to invest skill with their own particular sets of meanings, many of which are in strong opposition to one another.

The conversion of skill as a *floating signifier* to skill as an *objective totality* would seem to be consequent on the impact of governmental rhetoric, policies, actions and hegemonic articulations sustained over a period of more than 25 years (Chapter 2). This has been shown to have privileged the views of one discourse (that of CBET – strongly influenced by the supporting discourses of industry and national economic performance) over that of education in general and higher education in particular (chapter 2). This in turn appears to have supported the creation of skill as an *objective totality* - and in Laclau and Mouffe's terms positioned skill as a particular kind of social construction - a *myth*.

To be completely clear at this point, skill *perse* is not posited as a myth. Rather it is the particular socially bounded construction of skill, which has arisen out of the rhetorical interventions, discursive articulations and hegemonic processes which is posited as a *mythic notion* of skill. This ought not to be considered as simply an academic distinction, nor ought it to be thought of as some benign construction. As was indicated earlier, whilst myths are an inevitable distortion of our perceptions of reality in providing a necessary horizon for our actions (Phillips and Jorgensen, 2002) they are also 'dangerous constructs' in that they are able to both distort our understanding and slant our thinking and are capable of inflicting substantial harm (Midgley, 2003).

8.5.3 Creating a Myth of Skill – *some implicit outcomes*

There are a number of outcomes implicit in the mythologisation of skill. The *sedimentation* of the discourse produced by such a process masks previous meanings and in doing so seeks to hide earlier conceptions of skill. These previous understandings discussed earlier and related to (for example) domain and occupational specificity, transferability, skill acquisition as related to time, repetition,

practice and so on, have been subsumed by the myth which both conceives and projects skill as unproblematic in this regard.

There is a further outcome which is contingent upon the mythologisation of skill. By replacing previous understandings of skill with what Laclau and Mouffe describe as a 'taken-for-granted' or objectivised view (cf. Laclau, 1993:287) the mythologisation not only masks past understandings of skill but also hides what else it might be. That is, it seeks to remove contingency – that things could be different and will change over time. Current voices - declaiming the domain specificity of skill (Ericsson and Crutcher, 1996), the time-related nature of skill (Eraut, 2001), repetition and practice (Ericsson and Smith, 1991), concerns about transferability (Lajoie, 2003), the confusion of skill with qualifications (Warhurst et al, 2004), issues of definition and meaning (Tomlinson, 1997), concerns about generic skills (Bennett et al, 2000) and the nature of competence (Barnett, 1994) - are dominated by the myth which as Barthes (1974) indicates not only 'points out and notifies', but also 'imposes itself upon us' (p.117). We are it seems, interpellated by the myth of skill. In responding to what has become a more ideological position than the normal pragmatic processes of educative practice we have (to use Althusser's expression) been 'hailed' by the discursive ideology of 'new skill' and as a consequence, we appear to have been drawn in to the *myth* of skill.

8.6 Some Implications for Higher Education *and* Skill

It is contended here that the myth of skill has distorted our perceptions of both higher education *and* skill and that the mythologisation of skill has resulted in bilateral damage to both structures. Myths, it has been argued organise social space (Laclau, 1990; Phillips and Jorgensen, 2002; Loughran and Russell, 2002) and in this way the myth of skill has had a significant impact on both higher education (as a social structure) and on skill itself (positioned as a social construction).

What follows is an exploration of some implications for both structures as they are interpellated by the myth (Althusser, 1971). That is to say what it might mean for

skill to be mythologised in this way and what might be the implications in having such a mythic notion of skill functioning as the *nodal point* of higher education.

The argument will follow two broad strands. The first will pursue the line that the myth of skill is in fact antithetical to both its stated function and purpose. The second line of argument is that when placed in higher education this social construction of skill is iatrogenic.

8.6.1 Unpacking the Myth - some considerations relating to skill

In considering this social construction of skill, Barthes (1974) contention that myths are constructed from 'stolen language' can be considered alongsde Wittgenstein's (1953) assertion that problems of meaning become distorted when language used in one discourse is asked to function in another (*PI*:70-91). This appears to be what has happened in the mythologisation of skill. The discourses of industry, economics and political rhetoric have (to extend Barthes' metaphor) been 'burgled' for particular aspects and used not only to create a new understanding of skill but also to subsume previous understandings. As indicated previously this has been done (in part) in arguing for skill by arguing against higher education. Chapter 2 showed how the landscape of the discourse shifted, moving away from notions of higher education related to the development of the individual and towards higher education as a key function of national economic performance (Wolf, 2002; Perry, 1994; Barnett, 1994; Assiter, 1995). Government papers and policy documents are replete with statements related to higher education but drawn from industrial and economic discourse. For example:

> National economic imperatives support our target to increase participation in higher education...[we need] new types of qualifications tailored to the needs...of the economy...we will support employers...on the skills they need (*The Future of Higher Education*, 2003:57-8).

The language used is often overtly industrial/economic displacing the language of education, for example:

> Graduates will need to be 'knowledge workers' and members of a 'learning organisation'...'manage' their own career...make an immediate

> contribution to the profitability and competitiveness of the employer (*Skills Development in HE*. DfEE, 1998:3).

The interpellation of education by the industrial discourse is also evident in the phrases used within documentation produced by and for education, for example:

> The education and training market...[we must] ensure a balance between supply and demand (DfEE 1999:16). Changes to the supply side...More productive workforce...reforming the supply side...education and productivity...output per hour worked (DfES, 2003). Oversupply of graduates (LSC, 2002). [honours degrees] are different products...the supply of places does not dictate demand for HE (HE Policy Institute, 2003).

Chapter 2 also showed how the discourses of industry work and employment increasingly found its way into the discourse of education through (for example) major government initiatives such as the New Training Initiative and National Vocational Qualifications. It would seem that the creation of this particular social construction (the myth of skill) began when constructions of skill used in different discourses began to be conflated into one particular understanding. In this way it would seem that the powerful articulatory forces acting upon higher education discussed in chapters 2, 4 and 5 have promoted a view that through the discursive practices of industrial and economic conceptions of skill we seem to have come to accept that not only is it the function of higher education to deliver the skills needed for national economic health, but that in many important respects skills may be considered as constitutive of higher education and higher education as constituting skills (for example in the arguments advanced in chapters 4 and 5 on the nature of generic 'transferable' skills).

Whilst being interesting, and predicated on uncertain grounds, this is not the myth as such, although it clearly contributes to the creation of the *objective totality* which supports the construction of the myth. Rather, it would seem to have helped to promote a classic sense of 'false consciousness' by the imposition of a particular ideological viewpoint of what higher education is and what function it ought to serve. Such ideological determinism is apparent in the approaches taken to CBET, in the separation of know how from know that, in the view that education is for particular economically extrinsic ends and in the politically hegemonic domination

of the discourse of education by the discourses of industry and economics. In this way it seems that the approach taken towards skill over the past 25 to 30 years is rather more representative of an ideological approach than – as suggested by the political rhetoric – a pragmatic one.

8.6.1 An antithesis of function and purpose?

To return directly to the first argument – that the consequence of mythologising skill in this way is to render it antithetical to its own stated function and purpose. The argument can be stated briskly; skill has been shown to require several fundamental elements essential to its acquisition. These, it has been argued (Chapter 5) are grounded in both historical and current understandings of skill acquisition and are supported by a robust evidential base, whereas the construction of skill which has emerged from the discourse of education over the past 20 years is not grounded in this way.

The consequence of this would seem to be that whilst it is that conceptions of skill discussed earlier have the *necessary conditions* to support the acquisition of skill, the mythic notion of skill as separated from understanding (Barnett, 1994), with insufficient time for practice (Sloboda et al, 1996), no in-built mechanism for repetition (Ericsson et al, 1996), and the requirement that it should be context independent (Billett, 2001) do not. To state this directly, skill may be legitimised as functioning as a myth within the discourse of education not simply because it conforms to discursive understandings of myth formation proposed by discourse theorists. But (importantly) because in following this ostensibly appropriate process of 'skill acquisition' within higher education, it would seem that it is not *structurally possible* to acquire such skills.

This then is the charge laid against the current conception of skills within the discourse of education: that it would seem that the very processes required to ensure skill acquisition are *structurally incapable* of delivering meaningful skilled performance at a level compatible with higher education. And in addition, it would seem that the rhetoric which continues to insist that higher education is configured to deliver skills (and the weight of empirical evidence which suggests that it is not)

are further indicators that the notion of skills as delivered through higher education functions more as myth than reality.

8.6.2 Higher Education and Skills – *'cure' or iatrogenisis?*

The second argument advanced here is that the introduction of skills into higher education to 'cure the problem' is iatrogenic and that it is the 'treatment' rather than the 'problem' which is causing the 'illness'.

It was shown earlier that arguments were advanced *for* the inclusion of skill into higher education by arguing *against* higher education (Usher, 1997; Warhurst et al, 2004). The principal arguments were, as indicated in chapters 2, 4 and 5, centred around the accusation that higher education was failing to provide industry with suitable skilled people. The particular nature of these skills was (and remains) contested, but with the emergence of several reports and policy documents throughout the 1990's whole sets of generic skills were considered to be an integral part of the higher education curriculum. The 'problem' of higher education as being considered hugely expensive but increasingly irrelevant to contemporary needs, too slow to change and too fixated on academic disciplines (UNESCO Report, 1972) was to be addressed by placing greater emphasis on employment considerations (Drew, 1998; Wolf, 2002; see also, *Higher Education: a new framework*, 1991). This was to be the 'cure' needed to restore higher education to health (at least in so far as it was considered by those outside of the Academy to be 'sick') in that it was not providing its graduates with the skills 'demanded' by industry.

As has been shown (chapter 4) these 'skills' are a diffuse mixture of personal attributes, dispositions and attitudes (Keep and Mayhew, 1999) together with a rising level of new 'employability skills' – motivation, teamwork (Grugulis, 2003) and an increasing requirement for 'emotional skills' (Bolton 2004). It seems hard not to see such 'skills' as the function of employment rather than education, but as was pointed out in chapter 4 employers continue to report such 'skills' as 'shortages' in the graduates they recruit (LSC, 2002, 2003). It seems clear from the new discourse of skills that in demanding 'work ready' graduates employers and government have shifted the responsibility for the provision of such skills out

of the workplace and into higher education (Grugulis, 2003; Westwood, 2004; Warhurst et al, 2004).

This does not seem to be a sustainable position. As Barnett (1994) indicates the skills of academe and employment are not one and the same (p.168). Higher education is not concerned with providing the specifics of industrial and commercial performance. Indeed how could it? given the highly differentiated nature of employment together with the rapid changes which constantly reshape industry and commerce (a proposition seemingly recognised in the conversion of 'skills' into 'generic' skills). The argument was advanced earlier however, that the nature of skill is specific and not generic – arguments supported by a great deal of well-founded empirical evidence - this argument is unable to be counter posed by evidence of generic transfer.

The question then arises as to how might higher education legitimately engage with such necessarily short term objectives as those required by industry whilst still remaining true to its own sense of purpose? The answer would seem to be that it ought not, and perhaps more pointedly, that it cannot. The 'cure' which has been administered to higher education by conflating the notions of economic performance (as being directly related to skills in the workforce) with the notion that it is the function of higher education to provide such skills, is deeply problematical.

The conception of 'skills' which have been constructed to fill this 'gap' it has been argued, conform to discursive understandings of myth, in that they are brought into being as providing a 'necessary horizon' for our acts (Phillips and Jorgensen, 2002) – in this case the requirement to engage with perceived threats to our national economic performance. The realisation of a discourse of higher education constructed around this notion of skill as its *nodal point* would seem to be the logical extension of such a position and indeed this (as shown in the previous chapters) would seem to be the case. However, such a discursive conception would not only require higher education to function in radically different way that at present but it would also seem to require a substantial revision to its purpose.

Were such a radical restructuring of higher education to take place, then it follows from the arguments outlined earlier, that in order for higher education to successfully engage in a process of high level skill transmission it would require substantial increases in the duration of the courses undertaken, and substantial decreases in the variety of subjects studied (chapter 5). It would also seem that higher education would have to be delivered along the same lines as any other skills-based programme of study in that the outcomes would need to be determined at the start of the process and more rigid methods of assessing would need to be tied to these known outcomes (chapters 4 and 5). Programmes of study would need to be both predetermined and fixed to widely agreed standards (chapter 4). It would, in short be required to function more as a vocational programme of study – a kind of academic apprenticeship.

This would seem to be such a radically different proposition that it would be hard to recognise such an undertaking as higher education, irrespective of however high level might be the skills that such a process might produce (Barnett, 1994:61). These arguments might go some way in explaining why it is that skill could not be considered as the *nodal point* for an appropriate discourse of higher education.

This would seem to leave the notion advanced earlier of skill – as a *nodal point* of the discourse – in something of a difficult position, were it not for two particulars. The first is that higher education does in fact function in several of the ways indicated above. With the incursion of skills into higher education has come an increasing requirement that learning outcomes must be specified in advance and for the instruments of assessment to be locked-in to the learning outcomes (QAA guidelines, 2003). There has also been a much greater emphasis placed on the metrics of performance, requirements which are increasingly being applied not only to students but to large numbers of supporting structures within universities themselves.

The second particular is that whilst skill has undoubtedly become something of a *nodal point* within the discourse, the construction of the skill in question would appear to be this mythic notion of skill. It is a notion which seeks to delimit the

scope and function of higher education whilst bringing none of the advantages of grounded skill, yet seemingly conferring a great deal of difficulties many of which would seem inimical to higher education. It would seem that in engaging in a process of 'curative' measures for higher education what has in fact been taking place is a process of iatrogenisis, where the treatment is rather more symptomatic of the illness than the cure.

Part Five

Part Five (chapters 9 and 10) attempt a reconceptualisation of skill by problematizing constructions of skill within higher education; analysing 'sites of damage' to both skill and higher education before reaching some conclusions about commensurable and incommensurable uses of skill.

Chapter 9 Towards a Reconceptualisation of skill

9.1 Introduction

In exploring the several conceptions of skill, what has emerged is that different circumstances appear to have brought about different understandings of the term. Whilst it seems clear that the social world is able to operate different conceptions of skill, it is less clear that there is an understanding that these different conceptions have outcomes which are consequent upon their particular construction and use.

It has been shown that many constructions of skill appear to be predicated on less than certain ground. If a reconceptualisation of skill is not to be open to the same criticism then it would seem essential that it be conceptualised from a strong base of grounded evidence, or the process would stand in danger of constructing a further mythic notion of skill.

This is a process which will be undertaken shortly, but before engaging in a dialectic about what the relationship between skill and higher education might become it seems appropriate to begin by outlining a brief characterisation of what skill in higher education is currently taken to be. And, given that skill has been driven deeply into higher education by the dubious rhetorical device of arguing for skills by arguing against education it seems reasonable to use this same device to reveal what this process has achieved. It is not a flattering portrait.

9.2 Rhetoric and Analogy

Analogies can be dangerous constructions but of necessity one is required here in order to reveal something of the issues facing higher education. The analogy which follows relates to running a medical school in a large provincial university.

The Analogy

A new dean of faculty is required and on applying for the post she receives a copy of the government's *'new mandate for medical education into the next century'*. The mandate is based upon a rhetoric which insists that first class medical training is absolutely vital if we are to have a health service which can keep pace with our

international competitors, and that the key to success is to place medical skills at the very heart of the strategy. Many papers and policy documents have criticised medical training as being too fixated on outdated ideals and point out that the time taken to gain a medical degree is largely historical, and that what is important is not what doctors know but what they can do. Other criticisms begin to emerge indicating that practitioners are too concerned with maintaining 'unnecessary' separation between disciplines and that the health service really needs doctors with generic skills, flexible practitioners able to engage in all aspects of medical practise and that the success of the health service depends upon these skills.

In taking up the post she receives the news that the mandate requires immediate action to reduce the current duration of the programme from 6 to less than 3 years. The previous programmes of clinical practice in the local hospital are to be discontinued and replaced by an occasional series of 'virtual simulations' in the classroom. The programme learning outcomes require that all medical personnel must, on graduation, be able to utilise their skills in any area of medical practice, and on entering the profession they must be 'employment ready'. The new dean is told to construct the programme around generic skills on the understanding that all generic skills are transferable. As a final consideration she is reminded that in undertaking the programme in half the time with little or no facilities for practice, she must produce practitioners who are not only instantly employable in any field of medicine but as the programme is now focussing more on skills than other 'unnecessary' aspects of education, the students are expected to be more skilled than those who have gone before.

Viewed like this such a prospect hardly seems tenable and whilst this is accepted as something of a caricature of the position facing higher education it does seem to be a reasonable positioning of the processes higher education is being asked to engage with. It has been contended by Althusser (1971:174) that as subjects we are interpellated by ideological positions. As previously discussed the processes which appear to have driven forward the notion of skill as a key principle of education can be understood as ideological in nature (Phillips and Jorgensen, 2002). This process can also be understood as the natural concomitant of discursive articulation where antagonistic forces are resolved through hegemonic

practice into sedimented discourse (Laclau and Mouffe, 1985). Although these are different process, both are in agreement that whatever the social mechanism, we as subjects (in higher education) are interpellated by the discourse (of skill). This is a discourse which interpellates us into the irrational world of the previous analogy where pragmatics appear to be subsumed by rhetoric, and rationality would seem to be defeated by ideology.

As indicated throughout this work, conceptions of skill are not value free – they are particular constructions with consequences in the social world. For higher education the consequences of engaging in a mythic construction of skill would seem to be profound. And, if there is to be any possibility of a rational reconceptualisation, first it would seem essential to reveal what this mythic construction means for higher education.

9.3 Some Outcomes for Higher Education

What follows is based upon the logics advanced in this enquiry. They are a difficult and problematic set of issues and ought not to be shirked. The issues are both structural and philosophical and at this stage of the enquiry can be stated briskly.

- That to engage in a process of higher education predicated on the current conceptualisation of skill is to stand in danger of engaging in a fruitless activity.
- That such a process interpellates the academy into an ideology which is counter to accepted notions of higher education.
- That by engaging in the values related to skills we stand in danger of displacing the intrinsic values of higher education.
- That such a process changes the perception of higher education held by all stakeholders.
- That we are engaged in an iatrogenic process which is damaging higher education.

Each of these will now be considered.

9.3.1 Higher education as a fruitless task?

This argument is an extension of the issues advanced in chapter 5 and is based on the understanding that the acquisition of skill is contingent on well-rehearsed

and grounded arguments which show that without extensive time, practice and repetition there can be no reasonable expectation of skills being learned (Ericsson and Crutcher 1996; Sloboda et al, 1996). Moreover, not only do skills appear to be highly correlated to domain specific, rather than generic areas (Ericsson and Smith, 1991; Billett, 2001) but there is insufficient evidence to allow of their transfer to new situations and circumstances (Lajoie, 2003; Ericsson and Lehmann, 1996). Now to state this directly; what might be the value of engaging in a process which has very little chance of inculcating the skills in the first instance; based upon a seemingly false premise of generalisability and with what appears to be only the remotest possibility that the skills (should they be learned) would able to be used in the way intended?

These are not the only aporias to be advanced against such a seemingly irrational undertaking. For the past several years industry surveys have reported that such skills have not found their way into the workforce in the way anticipated (chapters 5 and 6). This appears to have two implications. The first would seem to indicate that there must be something structurally problematic with a process which has cost so many billions of pounds yet has yielded so little in intended outcomes. It is beyond the scope of this enquiry to engage with this economic issue but logic would suggest that such a root and branch revision of education which placed skills at the centre of the process ought to have had more of an impact on those for whom the process was ostensibly changed (the employers).

It is worth pursuing this issue of skills shortages a little further. In 1993 the National Advisory Council for Education and Training Targets (NACETT) published its targets which indicated that: "by the year 2000, 50 percent of the workforce should be qualified to NVQ level 3" (NACETT, 1993). The target (regarded as 'adventurous') was thought to represent a resolution to the skills problem faced by industry. The Confederation of British Industry (CBI) in its report 'Quality Assessed' (1994) strongly supported the targets indicating that it would: "improve competitiveness and [would] turn technological and economic change to the UK's advantage" (p.6). The latest figures from the Learning and Skills Council indicate that the number of employees with formal qualifications has risen from: "about three quarters of the employed workforce in 1993, to around 90 percent by 2003

[and that] almost 50 percent of the employed workforce is qualified to at least NVQ level 3" (LSC, 2003, para:1.18). However, meeting the 'adventurous' targets set in 1993 does not appear to have resolved the problem and the same concerns continue to be raised about 'international competitiveness' as have been raised for more than 30 years (chapter 2) (see also, Wolf, 2002).

The LSC report indicates that despite record levels of qualifications achieved "problems still remain" (para.1.20) with the concern now switching away from the volume of qualifications to problems with: "standards being reached, especially in comparison with the UK's main competitors" (para.1.21). This is of particular concern here as it would seem to relate to the extent to which a qualification can be said to confer skill. This was an aspect examined earlier in the tendency of governmental agencies and industry to conflate the notion of qualification with that of skill (chapters 5 and 8). The LSC report clearly states that "qualifications are [used] as a proxy measure of skill" (para.1.22). The problematic nature of improving the 'skills supply' may have something to do with the fact that it is a 'moving target' and that in a modern economy supply of skills will always trail demand for skills. But as the previous analysis suggests it may also have something to do with the widely held assumption that skills are an inherent component of qualifications and that qualifications may therefore be taken as an appropriate proxy of skill.

The difficulty is that as employers continue to report skills shortages despite rising numbers of qualifications it would seem to suggest that the second implication – that skills are not finding their way into the workplace because of profound structural problems which prevent their inculcation and transfer – may well be significant (chapters 5 and 7).

It is not contended here that students are emerging from higher education 'unskilled'. It is clear that higher education provides graduates with very many abilities which they are able to use in employment. What is contended however, is that the suite of 'skills' implied as being conferred to graduates by government interventions into higher education is not supported by appropriate evidence and

may well be countermanded by employers reportage of 'skills shortages' in undergraduates.

9.3.2 Interpellation and ideology

The second issue is that such a process interpellates the academy into an ideology which is counter to accepted notions of higher education. The difficulty here appears to have arisen from a confusion between a historical mandate whereby higher education was intimately engaged in a process related to a vocation and the much more recent notion of vocationalism. As Barnett (1994) indicates whilst the notion of vocation is explicitly value laden and reaches back into sets of social and academic values which imply a deep level of personal commitment to the subject and to the values and obligations implicit within the subject, the contrary view of vocationalism as being seen as a descriptive term which is value-free is misplaced (P.67-8). Barnett argues that it is an ideology representing the interests of the economy and that as such represents a radical discontinuity with notions of vocation and past understandings of higher education.

The articulatory processes which have led to such a radical shift in the discourse were discussed earlier, and as was shown these processes have been successful in driving the discourses of industry and economics into the discourse of education. With the overt emergence of skill into the discourse higher education, the 'social actors' appear to have been further interpellated by a discourse which places the values and outcomes of economics as central to the purposes of higher education and in this way, it may be said that the established values of higher education appear to have been displaced by the inherent ideology of a skills-based approach. It is an approach which has had the powerful forces of industry, economics and the state in helping to establish a hegemony which has privileged this particular view over previous understood meanings and has established a new sedimentation in the discourse.

Whilst representing the processes which have undoubtedly taken place over the past several years, this might be considered by many to be a natural extension in the shift from vocation to vocationalism, and that to be concerned about such processes it is to be overly concerned about something which merely represents

the latest understanding of higher education. However, whether this is the case or not the question arises as to where might such a process stop? And what might be the outcome for the nature and purpose of higher education if the academy is simply reflective of particular hegemonic societal interventions? In such a case it seems reasonable to ask – what of the academy's own sense of certainty of purpose?

9.3.3 The Value of Higher Education – *a pragmatic view*

The third issue is that by engaging in the values related to skills we stand in danger of displacing the intrinsic values of higher education. This is related to the previous issue but extends the argument away from existentialist understandings of vocational values and particular philosophical considerations and into more prosaic and pragmatic territory.

This represents a point of departure from the arguments advanced so far. It is not the intention of this work to assert that skill as such *ought not* to form part of higher education (although it is recognised that this is a legitimate position and has been represented in this enquiry). Neither is it asserted here that skill *cannot* form part of higher education. It is clear for example, that HE institutions can and do impart skills to their students. What is contended however, is that if skills are to form part of higher education they must conform to the principles of acquisition stated earlier and (crucially for this consideration) they ought to be of a level appropriate *to* higher education.

This does not seem to represent the position in the discourses of industry and economics where the requirement appears to be for 'low level skills' (Warhurst et al, 2004; Grugulis, 2003) and 'intermediate skills' (LSC, 2003; DfES, 2003). Here the largest demand (by industry) is for low level skills of the kind referred to in chapters 5 and 8 (cf. Rainbird et al, 2004; Bolton, 2003; Westwood, 2004). There is a concern that industry is too reliant on such skills and that efforts ought to be made to lift the economy out of its 'low skills equilibrium' (ibid) but documents from the LSC and the DfES continue to reiterate that the economy is in particular need of 'intermediate skills' (LSC, 2001, 2002, 2003; DfES, 2003). To be clear about this issue, these are skills which are classified as 'equivalent to NVQ level 3' (DfES,

2003:19). That is to say they are sub-degree level and ought not to form part of a higher education qualification, yet it is these skills which are reported as lacking in graduates by employers (LSC, 2003). There is some evidence that the requirement for low skills is *increasing* despite the message that we need a 'high skills' economy (DfES, 2003). This is particularly problematic, as skills initiatives are driven by 'supply-side' measures (education and governmental initiatives) and are therefore thought to distort the real picture of 'demand'. The rhetoric is of high level skills, but the reality would seem to paint a different picture (Warhurst, 2004).

There is a further issue to be addressed here. Many of the 'key skills' which now form part of post-compulsory education curricula are also to be found in the curricula of secondary education (Drew, 1998). Whilst it is accepted that it is possible to engage with the same skill at several levels, the evidence from employers and recruiters would seem to suggest that graduates are lacking in many of these basic "transferable" skills. This would seem to suggest that far from higher level education being able to concentrate on higher level skills (the building blocks of expertise) they are faced with a remedial approach to 'key skills' at levels below an appropriate threshold for higher education. This would also seem to suggest that the content of higher education courses stands in danger of being displaced by the requirement to engage with such skills (a principle which already appears to be established in mathematics and science courses). Even if this were not the case, it seems reasonable to suggest that given the apparent lack of key skills in pupils leaving secondary education, what opportunity might there be for higher education to build higher level skills on such an 'unskilled' base?

This leaves two further outcomes. The first of is that the process of engagement with such skills changes people's perception of higher education. This issue seems to be closely related to the perceptions we hold of skill and consequently is attended to in the next section.

9.3.3 Skills and Iatrogenesis – *collateral damage*

The final issue is that we are engaged in an iatrogenic process which is damaging higher education. Chapter 6 outlined the argument that the supposed 'cure' to be administered to higher education was that it be 'treated' by an 'injection' of skills.

The medical allusion would seem to be appropriate. Midgley (2003) suggests that we ought not to see myths as an "external parasite" (p.4) but here, the object in question is not the myth of skill but its outcome. In chapter 6 it was argued that the myth of skill rather than a construction of skill could be part of the reason why the discourse of education and the process of education might be in such a state of uncertainty.

The previous arguments advanced here is that in locating the notion of skill as a *nodal point* in the discourse of higher education we have been interpellated by an ideology which is not only antithetical to previously held notions of higher education but may displace key principles and processes of HE and stands in danger of rendering large aspects of higher education as a fruitless activity. It seems that we may have been engaged in a process which has (and continues) to inflict damage on higher education. It is a process which seems to be inimical to the process of higher education, but as indicated previously, the iatrogenic nature of this process appears to have created a bilateral site of damage, and it is to the damage inflicted on skill itself that we turn to last.

9.4 Some Outcomes for Skill

The following outcomes are as a result of examining the several discourses In the process of this enquiry. There are several sites of damage to skill as a consequence of its mythologisation in the discourse. Whilst these arguments have been advanced in various parts of the dissertation they can be usefully and briefly drawn together here. The issues relate to the conceptualisation of skill within the discourse of education. They all appear to have been imbued with a deep sense of ambiguity and in conforming to mythic conception of skill represent a profound discontinuity with the past. They are represented here as paradoxes within the discourse, these are:

- **Knowledge and Understanding** - That skill is presented as functioning separately from knowledge and understanding whilst being required to function as if it were knowledge and understanding.
- **Skill by Proxy** - that skill is taken to be an inherent property of qualifications, yet qualifications are increasingly recognised as not conferring skill.

- **Generic/Specific Skill** - that many skills are taken to be non-specific yet such skills are only demonstrable through specific deployment of such skills.
- **Time** - that the acquisition of skill can be decoupled from the time take to acquire it , yet the acquisition of skill requires large amounts of time.
- **Damage by Enhancement** - that the reputation of skill has been seriously damaged by actions ostensibly designed to enhance it.

Each of this will now be considered.

9.4.1 Paradox 1. Knowledge and Understanding

Skill is presented as functioning separately from knowledge and understanding whilst being required to function as if it were knowledge and understanding.

The paradox here is that whist notions of competence regard skill as essentially separate from understanding (Barnett, 1994) and notions of generic, transferable skills are built upon the notion of competence (Dearing, 1997), the generic skills are required to function as if they were knowledge and understanding. To take Peters' (1966) point that skill is not something that can be learnt in a flash of insight or from reading books or from instruction alone (p.14). Following this line of reasoning how might we then consider the 'skill' of 'problem solving'? In its current (mythic) construction skill is treated as knowledge and understanding in that it is not given sufficient, focussed study and practice to function any other way (certainly not as a skill). Rather, it would seem that it is required to function as the outcome of knowledge and understanding in that students are required to 'fill in the blanks for themselves' as it were. That is to say that skill is taken to function as *insight,* for problem solving (it could be argued) is a matter of insight, in that it is not possible to teach someone how to solve all possible problems. To do so they must engage with novel problems through a process of knowledge, understanding and insight. The same principle may be extended to communication skills, teamworking and the like. All are regarded as skills yet are required to function as if they were knowledge and understanding. The damage to skill here is the assumption that when configured in this way that skill will only give way to knowledge and insight. This is an approach which if taken towards plastering a ceiling for example, using only insight and a good book would simply leave the

'skilled' worker and not the ceiling coated in plaster. Such an approach both demeans the nature of skill and ensures that it will not be acquired.

It would seem to be a paradox which might only be resolved through an understanding that generic skills are either not skills (but aspects of knowledge and understanding) or by an acceptance that such 'skills' are not actually acquired.

9.4.2 Paradox 2. Skill by Proxy

Skill is taken to be an inherent property of qualifications, yet qualifications are increasingly recognised as not conferring skill.

Several years ago a particular aphorism doing the rounds was that NVQ stood for Not Very Qualified, a more accurate representation however turned out to be 'not very skilled' (Spencer, 1995). It is an issue which many employers now take seriously indicating that many employees are much less skilled than their predecessors (Senker, 1996; Smithers, 1993). Indeed it has been contended that NVQ's lead to little benefit for either the individual or the employer (Grugulis, 2003). This relates directly to understandings of qualifications as skills. Steiger (1993) argues that qualifications are a readily understood form of shorthand for skills and can only ever be a proxy for skills. Steedman (1993) indicates that given this understanding a principal measure of success of such qualifications is their capacity to increase the skill levels of those holding the qualifications and not the number of certificates issued.

It was shown earlier that in surveys of employers, many indicated that graduates were lacking in both particular and generic skills (LSC, 2002, 2003). It appears that whilst the number of qualifications is increasing the number of 'qualified' people with skills is rising much more slowly (Grugulis, 2003). This would seem to place the understanding of what it means to be skilled in some difficulty. It appears that governmental agencies charged with delivering the skills agenda are happy to include (for example) key skills in higher education qualifications and therefore feel able to assert that a higher proportion of the population now has these key skills. What is less clear is the degree to which such qualifications can be said to confer these skills. The evidence would seem to suggest that they do not.

The damage to skill here is conflating the notion of being qualified with that of being skilled. As has been noted with NVQ's, the conflation of these two notions reduces the value of one (skill) when the other (the certificate) looses credibility.

9.4.3 Paradox 3. Generic/Specific Skill

Many skills are taken to be non-specific yet these skills are only demonstrable through the specific deployment of such skills.

This is a particular problem for high level skills. It was argued earlier (chapter 6) that if skills were to have a function within higher education then these would need to be entirely congruent with the aims and outcomes of higher level study, that is to say they would need to be higher level skills. This much seems rational. It was also shown (chapter 4) that many of these skills are conceived as generic in nature and as transferable in principle to new situations and circumstances. There would seem to be no particular rationale which might be advanced which would indicated that such skills are necessarily of a lower order than the other constituent skills of higher education. Indeed, a good case might be mounted that such generic and transferable skills would need to be of the higher level type given that they are required to be deployed against novel and non-analogous situations. However, there is a particular problem here. The empirical studies of high level skills show that such skills are strongly domain specific and that expertise which utilises these skills is focussed across a very narrow band of ability (chapter 5). This would seem to militate against the notion of skills as being somehow detached from domain specific knowledge, able to be deployed in any given situation or circumstance. The acquisition and demonstration of high level skills would seem to require a focussed objective for those skills. As was indicated earlier, skill is about *something* and not anything or everything. This would seem to suggest that skills of the appropriate level for higher education could not logically be generic and would have to be either of a lower level or not conform to the notion of 'skill'.

The damage here is that skills taken to be generic constructions, are regarded as potentially superior to specific skills. It would seem that particular skills are 'given admittance' to higher education because they are assumed to transfer to new situations and circumstances and in this way may be thought of as high level. The

evidence would seem to suggest however that it is the specific skills which function at the level of expert performance and generic skills which do not.

9.4.4 Paradox 4. Time

The acquisition of skill is not correlated with time yet skill requires large amounts of time to acquire.

In chapter 5 the argument was presented that high level skills require several hundreds if not thousands of hours to acquire. Earlier (chapters 2 and 4) it was shown how the rhetoric and subsequent redefinition of skill de-coupled time and process from the acquisition of skill (Jessup, 1991). Whilst the general principles of skill acquisition hold that time, practice and structured performance are an essential prerequisite of acquiring skill this principle is much less certain at much lower level of 'basic competence' where (dependent on what is regarded as skilled) some operations can be 'mastered' in small amounts of time. It is this notion which appears to have given rise to the notion of time and skill as largely unconnected functions. There are however two objections to this line of thinking. The first is that it does not follow that because vanishingly small 'elements' of competence might be gained in this way, that this will necessarily sum to a much greater level of skill. Indeed, there is evidence to suggest that this not the case (Smithers, 1993; Senker, 1993). And further, that qualifications based on this approach are failing to deliver skills (Grugulis, 2003). The second objection is that these are not the skills under consideration. It has already been argued that skills which appear in higher education must be congruent with high level study, in which case the simplistic notions of atomistic skill production do not apply.

Empirical studies show that the acquisition and deployment of high level skills takes a substantial amount of time (Chapter 5) yet skill is presented as if this were not the case. This does not seem to be simply a function of the influences of the NCVQ but appears to be a peculiarly contemporary 'western' understanding of skill. An alternative viewpoint can be accessed from an eastern culture. Few would dispute that the martial art karate is an outstanding exemplar of somatic skill which requires many thousands of hours training and dedication in order to achieve a black belt. In Japan this is known as *Shodan*. The term is composed of two ideograms *sho* meaning first or beginning (as in the first sunrise of the year) rather

than the Japanese term *ichi* (literally - one) and *dan* meaning level or step. In Japan therefore, the student who reaches *shodan* is considered to be at the beginning of their journey *towards* skill (in Japan skills are never considered 'mastered' in the western sense). Consider this against western view of martial skill development.

> The results of hundreds of years of development in Japan, Karate is the secret, oriental art of self defence that turns your hands and legs into deadly weapons. In just 2 hours after you begin 'Super Karate' you will be on your way to being an invincible Karate master (*Sir Magazine*, Feb 1964. Cited in Haines, 1997:170)

The western view that not only is a black belt an end rather than a beginning (Umezawa, 1998) but that skill might be acquired so easily and so rapidly is applicable across many areas of skill acquisition. As the holder of a 1st Dan black belt myself (TaeKwonDo) I can fully testify to the level of effort and dedication required to gain a purchase on the 'first step'. The argument being made here is that the notion that the skill of an appropriately high level might be acquired rapidly and without focussed and structured training is both misguided and profoundly damaging to the reputation and standing of skill and higher education.

9.4.5 Paradox 5. Damage by Enhancement

The reputation of skill has been seriously damaged by actions ostensibly designed to enhance it.

The final point is a generic one which relates to both skill and higher education. It is unclear whether the imposition of skills into higher education was regarded as a likely enhancement of higher education – it would rather seem not. But as shown, skills were certainly considered to be a 'necessary' addition in order to provide appropriately skilled graduates for industry and improve 'international competitiveness' (chapters 2, 4, 5 and 6). It is perhaps too soon to tell if this strategy of requiring higher education to engage in a more overt form of skills-based education has damaged the reputation and standing of higher education although it certainly appears to have damaged the structure of higher education.

The same cannot be said of skill however, where it seems clear that substantial damage has been inflicted on both its structure and reputation. The conflation of the notion of skill with that of competence has not only exposed skill to the same epistemologically threadbare notions of performance but also subjected it to the withering criticisms appropriately directed at competence. The further conflation of skills with certification, where weak and impoverished qualifications (NVQ's) are taken to be appropriate proxies of skill have further damaged the reputation of skill. It is perhaps some measure of the potential damage that the group for whom skills were ostensibly reconfigured and repackaged have begun to question the quality of the skills the process has (and continues to) produce. The continued and growing insistence that personal attributes, dispositions and attitudes are skills and further that these 'skills' are something which must be taught in education rather than (historically) in the workplace dilutes the notion of what it means to be skilled and further weakens the reputation of skills. It would be hard to tell (from the current discourse of education) that skill can be considered as a worthwhile and complex undertaking, an undertaking which requires a focussed and substantial effort together with an intellectual engagement with both knowledge and understanding. And, that these things must be sustained over a protracted period of time in order to become skilled to any meaningful level and at any worthwhile task. That such things were once taken to be 'common sense' in the discourses of industry and education is perhaps some measure of the problem.

9.6 Skill and Higher Education – *an incommensurable relationship?*

Laclau and Mouffe (1985) indicate that when - through processes of hegemonic intervention and articulatory practice - earlier 'common sense' notions are displaced from the discourse by new ascriptions of meaning which mask previous understandings, the discourse becomes *sedimented*. And, that when (as here) discourses compete to turn contingent understandings into fixed understandings such *objective totalities* become established in the discourse as myths. The problem (for skill) is that in its *mythic construction* it not only continues to receive substantial collateral damage from the articulatory practices which have shaped the discourse over the past 30 years, but in this form it also continues to damage the structure of higher education.

This would seem to represent something of a radical discontinuity with the past, where historical notions of skill and skill acquisition have been abandoned in favour of an ideological construct. It is an ideology which also appears to have created fundamental ambiguities with the present, where large tracts of empirical evidence appear to have been subsumed by the ideological imperatives inherent within the changing discourse and radicalised by the rhetoric of skills.

It would seem from all of the foregoing that a reconceptualisation of skill must begin with an understanding of what it *cannot do* rather than (as now) focussing on what it is *assumed to be able to do*. From the evidence advanced in this enquiry it appears that the former has been largely discounted (or simply ignored) and the latter rather too overblown. It would appear therefore, that any reconceptualisation of skill would need to be based not around an understanding of compatibility between current notions of skill and higher education, but rather one of incommensurability between the purposes (and structure) of higher education and the requirements (and structure) of skill. A consideration of this issue together with some conclusions is undertaken in the final part of the dissertation.

Chapter 10 Summary, Conclusions and Implications for Professional Practice

This final chapter of the dissertation restates the research problem and reviews the methods used in the study. The major sections of this chapter summarise the outcome of the study and discuss their implications for professional practice.

10.1 A statement of the problem

It is contended that skill is a concept which, whilst being almost universally applied throughout all sectors of education lacks any real unity of meaning or purpose. That it is a construct which is substantially over-used and under-theorised, lacking in clarity of definition, consistency of meaning and deeply fractured by logical disjunctions, pragmatic ambiguities and metaphysical inconsistencies. The requirement that higher education engage in skills-based education has amplified these difficulties and appears to have created an ideological position in which skill functions as a social myth, masking alternate possibilities for action. It is a construction which has profoundly shifted the discourse away from previously understood notions of education and created a new discourse influenced by industry and economics. This process appears to have inflicted serious bilateral damage to previously understood notions of skill and higher education in that it has profoundly compromised the meaning and functioning of skill and would appear to be iatrogenic to the function and purposes of higher education.

10.2 A Review of the methodology

As explained in chapter 1, the study is an analysis of the educational and industrial discourses (principally) using the discourse theory of Laclau and Mouffe, and taking the general approach of Social Constructionism. The study drew on structuralist and (specifically) poststructuralist theory and utilised several aspects of discourse theory and analysis from other theoreticians notably, Parker,1992 (criteria for distinguishing discourses); Fairclough, 1992 (Intertextual analysis); and Phillips and Jorgensen, 2002 (deploying the theories of Laclau and Mouffe). The methodology specifically sought to avoid an engagement in detailed textual analysis, focussing instead on the specific expression of skill within the discourses

examined. This was undertaken by focussing on the *articulations* and articulatory practices which modified the meaning of skill within the discourse of education, and by exploring what particular meanings had been established, and what meanings had been excluded by this process.

This was undertaken by exploring the discourse(s) for the specific *articulations* they drew on, the discourses they reproduced, and the challenges and transformations to existing discourses brought about by a redefinition of skill. *Nodal points* within the discourse(s) were identified, and an exploration of the privileged status of skill within the discourse of education was undertaken. The discourses were investigated for the way they defined skill in different ways and skill was further analysed in its function as a *floating signifier.* The enquiry also attempted to identify the inter-discursive struggles over the meaning of skill between the competing discourses of industry and education.

Summarising the Outcomes of the Study

10.3 Part One

The rise of the discourse of skills began in the mid 1970's with the re-emergence of long standing political and economic concerns about international competitiveness (Wellington, 1987). Concerns which by the mid 1980's had instigated radical reforms to skills-based education (Wolf, 2002). The subsequent rise of the NCVQ predicated on a new understanding of employment-derived and work-based competence (Jessup, 1991), set the tone for an understanding of skills which persists to the present time. National and global concerns about the purposes and function of education (UNESCO, 1972) coincided with a rapid expansion if higher education and a fundamental and much more overtly economic and industrial focus emerged which conflated economic performance, skills and higher education into one notion (Drew, 1998). The outcome of which seems to be that skills, once (principally) the function of industry have now become much more focussed on education (Warhurst et al, 2004).

10.4 Part Two

Throughout this period there has been little if any conceptual clarity regarding skill. The study has shown that for the most part, most stakeholders appear to have been content with classifying rather than clarifying skills (Bennett et al, 2000). Where clarification was attempted, this has often added to the confusion (Tribe, 1996). The notion of competence which emerged as a supposedly rational view of both skill acquisition and deployment has been subject to substantive criticism (Barnett, 1994; Ashworth and Saxton, 1990) and the NCVQ which championed the idea of competence has been subsumed into the QCA.

The study attempted to show that the nature of meaning and definition has a complex and problematic soul. Philosophical issues of meaning and definition were explored in order to scope this issue. Dualism was investigated as a potential form of articulatory practice which has helped to shape modern conceptions of, and attitudes towards skill. More recent understandings of dualism were examined in order to try and restore some clarity to the concept of skill (Peters, 1966; Ryle, 1949; Searle, 1987). Wittgenstein's (1953) concept of 'family resemblance' was contrasted with that of poststructuralist notions of difference (Laclau andf Mouffe, 1985) in an attempt to inject some linguistic clarity. This section of the work concluded by suggesting that the linguistic and philosophical analysis indicated that a conception of *skill as education* was misconceived.

Issues of definition and meaning were pursued into the industrial discourse where there is an ostensibly more unified view of skill than in the discourse of education. Socially bounded constructions of skill were contrasted with other understandings. It was suggested that definitions from the industrial discourse were particularly important as such definitions appear to have significantly influenced the discourse of education. In the industrial discourse, skills are problematised as relating to a person (Bolton, 2004) or to a task (Collins, 1982) with important and significant outcomes for a socially constructed notion of skill in either enhancing or delimiting human agency (Grugulis et al, 2004).

The ongoing creation of 'new skills' was explored (Payne, 1999) as was the transformation of personal attributes, dispositions and attitudes into skills. The

development of key generic skills seems to have this understanding as its progenitor (Warhurst et al, 2004) and it was suggested that the discourse of education had been strongly influenced by this commercial understanding of skill as functionally related to both personal attributes and employment.

The conflation of skills with qualifications was advanced as a possible reason why the workforce is assumed to be more skilled (Parsons and Marshall, 1995) and contrasted with concerns that they were not (LSC, 2003). The section concluded by suggesting there was a mismatch between rhetoric and reality and that particular constructions of skill which have found their way into the discourse of education may not confer any benefit on their recipients and may be involved in an 'inflationary spiral' of skills.

10.5 Part Three

This opened with a defence of *grounded skill* by mounting a robust attack on notions of competence as fundamentally unrelated to notions of *grounded skill.* The construct of competence was analysed as both postmodernist in intend and modernist in outcome. The confused state of competence was held to be (yet another) reason why it ought not to be considered as an appropriate notion of, or proxy for skill. Notions of skill were contrasted with notions of education and the language compared (Peters, 1970). Equating skill with higher education was suggested as being a misconception (Barnett, 1994) and one in which it was possible to misconstrue the value of either and the differences between both. The section concluded with an understanding that whilst higher education was thought to be damaged by the inclusion of skills this was a site of *bilateral damage* as skill itself was said to be damaged by the socially constructed *(mythic)* notion of skill. Two further constructs of skill were advanced from the industrial discourse; that of *grounded* skill and that of socially *bounded skill* (More, 1980). It was indicated that the resultant outcome of both understandings was the acquisition of *grounded* skill. It was suggested that a third contemporary concept (also a socially bounded construction) was not able to ensure skilled performance as a concomitant outcome and that this *'mythic'* construction of skill now dominated the discourse of education.

The two final sections in this part of the dissertation reviewed empirical evidence for effective transfer of skills and the acquisition of skill, and concluded that the overwhelming view in the literature was that the case was not yet made for the transferability of learning (Ericsson and Lehmann, 1999). However, it would appear that irrespective of the empirical evidence there seem to be socio-political reasons for the emphasis on transferable skills – that is the 'need' for a mobile/flexible workforce appears to have encouraged policy makers to believe that workers' skills transfer to new jobs and new circumstances (Eraut, 2001; Grugulis, 2003). It would also seem (crucially) that the case for the inclusion of generic 'transferable' skills in higher education was predicated on the basis that is both achievable and functional . The question was raised about the value of pursuing an educational process which appeared to have little or no chance of achieving its stated outcomes. The final aspect of this part of the dissertation focussed on fundamental predicates of skill acquisition - time and associated principles of practice and repetition in order to gain skill. Empirical evidence was shown to demonstrate correlation with time, structured practice and repetition and the acquisition of skill (Ericsson et al, 1996; Billett, 2001). This was contrasted with the time and available resources in higher education and concluded that the structures of skill and higher education were inimical to the process and provision of skills-based transmission. It was further concluded that higher education may be *structurally incapable* of engaging in effective skills-based approaches.

10.6 Part Four

This part of the dissertation began by outlining the linguistic, social and discursive conditions required to bring about the construction of a social myth (Barthes, 1974, Midgley, 2003; Lacalu and Mouffe, 1985) and contends that the current conception of skill in the discourse of education functions as a socially constructed myth. Constructing skill as a social myth it was argued has implications both for the health of skill and of higher education. And, that in functioning as a myth' skill is rendered antithetical to its own function and purpose, and further, when required to function in higher education the construction may be iatrogenic in outcome.

10.7 Some Conclusions and Implications for Professional Practice

Broadly, it is contended that skill has undergone a transformation brought about by the imposition of industrial and economic imperatives and now functions not as a rational an effective construct within the discourse of education but as a form of dysfunctional social myth. This discursive construction 'hides' alternative contingent conceptions of skill, and through powerful hegemonic articulations would seem to have created a new ideology which interpellates the 'social actors' in higher education in particular ways. This interpellation by the ideology appears to have required a reconfiguration of fundamental underpinning predicates of skill in order to support the myth. These predicates would seem to be the irreducible fundamental requirements which constitute the nature of skill. The consequence of which is that the process required to deliver such skills would seem unable to function appropriately. And, that it is these deep ambiguities and radical dysfunctions which are not only implicated in inflicting collateral damage to higher education but appear to have created a site of *bilateral damage* profoundly affecting both higher education *and* skill.

It seems clear that as indicated throughout this enquiry, the discourses of industry and economics have had a profound impact upon the discourse of education. Whilst we now seem to be engaged in a process which seems to increasingly regard skill and education as coterminous, it is clear that for most of recorded history they have been thought to be different in some way. This is represented by the views held of dualism by Aristotle, Plato, Descartes and more recently by Ryle (1949) and Peters (1970).

Interestingly (and significantly) the two constructs of skill and education would appear to have been able to coexist as different but related notions until comparatively recently. It seems clear from the discourses of both skill and education that in order to gain an education it is first necessary to gain some skills (reading, writing and number for example); and conversely, to become skilled it was necessary to engage in some aspects of education (acquiring knowledge and understanding for example). The level of 'mixing' between these two constructs can perhaps be thought of as a natural and self regulating mechanism in that skill and education would seem to have their own determinants which do not

fundamentally correspond with each other. Some examples of which might be the requirement for the outcome (of skill) to be determined in advance of the process of its acquisition, and in the functioning of *insight* as being a desirable property of education but an impossibility as an inherent function of skill (Peters, 1966). The artificial reconfiguration of this 'natural balance' through the imposition of an ideology which has privileged particular sets of ideas over other sets of ideas would seem to have proved to be pathogenic to both skill (in higher education) and higher education itself.

Skill would seem to have undergone a transformation which has moved beyond a simple redefinition or adjustment of meaning (such as the shift in the industrial discourse between notions of *grounded skill* and socially *bounded skill*) and into a new *conception* of skill. It is unclear from the literature at what point this transition began, but my assumption would locate it with the emergence of Taylorist understanding of 'scientific management', where skill (for reasons of industrial control) began to be located as a function of the task (and therefore controllable by management) and not, as had previously been the case, as a property of the person and therefore 'portable' with the person. This in turn seems to have led to an understanding of skill as a less than complete suite of abilities, and more to an understanding of skill as a task-specific construct. It would seem that this notion derived from industry, for the benefit of industry, was transported into the notion of competence. In this way skills were able to be seen as divisible constructs where it might only be necessary to learn the specific skill required to undertake a specific task (Spencer, 1995). This seems to have given way to the understanding that tasks *are* skills and by extension, the possession of a certificate which lists the tasks undertaken confers *grounded skill*.

The definitional problems which have interposed difficulties in the way of a more universal understanding ought not to be minimised and many of the issues relating to clarity of definition – and by extension the more functionally useful constructs of meaning and purpose are formidable obstacles to be overcome. However, it seems likely that Wittgenstein's analysis relating to the 'construct in use' would seem to provide the best hope of bringing some clarity to very muddy waters. This would seem to be a pivotal issue. If the term skill is to have any coherence then it

would seem that its use must imply skilfulness. That is to say, becoming skilled is both an inherent property of an idea of skill and (crucially) that the potential to become skilled is clearly an intention behind the offer of skill acquisition. In this way it seems reasonable to assert (albeit rather obviously at this point) that the meaning of skill rests with its usage and its usage is clearly predicated on a potential for acquisition. This definition needs contrasting with the rather counterintuitive assertion made in this enquiry, that one outcome of the current conception of skill is that those following a programme of skill acquisition fail to become skilled. This would seem not only to negate the outcome of the process but also call into question the fundamental meaning of the term when used in this way.

To pursue this a little further. It was suggested that one outcome of predicating a process of becoming skilled on a set of false premises – in this case a belief that skills can be acquired in the same way and in the same time scale as any other aspect of education, when empirical evidence indicates otherwise – is that it results in *not becoming skilled*. In this way (and if this is taken to be true) then it may be said that this particular mythic social construction of skill is antithetical to the purposes and functioning of skill.

This would seem to be corroborated by 'complaints' from industry that candidates, whilst holding qualifications were still reported a missing key generic skills (LSC, 2002). This in turn would seem to be related to the issue of qualifications being seen as an appropriate proxy for skills, the outcome of which appears to be that whilst qualifications in the workplace are rising, skills – supposedly an inherent property of qualifications - are failing to keep pace (Grugulis, 2003).

Whilst skill can be cast as a socially bounded construction (and therefore open to different ascriptions of meaning), the literature is unequivocal that to be skilled is to be skilled at *something* (Lajoie, 2003). Whilst hegemonic and articulatory outcomes may change how skill is represented in the discourse (something which is not only possible but *inevitable* with all social constructions – Laclau and Mouffe, 1985) the nature of skill would seem to be largely unaffected and remain what it is – a conception referent to itself.

10.7.1 This then, is the first point of departure from the current understanding of skill. That although some skills may be conceived differently, defined differently and inhabit different discourses – social, competence, mythic, grounded; education, industry, cognitive psychology, psychomotor and so on – they would all appear to be predicated on the understanding that the resultant outcome of a process designed to transmit skill is skilful behaviour. That is to say, whatever the *process,* the *intent* is the production of skill. This is not a small point.

Alongside this notion of *intent* it would seem necessary to place an appropriate mechanism to ensure the secure transmission of skill and that to do otherwise is to engage in an abstraction rather than a reality. This is a key point, as it would seem that the purpose of skill is that it can be made manifest in some *real* way. It would seem that the *intention* behind the government's skill strategy is to raise the level of skills in the working population. Indeed, it would seem reasonable to assert that whatever the previous conceptions have *included* as part of their skills strategies (delimiting access, demarcation and increased remuneration for skilled workers for example) their *aim* was to produce people who were genuinely skilled at something. This would seem to be a unifying principle which is able to unite all conceptions of skill and links the *intention* (to become skilled) with the *outcome* (of being skilled). What stands between these two notions of intent and outcome is the *process* by which the skill is acquired. And, as shown, it would seem to be the *process* which is the principal problem with the current conception of skill within the discourse of education.

It has been argued that skill functions as a social myth within the discourse because whilst it is that the *intention* to produce skills is made clear and the *outcome* is also made clear, the *process* whereby these two notions might be linked together appears to be inimical to the production and transmission of skill. It would seem to be the cleaving to the former, and the disregard for the latter which presents skill as myth. The rhetoric insists that we (as a nation) both need skills and that we are engaged in producing them, whereas the empirical evidence would suggest that whilst we may need skills we are not in fact producing them in the way the rhetoric might suggest. There is a deep structural ambiguity here

which seems to have inflicted substantial damage to our understanding of skill *as* skill.

10.7.2 This leads directly to the second point of departure, in that (for the most part) higher education is *structurally incapable* of appropriate skill transmission, and further, that the construction of skill is a *sufficient condition* to prevent its inclusion in higher education.

These two points are functionally interrelated. It would seem that the pre-requisites of skill (time, practice and repetition for example) are not only fundamental and seemingly irreducible elements of skill acquisition but that they are incommensurable with the structure of most higher education programmes of study. Based upon historical notions of self study and (self) enlightenment, contemporary notions of vocational higher education no longer rely quite so much on these understandings as they once did, however, the academic year and teaching and so forth are constructed around the idea that this is still the case. Nor, as was indicated earlier do higher education courses significantly feature repetition and practice as teaching and learning strategies. Courses are seen to be increasingly modular, multi-subject and semesterised and are constructed on short, once-only exposure to the subject matter, non of which would appear to be appropriate to skill-based systems where repeated practice is indicated as the single most important variable in acquiring skill (Ericsson and Smith, 1991).

In this way, the interconnectedness of both assertions is revealed in that it would seem to be a *sufficient condition* that in order to acquire meaningful skill to a meaningful level (both of which would seem to be *necessary conditions* for the inclusion of any skill into higher education) this must be done by adherence to the fundamental predicates of skill acquisition. The parameters dictated by the structure of higher education would seem to make any adherence to these predicates of skill acquisition a virtual impossibility.

(It should be noted here that established 'vocations' of the law medicine and teaching are excluded from this notion as they all appear to have protracted periods of time in which to develop skills and in-built professional practice).

10.7.3 The third point of departure is tangentially connected to the last in that it would seem to be a *necessary condition* for any skill in to be included higher education that it be of a sufficiently high level to equate with study undertaken at a level appropriate to higher education. There would seem to be three reasons for concern here, all relate to the construct of generic skill. The first concerns the ongoing debate about whether the 'key skills' such as *team working, motivation, improving own learning and performance* and so on are skills or personal attributes, disposition and attitudes (Grugulis et al, 2004). The list continues to grow with other 'skills' such as *aesthetic* and *emotional* 'skills' now vying for a place at the table (Westwood, 2004). Perhaps this might be of little more than academic interest were not for the view that it now appears to have become the task of education and not industry to supply these 'skills'. This has an associated point, as these skills are regarded as 'key', they occur and reoccur throughout several levels of education, a feature which would seem to place higher education at a particular disadvantage relative to lower levels of educational provision. Many of the key skills do not appear to be taught at a level commensurate with high level skills (a point raised in part 5). When for example, communication skills appears in higher education courses it might seem reasonable to assume that in place of the lower (and one would hope) previously undertaken prosaic aspects of communication, concepts such as semiotics, transmission and receipt of meaning or the inherent polysemy of meaning might be appropriate in engaging with communication at a higher level of knowledge and understanding. However, it seems clear that the various employer surveys have much more basic and prosaic notions of 'communication' in mind than this such as '*customer relation skills*' (LSC, 2002, 2003). Indeed it seems reasonable to assert that from an employers perspective why ought they not to be concerned with such matters? That they would wish to do so does not appear to be the problem, rather it would seem that it ought to be the business of higher education to decline an engagement with something which is neither of an appropriate level and which ought to be learnt in the workplace rather than the library.

The final point here relates to the supposed 'transferability' of generic skills and not to any concerns of their level. In part three of the dissertation this position was analysed in some detail and will not be reprised again here other that to restate

the more fundamental point. The term generic skill has come to be taken as synonymous with transferable skill, a construct which would seem to be one of the more obvious aporias in education yet it remains firmly rooted in the notion of education and it would seem that it continues to direct the policies of higher education. It does not seem to be an overstatement to suggest that (at best) transferability is an unproven conception and that it may be more reasonably supposed to be an unsupportable premise. It ought to be a matter of considerable concern to all in higher education that a whole notion of education is constructed on such a premise, a premise which would seem to render the teaching of any such generic skills a fruitless (and pointless) activity.

10.7.4 The forth and final point of departure is that of damage to both higher education and skill. This has been extensively covered in chapter nine and it not proposed to engage with it again here other that to add an important rider to the previous discussion. It seem clear from all of the foregoing that the intention behind the inclusion of skills within higher education was to both increase the stock of skills in the workforce and to engage education in providing this process. It seems reasonable to assume that in constructing a new understanding of skill it would have been paradoxical of government or its agencies to have conceived of a structure which would damage the intended outcome (skill) - whether the same level of benign consideration might be extended to higher education is more of an open question. However, from a professional perspective as members of the academy, it would also seem to be a paradoxical outcome to both recognise the site of damage and to continue to engage in a process which continues to inflict it.

10.8 In Closing

And finally, to return back to the discursive notion of myth. It has been contended that the construction of mythic notions of skill are associated with a 'new' ideology which implicates the role of higher education in providing the skills to power the economy and maintain national competitiveness. Ideologies have long been associated with a 'transformation of consciousness' in which the subjects interpellated by the ideology cannot see through to their real interests (as for example in *historical materialism*).

However, Laclau and Mouffe do not understand the social world through a conception of ideologies which mask contingent understandings but through the process of discourse. Discursive articulations create the conditions in which one view comes to dominate other possible views and in displacing these other possibilities *sediments* the discourse into one contingent view which comes to be accepted as 'common sense'. If they do not share Gramsci's view of ideology they do share Althusser's assertion that as social subjects we are all interpellated by ideologies (or in their terms, discourses) whenever we respond to the ideology/discourse. In this way we are all 'hailed' by the myth of skill, whether we are able to see through the sense of 'false consciousness' generated by the new discourse of education, to our own real interests would seem to be more of an open question.

References and Bibliography

Adler, P. (2004) Skill Trends under Capitalism and the Socialisation of Production, In C. Warhurst, I. Grugulis, and I. Keep (2004) (eds) *The Skills that Matter.* Basingstoke: Palgrave Macmillan.

Althusser, L. (1971) Ideology and ideological state apparatuses, in L. Althusser, *Lenin and Philosophy and Other Essays.* London: New Left Review.

Althusser, L. and Balibar, E. (1970) *Reading Capital*, London: New Left Books.

Anderson, A., Reder, L.M. and Simon, A. (1996). Situated Learning and Education. *Educational Researcher*, 25 (4).

Ashworth, P. D. (2000) *Psychology and 'Human Nature'*, Hove: Psychology Press.

Ashworth, P. D., and Saxton, J. (1990) On 'Competence'. *Journal of Further and Higher Education.* 14, Summer 1990.

Assiter, A. (ed). (1995). *Transferable Skills in Higher Education.* Kogan Page.

Association of Graduate Recruiters (AGR). (1995). *Skills for Graduates in the 21st Century.* Cambridge: AGR.

Attewell, P. (1989) 'What is Skill'? In *Work and Occupations*, 17 (4) 422-448.

Austin, J.L. (1962) *How To Do Things With Words*, Oxford University Press.

Baldry, C., Bain, P., and Taylor, P. (1998) 'Bright Satanic Offices:Intensification, control and team Taylorism, in P. Thompson, and C. Warhurst (eds) *Workplaces of the Future.* London: Macmillan.

Barnard, H. C. (1966) *A History of English Education from 1760*, London: University of London Press.

Barnett, C. (1986) *The Audit of War: The illusion and reality of Britain as a great nation,* London: Macmillan.

Barnett, R. (1990) *The Idea of Higher Education.* Buckingham: SRHE and Open University Press.

Barnett, R. (1994) *The Limits of Competence: Knowledge, Higher Education and Society.* Buckingham: SHRE and Open University Press.

Barnett, R. (2000) *Realizing the University in an age of Complexity.* Buckingham: SRHE and Open University press.

Barnett, R., and Griffen, A. (eds) (1997) *The End of Knowledge in Higher Education.* London: Cassell.

Barthes, R. (1974) *Mythologies.* London: Jonathon Cape.

Baum, T. (2004) The Social and Cultural Construction of Skills in Hospitality Work. ESRC Seminar Paper, April 2004.

Becker, G. S. (1964) *Human Capital.* New York:Columbia University Press.

Beirne, M., Ramsay, H., and Pantelli, A. (1998) 'Developments in Computing Work: Control and contradiction in the software labour process, in P.

Thompson, and C. Warhurst (eds) *Workplaces of the Future*. London: Macmillan.

Bell, D. (1973) *The Coming of Post Industrial Society*. New York: Basic Books.

Bennett, N., Dunne, E. and Carre, C. (2000*). Skills Development in Higher Education and Employment.* SHRE and OU Press.

Bhaskar, R. (1978) *A Realist theory of Science*, Brighton: Harvester.

Billett, S. (2001) Knowing in Practice: re-conceptualising vocational expertise. *Learning and Instruction*, Vol 11, No 6 Dec 2001.

Billig, M. (1991) *Ideologies and Beliefs*, London: Sage.

Blagg, N., Ballinger, M, and Lewis, R. (1993) *Development of Transferable Skills in Learners,* Dept of Employment.

Bloom , B. S. (1985) (ed) *Developing Talent in Young People* . New York: Ballantine Books.

Bohm, D. (1996) *Wholeness and the Implicate Order.*

Bolton, S. C. (2004) Emotion as Skilled Work, In C. Warhurst, I. Grugulis, and I. Keep (2004) (eds) *The Skills that Matter.* Basingstoke: Palgrave Macmillan.

Boyatzis, R.E. (1982). *The Competent manager.* Wiley.

Boys, C. J. (1988) *Higher Education and Preparation for Work*. Jessica Kingsley.

Braverman, H. (1974) *Labor and the Monopoly Capital.* New York: Monthly Review Press.

Brennan, J. and McGeevor, P. (1987). *CNAA Graduates: Their Employment and Their Experiences after College,* CNAA Development Services, No 13.

Bridges, D. (ed) (1994). *Transferable Skills in Higher Education.* University of East Anglia Press.

Briscoe, C. (1993) Using Cognitive Referents in Making Sense of Teaching: A chemistry teacher's struggle to change assessment practices. *Journal of Research in Science Teaching*, 30 (8): 971-87.

Brown, S. (1976) *Language and Reality.* Milton Keynes: Open University Press.

Burgess, T. (1977) *Education After School.* Victor Gollancz.

Burgess, T., and Pratt, J. (1974) *Polytechnics: A report.* Pitman Publishing.

Burr,V. (1995) *An Introduction to Social Constructionism*, London: Sage.

Butler, J., Laclau, E, and Zizek, S. (2000) *Contingency, Hegemony and Universality: Contemporary dialogues on the left.* London: Verso.

Cantor, L. M., and Roberts, I. F. (1972) *Further Education in England and Wales,* London: Routledge and Keegan Paul.

CBI (1989). *Towards a Skills Revolution.* CBI.

CBI (1991) *World Class targets.* CBI

CBI (1994) *Quality Assessed.* London: CBI

Charness, N. R., Krampe, T. Th., and Mayr, V. (1996) The Role of Practice and Coaching in Entrepreneurial Skill Domains. In *The road to Excellence: The Acquisition of Expert Performance in the Arts and Science, Sports and Games*, K. A. Ericsson (1996) (ed) New Jersey Erlbaum. pp 51-80.

Cheetam, G, and Chivers, G. (1996*). Towards a Holistic Model of Professional Competence.* Journal of European Industrial Training, 20 (5).

Chi, M. T. H., Glaser, R., and Farr, M. J. (1988) (eds) *The Nature of Expertise.* New Jersey: Erlbaum.

Choulioraki, L, and Fairclough, N. (1999) *Discourse in Late Modernity: rethinking critical discourse analysis.* Edinburgh: Edinburgh University Press.

Clark, M. (2002) *Paradoxes from A to Z.* London: Routledge.

CNAA (1989) Handbook 1989. CNAA.

Cockburn, C. (1983) *Brothers.* London: Pluto.

Cole, P. (2002)*The Theory of Knowledge.* London: Hodder and Stoughton.

Collins, H. (1989) *Artificial Experts, Social Knowledge and Intelligent Machines.* Cambridge, MA: MIT Press.

Connolly, W.E. (1993) *The Terms of Political Discourse*,3rd edn. Oxford: Basil Blackwell.

Corrigan, P., Hayes, M. and Joyce, P. (1995). 'A Modernist Perspective on Changes in the Higher Education Curriculum' in A. Assiter. (ed). (1995). *Transferable Skills in Higher Education.* Kogan Page.

Cotgrove, S.F. (1958) *Technical Education and Social Change*, London Allen Unwin.

Crossland, A. (1965) 'Woolwich speech'. Speech by the Secretary of State for Education and Science, Rt Hon Anthony Crossland MP.

Crossland, A. (1967) 'Lancaster University Speech'. Speech by the Secretary of State for Education and Science, Rt Hon Anthony Crossland MP. 20th Jan, 1967.

Culler, J. (1998) *Framing the Sign: Criticism and its Institutions*, Oxford: Basil Blackwell.

Curtis, S.J. and Boultwood, M.E.A. (1966) *A Short History of Educational Ideas*, Foxton: University Tutorial Press.

Dale, R. (1985). 'Education and Training', in *Westminster Studies in Education,* Vol.7. (1984).

Daly, A., Hitchens, D. M. W. N., and Wagner, K. (1985) Productivity, Machinery and Skills in a sample of British and German Manufacturing Plants: results of a pilot enquiry. *National Institute Economic Review*, February.

De Waal, F. (2001). *The Ape and the Sushi Master.* Allen Lane Penguin Press.

DE/DES (1986). Working Together. London: HMSO

DE/DES (1987). Higher Education: Meeting the Challenge. London: HMSO

Dearing Report. (1997). *Higher Education in the Learning Society.* HMSO.

Dearing, R. (1997) *Review of Qualifications for 16 to 19 year olds*. SCAA.

Dent, H. C. (1966) *The Educational System of England and Wales*, London: University of London Press.

Derrida, J. (1978) *Writing and Difference*, London: Routledge.

Derrida, J. (1982) *Margins of Philosophy,* Brighton: Harvester Press.

DES (1981) New Training Initiative: *a programme for action*, Cmnd 8455, (December 1981).

DfE. Employment Gazette (March 1993) DfE.

DfE. Employment Gazette (May 1992) Section S8. DfE.

DfEE (1991). Higher Education: a new framework. London: HMSO

DfEE (1993) *Prosperity Through Skills*: *The National Development Agenda*. Londo: HMSO.

DfEE (1998) *Skills Development in Higher Education*. DfEE/CVCP/HEQE.

DFEE (1999) Towards a National Skills Agenda*: First report of the National Skills Task Force*. HMSO.

DfES (1985) Better Schools, Cmnd 9482. (April 1985).

DfES (2003) *21st Century Skills: Realising our Potential*. (Cm 5810) HMSO.

Drew, S. (1998) *Key Skills in Higher Education: Background and Rationale*. SEDA special No 6.

Drucker, P. (1993) *Post-Capitalist Society*. Oxford: Oxford University Press.

DTI (1994) *Competitiveness: helping Business Win*. (Cm 2563) HMSO

During, S. (1993) (ed) *The Cultural Studies Reader*. London: Routledge.

Education, Science and Arts Committee (1980) The funding and organisation of courses in higher education, 5th Report. (HC 787-1) HMSO.

Edwards,D., Ashmore, M. and Potter, J. (1995*)* 'Death and Furniture: The Rhetoric, Politics and Theology of Bottom Line Arguments Against Relativism', *History of Human Sciences*, 8 (2) 25-49.

Eraut, M. (2001) The Role and Use of Vocational Qualifications. *National Institute Economic Review* No 178, Oct 2001.

Ericsson, A. K. and Smith, J. (Eds) (1991) *Towards a General Theory of Expertise*, Cambridge University Press.

Ericsson, K. A. (1996) 'The Acquisition of Expert Performance: An introduction to some of the issues, In *The road to Excellence: The Acquisition of Expert Performance in the Arts and Science, Sports and Games,* K. A. Ericsson (1996) (ed) New Jersey Erlbaum.

Ericsson, K. A. (1997) Deliberate practice and the Acquisition of Expert Performance: An overview, In H. Jorgensen, and A. C. Lehmann (eds) *Does Practice make Perfect?* (1997) Oslo: Norges Mussikkhsgkale.

Ericsson, K. A., and Crutcher, R. J. (1990) The Nature of Exceptional Performance, In P. B. Baltes, D. L. Featherman, and R. M. Learner (eds) *Life-span development and behaviour* Vol 10,187-217. New Jersey: Erlbaum.

Ericsson, K. A., and Lehmann, A. C. (1996) Expert and Exceptional Performance: evidence on maximal adaptations on task constraints. *Annual review of Psychology*, 47: 273-305.

Ericsson, K. A., Krampe, R. Th., and Tesch-Romer, C. (1993) The Role of Deliberate Performance in the Acquisition of Expert Performance. *Psychological Review* , 100: 363-406.

Evans, B. (1992) *The Politics of the Training Market: From Manpower Services Commission to Training and Enterprise Councils*. London: Routledge.

Evans, B. (1992) *The Politics of the Training Market: From Manpower Services Commission to Training and Enterprise Councils*, London: Routledge.

Fairclough, N. (1992) *Discourse and Social Change*. Cambridge: Polity Press.

Fairclough, N. (1993) Critical Discourse Analysis and the Marketization of Public Discourse: The Universities. *Discourse and Society*, 4 (2): 133-68.

Fairclough, N. (1995) *Critical Discourse Analysis*. London: Longman.

Fairclough, N. (Ed) (1992) *Critical Language Awareness*. London: Longman.

Fairclough, N. and Wodak, R. (1997) 'Critical Discourse Analysis' in T.Van Dijk, *Discourse as Social Interaction*, London: Sage.

Faure (1972) *Learning to be: The world of today and tomorrow.* Report of the International Committee on the Development of Education. Paris: UNESCO.

Felstead, A., Gallie, D., and Green, f. (2004) Job Complexity and Task Discretion, In C. Warhurst, I. Grugulis, and I. Keep (2004) (eds) *The Skills that Matter*. Basingstoke: Palgrave Macmillan.

Femia, J. V. (1981) *Gramsci's Political Thought: Hegemony, consciousness, and the revolutionary process*. Oxford: Oxfrod University press.

Flick, L. B., and Lederman, N. G. (2001) The Role of Practice in Developing Expertise in *Teaching. School Science and Mathematics*, Vol 101, No 7: 345-48.

Foucault, M. (1972) *The Archaeology of Knowledge*, Trans, Smith, S., London: Tavistock.

Foucault, M. (1973) *The Order of Things: an archaeology of the human sciences*. New York: Vintage Books.

Foucault, M. (1977) *Discipline and Punish: the birth of the prison.* Harmondsworth: Penguin.

Foucault, M. (1981) *'The Order of Discourse'* in R. Young (ed.) *Untying the Text: A Post-Structuralist Reader*, London: Routledge and Keegan Paul.

Foucault, M. (1991) 'Politics and the Study of Discourse' in G. Burchell, C. Gordon and P.H. Miller. (eds.) *The Foucault Effect: Studies in Govermentality,* Hemel Hempstead: Harvester Wheatsheaf.

Fowler, R. (1981) *Literature as Social Discourse: The practice of Linguistic Criticism*, London: batsford Academic.

Further Education Unit (May 1989) Extending TVEI, *Bulletin 1*. FEU

Further Education Unit. Basic Skills (1982) FEU.

Gagne, R.M. (1970) *The Conditions of Learning,* NY: Holt Rinehart and Winston.

Galasinski, D. (2000) *The Language of Deception: A Discourse Analytical Study*, London: Sage.

Gellatly, A. (ed) (1986). *The Skillful Mind.* OU Press.

Geras, N. (1990) *Discourses of Extremity: Radical ethics and post-Marxist extravagances*. London: Verso.

Gergen, K . (1985) The Social Constructionist Movement in Modern Social Psychology, *American Psychologist*, 40(3):266-75.

Glaser, R. (1991) The Maturing of the Relationship between the Science of Learning and Cognition and Educational Practice. *Learning and Instruction*, 1, 129-44.

Glaser, R. (1996) 'Changing the Agency for Learning: Acquiring expert performance In *The road to Excellence: The Acquisition of Expert Performance in the Arts and Science, Sports and Games*, K. A. Ericsson (1996) (ed) New Jersey Erlbaum.

Gosper, M. (2003) The development of Expertise and its Role in Understanding Teaching and Learning Difficulties, HERDSA Conference e 2003.

Gramsci, A (1991) *Selections from Prison Notebooks*. London: Lawrence and Wishhart.

Green, A. (1994). 'A Psychological Approach to Identifying Transferable Skills and Transfer Skills' in Bridges, D. (ed) (1994*). Transferable Skills in Higher Education.* University of East Anglia Press.

Grosch, P. (1987). 'The New Sophists' in M. Holt (ed) (1987*) Skills and Vocationalism: the easy answer.* OU Press.

Grugulis, I. (2003) The Contribution of National Vocational Qualifications to the Growth of Skills in the UK. British Journal of Industrial Relations, Vol 41, No 3, 457-76.

Grugulis, I., Warhurst, C., and Keep, E. (2004) What's Happening to Skill?, In C. Warhurst, I. Grugulis, and I. Keep (2004) (eds) *The Skills that Matter.* Basingstoke: Palgrave Macmillan.

Gunnarsonn, B.L., Linell, P and Nordberg, B. (1997) (Eds.) *The Construction of Professional Discourse*, London: Longman.

Haines, B. (1997 *Karate's History and Traditions* (revised edn), Tokyo: Tuttle Publishing.

Hammond, J.L. and Hammond, B. (1979) First published 1919. *The Skilled Labourer*, London: Longman.

Haraway, D. (1992) The Promises of Monsters: a regenerated politics for inappropriate/d others in L. Grossberg, C Nelson and P. A. Reichler (eds) *Cultural Studies*. New York: Routledge.

Harre, R and Madden, E.H. (1975) *Causal Powers: A theory of natural Necessity*, Oxford: Basil Blackwell.

Hart, W. A. (1978). *'Against Skills'* in *Oxford Review of Education*, Vol.4 no 2.

Harvey, D. (1992) *The Condition of Postmodernity.* Oxford: Blackwell.

Harvey, L., Moon, S, Geall, V., and Bower, R. (1997*) Graduates' Work: Organisational change and students' attributes.* Centre for Research into Quality. University of Central England at Birmingham.

Hayes, J. R. (1981) *The Complete Problem Solver.* Philadelphia: Franklin Institute.

Hendrickson, G., and Schroeder, W.H. (1941) Transfer of Learning in Training, In Hilgard, E.R., Atkinson, R.C., and Atkinson, R.L. (1971) *Introduction to Psychology.* NY: Harcourt Brace Jovanovich.

Hilgard, E. R., Atkinson, C., and Atkinson, R. L. (1973) *Introduction to Psychology.* New York: Harcourt Brace Jovanovich.

Hindess, B. and Hirst, P. (1977) *Mode of Production and Social Formation.* London: Macmillan.

Hirsch, W. and Bevan, S. (1988). *What Makes and Manager?: In Search of Language for Management Skills.* Report 144, Institute of Manpower Studies.

Hirst, P. (1979) On Law and Ideology, London: Macmillan. (contains two earlier publications: *Problems and Advances in the Theory of Ideology* (1976) and Althusser and the *Theory of Ideology* (1976).

Hochschild, A. R. (1983) *The Managed Heart. Berkley*: University of California Press.

Holmes, L. (1994). *Is Competence a Confidence Trick?* University of Leicester Press.

Holt, M. (ed). (1987). *Skills and Vocationalism: the easy answer.* OU Press.

Hopkinson, J. (1968) *Memoirs of a Victorian Cabinet Maker.* New York: Augustus. M. Kelly Publishers.

Howarth, D. (2000) *Discourse,* Buckingham: Open University Press.

Hudson, G. (1996) Dealing with Work: Secondary students' work experience and the curriculum. *Journal of Education and Training* , Vol 48, No 3, 177-294.

Hyland, T. (1998). *Competence, Education and NVQs.* Cassell.

IMS (1994) *Early Indications of Employers Take up and use of NVQs.* London Institute of manpower Studies.

IMS Report (1982). Foundation Training Issues No 39 (February 1982).

Industry in Education. (1995). *Towards Employability: Addressing the Gap between Young People's Qualities and Employer's Recruitment Needs.* IIE.

Jaworski, A., and Coupland, N. (1999) (eds.) *The Discourse Reader*, London: Routledge.

Jessup, G. (1997) 'Establishing a Learning Society' in Bennett, N., Dunne, E. and Carre, C. (2000*). Skills Development in Higher Education and Employment.* SHRE and OU Press.

Joint Board for Pre-Vocational Education (May 1984) *The Certificate of Pre-Vocational Education Consultative Document.* Joint Board of Pre-Voc Ed.

Jonathon, R. (1987). 'The Youth Training Scheme and Core Skills' in M. Holt (ed) (1987) *Skills and Vocationalism: the easy answer.* OU Press.

Kahney, H. (1993) *Problem Solving Current Issues*, OU Press.

Kedall, G. and Wickham, G. (1999) *Using Foucault's Methods*, London: Sage.

Keep, E, and Mayhew, K. (1999) The Assessment: Knowledge, Skills and Competitiveness. *Oxford Review of Economic Policy*, 15:1, 1-15.

Kellner, D. (1995) *Media Culture: Cultural studies, identity and politics between the modern and the postmodern.* London: Routledge.

Kenway, J., Bigum, C and Fitzclarence, L. (1993) 'Marketing Education in the Postmodern Age', *Journal of Educational Policy* 8 (2) 105-122.

Kortian, G. (1980) *Metacritique: The Philosophical Argument of Jurgen Habermas,* Fakenham Press.

Kristeva, J. (1986) Word, Dialogue and Novel, in T. Moi (ed) *The Kristeva Reader.* Oxford: Blackwell.

Laclau, E and Mouffe, C. (1985) *Hegemony and Socialist Strategy*, London: Verso.

Laclau, E and Mouffe, C. (1987) *'Post Marxism without the apologies'*, New Left review, 166: 79-106.

Laclau, E. (1990) *New Reflections an the Revolution of Our Time.* London: Verso.

Laclau, E. (1993) Power and Representation, in M. Poster (ed) *Politics, Theory and Contemporary Culture.* New York: Columbia University press.

Lafer. G. (2004) What is 'Skill'? Training for discipline in the low-wage labour market, in C. Warhurst, I. Grugulis, and I. Keep (2004) (eds) *The Skills that Matter.* Basingstoke: Palgrave Macmillan.

Lajoie, S. P. (2003) Transitions and Trajectories for Studies of Expertise. *Educational researcher* Vol 32, No 8.21-25.

Lawrence, B. (1972) *The Administration of Education in Britain,* London: Batsford.

Lee, D. (1992) *Competing Discourses*, London: Longman.

Levinson, B., and Reese, H.W. (1963) In Hilgard, E.R., Atkinson, R.C., and Atkinson, R.L. (1971) *Introduction to Psychology.* NY: Harcourt Brace Jovanovich.

Levi-Strauss, C. (1968) *Structural Anthropology. Volume One.* Harmondsworth: Penguin.

Littler, C. (1982) *The Development of the Labour Process in Capitalist Societies.* London: Heinemann.

Lloyd, C., and Payne, J. (2001) *The Political Economy of Skill: A theoretical approach to developing and high skills strategy in the UK.* Basingstoke: Palgrave Macmillan.

Loughran, J., and Russell, T. (2002) *Improving Teacher Education Practices Through self Study*. London: Routledge falmer.

Louie, B. Y., Stackman, D. D., and Purdy, J. M. (2002) Myths about Teaching and The University Professor.in J. Loughran and T. Russell (2002) Improving *Teacher Education Practices Through self Study*. London: Routledge Falmer.

LSC (2001) *Skills in England Report: Key Messages*. Policy Research Institute. Leeds Metropolitan University and DfES/LSC

LSC (2002) *Skills in England Report: Key Messages*. LSC and DfES.

LSC (2003) *Skills In England Report: Key Messages*. Institute for Employment Research, Warwick University and DfES/LSC.

Lucy, L. (1992) *language Diversity and Thought: A Reformulation of the Linguistic Relativity Hypothesis*, Cambridge University Press.

Macdonald, C. L., and Sirianni, C. (1996) (eds) *Working in the Service Society*. Philadelphia: Temple University Press.

Macdonell, D. (1987) *Theories of Discourse*, Oxford: Basil Blackwell.

Maclure, S. (1991). Missing Links: The Challenge to Further Education. Policy Studies Institute.

Magee, B. (1987) *The Great Philosophers*. London: BBC Books.

Mc Manus, C. (2001). 'Taking Sides'. *New Scientist*, No 2299, 14th July 2001.

McCarthy, T. (1984) *The Critical theory Of Jurgen Habermas*, Cambridge: Blackwell.

McDowell, L. (1997) *Capital Culture*. Oxford: Blackwell.

Midgely, M. (2003) *The Myths We Live By*. London Routledge.

Mills, S. (2003) *Michel Foucault*. London: Routedge.

Minogue, K. (1973) *The Concept of a University*. London: Weidenfield and Nicholson.

More, C. (1980) *Skill and the English Working Class, 1870-1914*, London: Croom Helm.

Mournier, A. (2001) The Three Logics of Skill. ACIRRT Working Paper No 66. ACIRRT, Sydney Cited in Warhurst et al (2004).

MSC and DES (1986) *Review of Vocational Qualifications in England and Wales,* London: HMSO.

Mueller-Vollmer, K. (Ed) (1985) *The Hermeneutics Reader*, Oxford: Blackwell

National Advisory Council for Education and Training Targets (1993) First Annual Report. London: NACETT.

Newman, J. H. (1853) *The Idea of a University*. Oxford: Oxford University Press.

Noble, W. (1991) Ecological realism and the fallacy of 'objectification'. in A. Still and A. Costall (eds) *Against Cognitivism* . London: Harvester Wheatsheaf.

Noon, M., and Blyton, P. (2002) *The Realities of Work*. Basingstoke: Palgrave.

Oates, T. (1992) *Report 16 Developing and Piloting the NCVQ Core Skills: an outline of method and summary of findings*. NCVQ.

Oliver, J. M., and Turton, J. R. (1982) Is There a Shortage of Skills Labour? *British Journal of Industrial Relations*, 20:2, 195-200.

Owen, G. (1999) *From Empire to Europe: the decline and revival of British industry since the second world war*, London: Harper Collins.

Parker, I. (1992) *Discourse Dynamics*, London: Routledge.

Parsons, D., and Marshall, V. (1995) *Skills, Qualifications and Utilisation: a research review.* DfEE.

Passerini, L. (1990) Mythobiography in Oral History, in R. Samuel and P. Thompson (eds) *The Myths We Live By*. London Routledge.

Payne, J. (1999) 'All Things to All People: Changing perceptions of 'skill' among Britain's Policy Makers Since the Late 1950's and Their Implications. *SKOPE Research Paper No 1*. University of Warwick.

Pecheux, M. (1982) *Language, Semantics and Ideology*, Basingstoke: Macmillan.

Perkins, D. and Salomon, G. (1994). *'Transfer of Learning'* in T. Husen and T. Postlethwaite (eds) *The International Encyclopaedia of Education* 2nd edn. Elsevier/Pergamon.

Perry, J. and Barnett, C. (1985). *Skills in Schools*. Longman.

Peters, R. S. (1970) (ed) *The Concept of Education*. London: Routledge and Keegan Paul.

Peters, R.S. (1966). *Ethics and Education*. Allen and Unwin.

Phillips, L. and Jorgensen, M. W. (2002) *Discourse Analysis: as theory and method,* London: Sage.

Popper, K. (1959). *The Logic of Scientific Discovery*. Hutchinson.

Postman, L. (1969) Experimental Analysis of Learning to Learn, In Bower, G.H., and Spence, J.T (eds) *The Psychology of Learning and Motivation*, NY: Academic Press.

Potter, J. and Wetherell, M. (1987) *Discourse and Social Psychology: Beyond Attitudes and Behaviour*, London: Sage.

Potter, J., Wetherell, M., Gill, R. and Edwards, D. (1990*)* 'Discourse – Noun, Verb or Social Practice'. *Philosophical Psychology* 3 (2): 205-17.

Poulantzas, N. (1973) *Political Power and Social Classes*. London: New Left Books.

Prais, S. J. (1995) *Productivity, Education and Training: An International Perspective*, Cambridge: Cambridge University Press.

Prais, S. J., and Steadman, H. (1986) 'Vocational training in France and Britain: The Building Trades', *National Institute Economic Review*, May.

Prais, S. J., and Wagner, K. (1983)' Some Practical Aspects of Human Capital Investment in Training Standards in Five Occupations in Britain and Germany. *National Institute Economic Review*, August.

Raggatt, P, and Williams, S. (1999) *Governments, Markets and Vocational Qualifications: An anatomy of policy*. London: Falmer Press.

Rainbird, H., Munro, A., and Holly, L. (2004) Exploring the Concept of Employer Demand for Skills and Qualifications, In C. Warhurst, I. Grugulis, and I. Keep (2004) (eds) *The Skills that Matter.* Basingstoke: Palgrave Macmillan.

Reeder, D. (1979) A Recurring Debate: Education and Industry, in G. Bernbaum (ed) *Schooling in Decline*. London: Macmillan.

Resnick, L. and Collins, A. (1994). 'Cognition and Learning' in T. Husen and T. Postlethwaite (eds) *The International Encyclopaedia of Education* 2nd edn. Elsevier/Pergamon

Ritzer, G. (1998) *The McDonaldisation Thesis*. London: Sage.

Robbins, L. R. (1963) *Higher Education*. London: HMSO

Robinson, E (1968) *The New Polytechnics*. Harmondsworth: Penguin Books.

Robinson, P. (1996) *Rhetoric and Reality: Britain's New Vocational Qualifications*. London: Centre for Economic Performance, LSE.

Rohlen, T. and LeTendre, G. (1998). *Teaching and Learning in Japan*. Cambridge University Press.

Roizen, J. and Jepson, M. (1985*). Degrees for Jobs; Employer Expectations of Higher Education*, SRHE/NFER. Nelson, Guilford.

Rowland, S. (2000) *The Enquiring University Teacher*. Buckingham: SHRE and Open University Press.

Ryan, P. (ed) (1991). *International Comparisons of Vocational Education and Training for Intermediate Skills.* Falmer Press.

Ryle, G. (1949) *The Concept of Mind*. Harmondsworth, Penguin.

Ryle, G. (1970) 'Teaching and Training' in R. S. Peters (1979) (ed) *The Concept of Education.* London: Routledge and Kegan Paul.

Sanderson, M. (1994) *The Missing Stratum: Technical school education in England 1900-1990's.* London: Athlone Press.

Sanderson, M. (1999) *Education and economic decline in Britain 1870 to 1990's,* Cambridge: Cambridge University Press.

Saussure, F.de. (1974) *Course in General Linguistics*, London: Fontana.

Saussure, F.de. (1983) *Course in General Linguistics,* London: Duckworth.

Searle, J. (1987) *'Wittgenstein'* In *The Great Philosophers*. London: BBC Books.

Seymour, W. D. (1967) *'Industrial Skills'* in C. More (1980) *Skill and the English Working Class, 1870-1914*, London: Croom Helm.

Sheridan, A. (1980) *Michel Foucault: The Will to Truth,* London: Tavistock.

Shorrocks-Taylor, D. and Varma, V. (eds) (1997). *Directions in Educational Psychology*. Whurr Publishers.

Shotter, J. (1993) *Conversational realities*, London: Sage.

Simon, H. A., and Chase, W. G. (1973) Skill in Chess. *American Scientist*, 61: 394-403.

Singley, M. K., and Anderson, J. R. (1989) *The Transfer of Cognitive Skill.* Harvard University Press.

Sloboda, J. (1986) 'What is Skill' in A. Gellatly. (ed) (1986). *The Skillful Mind.* OU Press.

Sloboda, J. (1991) Musical Expertise, in K.A. Ericsson and J. Smith (eds) *Towards and General Theory of Expertise.* Cambridge: Cambridge University Press.

Sloboda, J. A., Davidson, J. W., Howe, M. J. A., and Moore, G. G. (1996) The Role of Practice in the Development of Performing Musicians . *British Journal of Psychology* 87: 287-309.

Smart, B. (1985) *Michel Foucault*, London: Tavistock.

Smith, S. (1995) 'The Self Images of Discipline' in K. Booth, and S. Smith (eds.) *International Relations Theory Today*, Cambridge: Polity Press.

Smithers, A. (1993) All our Futures. London: HMSO.

Spencer, P. M. (1995) *Declining Standards in Vocational Education. M.Ed dissertation.* Sheffield University.

Spours, K. (1995) *Post Compulsory Education and Training: Statistical trends, Learning for the Future.* Working Paper 7, London and Coventry: University of Warwick, Centre for Education and Industry.

Starkes, J. L., Deakin, J., Allard, F., Hodges, N. J., and Hayes, A. (1996) Deliberate Practice in Sports: What is it anyway? In *The road to Excellence: The Acquisition of Expert Performance in the Arts and Science, Sports and Games*, K. A. Ericsson (1996) (ed) New Jersey Erlbaum.

Ste Marie, D. M. (2003) *Expertise in the Context of Sport Evaluation: Circumventing Information Processing Limitations.* Ottawa: Ottawa University Press.

Steedman, H. (1993) Do Workforce Skills Matter? *British Journal of Industrial Relations*, 31, 285-92.

Steiger, T. L. (1993) Construction Skill and Skill Construction. *Work, Employment and Society,* &. 535-60.

Stewart, J and Hamlin, B. (1992) Competence Based Qualifications: The case against change. *Journal of European Industrial Training*, Vol. 16. No. 7.

Stienberg, R.J. (1990) 'Social Construction of Skill: Gender, Power and Comparable Worth' In *Work and Occupations*, 17 (4) 449-482.

Still, A., and Costall, A (1991) (eds) Against Cognitivism . London: Harvester Wheatsheaf.

Stones, R. (1996) *Sociological Reasoning: Towards a Post-Modern Sociology,* London: Macmillan.

Sweller, J. (1990) Cognitive Processes and Instructional Procedures. *Australian Journal of Education*, 34 (2), 125-30.

The Future of Higher Education (2003) Fifth Report of Session. House of Commons Education and Skills Committee. HMSO.

THES (2003) 'Skills paper Sidelines Universities' *Times Higher Educational Supplement*, Nov 14.

Thompson, J.O. (1981) 'Real Pictures, Real Pleasures'? Screen Education, 38: 89-94 in D. Macdonell (1987) *Theories of Discourse*, Oxford: Basil Blackwell.

Thomson, P. (1989) *The Nature of Work.* Houndmills: Macmillan.

Tomlinson, P. (1997). 'Teacher Education and Psychologies of Skill' in Shorrocks-Taylor, D. and Varma, V. (eds) (1997*). Directions in Educational Psychology.* Whurr Publishers.

Training Agency (1988) Development of Assessable Standards for National Certification, Guidance note 1. Sheffield: TA.

Training Agency (1990) The Current Role of TVEI. Focus statement. TA

Training Agency. (1988). *Development of Assessable Standards for National Certification: Guidance Note 3.* Training Agency.

Training Agency. (1989). *Development of Assessable Standards for National Certification: Guidance Note 2.* Training Agency.

Training for Jobs. Cmnd 9135, (January 1984).

Tribe, J. (1996). *Core Skills: a critical examination. Educational Review*, 48.

Turner, H. A. (1962) *Trade Union Growth Structure and Policy.* London: Croom Helm.

Ukai-Russell, N. (1994). The Kumon Approach to Teaching and Learning. *Journal of Japanese Studies* (Winter, 1994).

Umezawa, R. (1998) *The Empty Hand.* New York: Weatherhill.

Usher, R. (1997) Seductive Texts: Competence, Power and Knowledge in Postmodernity, in R. Barnett, R., and A. Griffen, (eds) (1997) *The End of Knowledge in Higher Education.* London: Cassell.

Usher, R., and Edwards, S. (1994) *Postmodernism and Education: different voices, different worlds.* London: Routledge.

Vallas, P.S. (1990) 'The Concept of Skill: A critical review', In *Work and Occupations*, 17 (4) 379-398.

Van Dijk, T. (1977) *Text and Context*, London: Longman.

Van Dijk, T. (1997) *Discourse as Social Interaction*, London: Sage.

Vesy, G. (1976) *Meaning and Understanding : Locke and Wittgenstein.* Milton Keynes: Open University Press.

Viskar, R. (1992) 'Habermas on Heidegger and Foucault: Meaning and Validity in the Philosophical Discourse of Modernity', *Radical Philosophy*, 61: 15-22.

Waddell, J. (Chairman July 1978) School Examinations Report Part 1 HMSO Cmnd 7281-1.

Warburton, N. (1998) *Thinking from A to Z.* London: Routledge.

Warhurst, C., and Nickson, D. (2001) *Looking Good, Sounding Right.* London: Industrial Society.

Waugh, C. (1988) 'Polytechnical Education and Vocational Preparation' Liberal Education and General Education, *Journal of NATFHE General studies section*, Issue 61. pp28-36.

Welford, A.T. (1968). *Fundamentals of Skill.* Methuen.

Wellington, J. J. (1986) Pre-Vocational Education and the Needs of Employers, In *The Vocational Aspect of Education*, April 1986.

Wellington, J. J. (1987). 'Skills for the Future' in M. Holt (ed) (1987*) Skills and Vocationalism: the easy answer.* OU Press.

Westwood, A. (2004) The Skills that Matter and the Sortages that Don't, In C. Warhurst, I. Grugulis, and I. Keep (2004) (eds) The *Skills that Matter.* Basingstoke: Palgrave Macmillan.

Wickham, A. (1985) in R. Dale (1984*) Education and Training, Westminster Studies in Education*, Vol.7.

Williams, A.M., Davids, K. and Williams, J.G. (1999*). Visual Perception and Action in Sport.* Routledge.

Williams, G. (1985) Graduate Employment and Vocationalism in Higher Education. *European Journal of Education*, Vol 20 Nos 2-3, 181-92.

Willig, C. (1999a) (Ed.) *Applied Discourse Analysis: Social and Psychological Interventions,* Buckingham: Open University press.

Willig, C. (1999b) 'Beyond Appearances: A Critical Realist Approach to Social Constructionist Work'. In D. Nightingale and J. Cromby (eds.) *Social Constructionist Psychology: A critical Analysis of Theory and Practice*, Buckingham: Open University press.

Wilson, J. (1972) 'Two Types of Teaching' in R. D. Archambault (1972) (ed) *Philosophical Analysis and Education.* London: Routledge and Kegan Paul.

Wittgenstein, L. (1953) *Philosophical Investigations*, Oxford: Basil Blackwell.

Wittgenstein, L. (2001) *Tractatus Logico-Philosophicus.* London: Routledge.

Wodak, R. (1997) Critical Discourse Analysis and the Study of Doctor-Patient Relationships in, B. I. Gunnarson, P. Linell and B. Nordberg (eds) *The Construction of Professional Discourse.* London: Longman.

Wolf, A. (1995) *Competence-Based Assessment.* Buckingham: Open University Press.

Wolf, A. (2002) *Does Education Matter?* London: Penguin.

Wolf, A., Fotheringhame, J, and Grey, A. (1990). *Learning in Context: Patterns of Skills Transfer and Training Implications.* Training Agency: Sheffield.

Woodwiss, A. (1990) *Social Theory after Postmodernism.* London: Pluto.