Vocational and Professional Capability

An Epistemological and Ontological Study of Occupational Expertise

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Gerard Lum

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Contents

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Introduction

- 1 The Orthodox Conception of the Vocational
- 2 Philosophical Foundations of the Orthodoxy
- 3 Knowing How and Knowing That
- 4 The Competence Problem
- 5 Towards an Ontology of Occupational Capability
- <u>An Alternative Conception of Vocational and</u> Professional Capability
- 7 Working to Rules
- 8 Constitutive Rules and the Problem of Structure
- The Trouble with Competence-Based Education and Training
- 10 Rethinking Vocational and Professional Education

References

Index

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Introduction

This study is concerned with vocational and professional capability, by which is meant the entirety of those skills, competences, capacities, perceptions, attitudes and forms of knowledge which a person might require in order to fulfil an occupational role. I use the term 'capability' advisedly in place of the more customary 'skill' or 'competence'. As we shall see, terms such as 'skill' and 'competence' come to us replete with an accumulation of conceptual baggage. For example, to use the term 'skill' is, for some, to imply merely some kind of physical or manual dexterity; in psychology it has certain behaviourist associations; in sociology 'skilled' has connotations of working class, blue collar, etc.; when used politically the term can refer to a specific category of trade union membership. All of these uses are to be found in the literature in connection with the vocational aspects of education and yet it might be said that none of them are entirely in accord with how the term is more commonly understood when describing an occupation. For 'skilled' has long been a term of approbation to acknowledge the often considerable understanding involved in knowing how to proceed in a particular activity - skilled workers being distinguished from unskilled more by virtue of what they know than by what they do.² The term 'competence', brought to prominence by the growth of competence-based education and training (CBET), is likely to provoke even more diverse

reactions. For some it represents the very essence of what is required for consummate performance, while for others the term is at best epistemologically ambiguous, and at worst indicative of a deeply impoverished conception of the educational enterprise. Given such diverse interpretations of these terms, it is in the hope of avoiding prejudgement of the issues that the phrase 'vocational capability' is employed. But in order to emphasize that it is not some special 'concept' that is being delineated I will use it interchangeably with 'competence', 'skill', etc., and where a specific meaning is intended I will make this clear in the text.

The study arose from a personal dissatisfaction with certain theoretical assumptions in relation to the notions of 'skill', 'training', 'competence', etc., which have persisted in the education literature throughout the latter half of the twentieth century and continue today. Many of these assumptions run counter to my own intuitions about the nature of vocational capability and seem unhelpful in providing solutions to many questions relating to recent developments in vocational and professional education, both in the UK and elsewhere, namely the tendency towards 'competence-based' 'outcomes-based' or 'skills-based' approaches, a tendency which has impacted on vocational and mainstream education alike.

A central aim of this book is to show why these kinds of approaches are fundamentally wrong-headed. This is not, of course, an empirical claim about the quality of provision in universities, training schools or further education colleges. Rather, it is to say that current official arrangements are irredeemably antithetical to true educational concerns and as

such necessarily detract from the best efforts of educators and institutions to produce capable practitioners; insofar as educators do succeed in this endeavour they do so *in spite of* current arrangements rather than because of them.

But the target here is not merely that of current policy. As already intimated, underlying the arrangements which have come to predominate in education over the past two or three decades are a number of interconnected theoretical assumptions which might be summed up as follows. First, there is the assumption that skills, competences or capabilities are such as can be non-problematically related to definite ends or 'outcomes' and that they are generally amenable to being tied down to clear-cut specifications or rules. Second, there is the assumption that skills, competences, etc. are 'inert' in the sense that a person's view of the world is not transformed by undergoing training or possessing skills. And third, there is a certain kind of epistemological assumption: the idea that there are essentially two kinds of knowledge, a knowing how and a knowing that, and that it is appropriate for occupational capability to be associated predominantly, if not exclusively, with the former rather than the latter.

Now this way of thinking about the vocational is neither new nor unique; assumptions of this kind can be traced back at least as far as Aristotle and are certainly long-standing in the education literature. They might be said to represent the 'common-sense' view of the vocational and as such can be found supporting the most diverse range of causes imaginable. It is a characterization just as likely to be embraced by the industrialist for its implicit instrumentality

as it is by the trade unionist who might have cause to be suspicious of the overly academic or theoretical. It goes almost without saying that these are the very assumptions espoused with almost religious fervour by those who have a stake in the 'NVQ industry'. And ironically, it is precisely this characterization of the vocational which has long been propounded so vigorously by many philosophers of education in order to distance the vocational from a liberal education with the intention of protecting the latter from vocationalizing tendencies. 'Ironically' because, ultimately, this characterization has given encouragement to those who believe that by terminological sleight of hand (e.g. by referring to so-called 'thinking skills') these same characteristics can be extended to the wider educational enterprise. But most significant of all is that this conception of the vocational is on all fours with the bureaucratic imperative to standardize and impose accountability - the inevitable accompaniment to increased state involvement in vocational education and training (VET) in recent times. And this provides at least part of the explanation why these longstanding assumptions - for so long implicit in much theorizing about education and held in common by the most unlikely of bedfellows - have recently come to dominate so completely official policy on vocational provision and assessment. Suffice it to say that notwithstanding this almost universal assent, I intend to show that each and every one of these long-held assumptions about the vocational is completely and utterly mistaken.

This study is driven by two concerns, one theoretical and one practical. On the one hand a concern that prevailing

accounts in the literature of what it is to be vocationally capable are inadequate and philosophically incoherent. On the other hand a concern that these shortcomings have resulted in the failure to formulate a coherent and effective critical response to recent developments in vocational and professional education. In setting out to answer the question of what it is, epistemologically and ontologically speaking, for someone to be vocationally capable I offer a threefold critique of what I argue is the prevailing view. First, I set out to reveal its conceptual incoherence; second, I demonstrate that its philosophical and methodological underpinnings untenable; and third, I propose an alternative, theoretically more coherent account of vocational and professional capability. One overarching aim, however, is therapeutic: to explain how circumstances could have conspired to bring about a state of affairs which is profoundly and irredeemably adverse to the provision of effective vocational and professional education.

It may be useful to say a brief word about how this study developed during the writing. In the early stages I took the issue of occupational capability to be essentially an epistemological matter, assuming that the issue was one of clarifying what it is a person knows when he or she is competent, skilled, etc. However, my thinking on this was to be taken in another direction by two very different philosophical projects. The first was John Searle's book *The Construction of Social Reality*. In his book Searle poses the question of how is it possible for there to be 'objective' facts about the world which are entirely dependent upon human agreement. How is it possible, for example, for it be a matter

of objective fact that a person is married, has won at chess, is President of the United States, and so on. His answer is to suggest that these kinds of facts refer to a constructed social reality, an ontology of spectacular complexity which we create. It seemed to me that much of what Searle was saying could apply equally to the 'facts' relating to vocational capability, and that they too could be said to refer to a similarly complex ontology the complexity of which goes largely unrecognized because we *learn* to see it as a simple phenomenon. It was thus that I came to the view that questions about the nature of vocational capability are first and foremost ontological questions.

At the same time I felt there were certain problems with Searle's account, certain inconsistencies relating to his attachment to philosophical realism and a correspondence notion of truth, which remained unresolved. Indeed, the second thing that influenced the direction of this study and which ultimately made it possible to ameliorate Searle's account of 'constructed social reality' was my becoming aware of the acute significance of the work of Martin Heidegger.⁴ It was clear that Heidegger's 'analytic of everydayness' had profound implications for any understanding of vocational or professional capability. Having been published well over half a century earlier, not only does Heidegger's work foreshadow much of Searle's ontology of social 'reality', but it also avoids some of the difficulties faced by Searle's account. However, what remained valuable about the kind of picture suggested by Searle, was that in being generally representative of the prevailing consensus in modern Western societies – a

consensus centred on the foundational status of empirical science – it seemed to provide a better purchase on many of the 'common-sense' assumptions I wished to critique. It was thus that I set out to develop an account consistent with Searle's as a default position, while at the same time proposing a philosophically more comprehensive and ultimately more coherent position based on ontological considerations suggested by Heidegger's work. Consequently, the conception of vocational and professional capability that is developed here benefits both from Searle's notion of 'constructed social reality' and from Heidegger's account of 'Being-in-the-world'.

Background to the problem

For a great many occupations the history of vocational preparation is a history of ever-increasing state or quasiofficial involvement, accompanied by a similarly incremental trend towards the standardization and bureaucratization of occupational skills and training provision. It is possible to track the progress of this kind of tendency in the UK from the establishment of the Mechanics Institutes in the midnineteenth century (see Cotgrove, 1958), through the formation of the first industrial training quangos and then on to what, for many, is the apotheosis of vocational standardization: the highly bureaucratic 'competence-based' procedures of the National Vocational Qualification (NVQ). Importantly, since the tendency towards standardization and bureaucratization invariably involved attempts to try to make formal and explicit that which previously had tended to be passed tacitly from master to apprentice, from

practitioner to trainee, we might say that an important feature of this increasing state involvement was that it caused vocational education and training (VET) provision increasingly to be linked to the capacity to articulate or specify the exact nature of skills and capabilities required. Indeed, John Dewey (1966) recognized precisely this modern 'disposition to make explicit and deliberate vocational implications previously tacit' (p. 313). But the more immediate point here arises from the fact that, given the likelihood of dissension on these matters, it was also a tendency which raised the prospect of serious consideration being given to the nature of the skills required for a given occupation. In this sense we might say that it was inevitable that increasing state involvement in VET would eventually draw attention to important questions about the precise nature of skill, competence and training.⁵

From the 1960s in the UK, with growing state involvement and a succession of controversial government VET initiatives, there was no shortage of contributions to the literature relating to VET policy. Commentators were increasingly preoccupied with questions such as whether the provision of training was such as to serve the best interests of industry (Corfield, 1991; Guy, 1991), commerce (Jarvis and Prais, 1991), unemployed youth (Ainley and Corney, 1990), adults (Edwards, 1991), women (Wickham, 1985), and so on. However, VET still received relatively little attention from British philosophers of education. Relatively little of the literature of philosophy of education of this period – a literature largely preoccupied with conceptions of liberal education and the radical responses to it – dealt specifically

with matters of vocational preparation, with the notions of skill, competence or training. Perhaps this was because the vocational simply did not hold a necessary fascination for philosophers. We get an inkling of this perhaps in Richard Peters' (1977) claim that concepts such as education and politics are 'philosophically interesting in ways in which engineering is not' (p. 139). But behind this self-confessed lack of interest lay an identifiable philosophical stance towards the vocational aspects of education – certain assumptions relating to notions such as skill and training which were implicit in the way that many philosophers delineated 'the concept of education'. So widespread were these assumptions that it will be argued here that they can effectively be regarded as an 'orthodoxy'.

Although there is no evidence to suggest that this orthodoxy ever had a direct influence on VET practice, nevertheless these underlying assumptions continued to persist in the literature. There were, of course, notable exceptions to this quiet consensus: commentators who shared neither the same methodological approach to the analysis of concepts nor the same presumptions about vocational capability. Of particular importance on this score were those who drew attention to the essentially tacit nature of skills and abilities, for this seemed to point in an entirely different direction to the prevailing consensus. It is perhaps significant that the two main champions of this approach, Michael Polanyi and Donald Schön, were neither British nor connected with British philosophy of education.

It was with the introduction of competence-based education and training (CBET) that philosophical interest in

the vocational first began to stir and ideas relating to skill and competence began to attract unprecedented attention. Initially, discussion centred upon concerns that the introduction of the competence-based National Vocational Qualification (NVQ) into further education threatened to damage the quality of skills provision in the UK (Hyland, 1990; 1991a; 1991b; 1991c; Hodkinson, 1991; Smithers, 1993). But as the competence approach spread downwards into schools and upwards into higher education the growing political and managerial preoccupation with 'competences' and 'skills' induced a new anxiety and a more urgent need to scrutinize those 'concepts' which had previously been of little philosophical interest. By the 1990s, a substantial literature had begun to accumulate dedicated to either expounding upon or criticizing 'the concept of competence' and it was thus that many of the assumptions which had for so long been implicit - particularly in the liberal portrayal of the academic-vocational divide - now came to the fore and came to be of practical import. It is with a consideration of these assumptions that this study begins.

Overview of the argument

I begin by observing that it is possible to discern a pattern of inter-related theoretical assumptions in the literature relating to VET, assumptions which can be traced from the period in which ordinary language techniques became predominant in philosophy of education through to the present day. I suggest that so widespread have these ideas become, that it is appropriate to think of them as constituting a kind of orthodoxy and that many of these assumptions

remain prevalent in much theorizing about education today, particularly with respect to the relationship between the academic and the vocational. I also suggest that these same theoretical assumptions can be seen to have substantive practical consequences: underpinning current competence-based approaches to VET and demands for a skills-based general curriculum, while also shaping the critical response to such developments.

Examining the means by which these assumptions are justified in the literature, I show that their philosophical underpinnings can be traced back to the positivism and ordinary language techniques of Oxford philosophy. I examine this philosophical background in some detail along with the criticisms which have been directed at it. The implications of Oxford philosophy for philosophy of education generally, and for the orthodox conceptions of skill and training in particular, are then explored. I conclude that the ordinary language techniques of analysis fail to support the orthodox claims relating to concepts such as skill and training and that, under scrutiny, the putatively 'objective' and value-free analyses by which the orthodox concepts are delineated turn out to be substantively value-laden, employing spurious linguistic reasoning in order to support certain social, political and cultural prejudices.

Noting that the distinction between 'knowing how' and 'knowing that' occupies a central position in the orthodoxy, one widely acknowledged to be of epistemological import, I examine this dichotomy in the context of Gilbert Ryle's argument before turning to consider its implications for education. After examining the behaviourist implications of

Ryle's argument and the sort of criticisms which might be directed at these, I challenge the assumption that 'knowing how' and 'knowing that' denote two epistemologically distinct kinds of knowledge. First, I demonstrate that there is no consensus on how they are to be distinguished and that how the distinction is interpreted is entirely dependent upon the interpreter's wider purposes. Second, I show that by Ryle's own account the distinction is really about the evidential conditions of our claims about the knowledgeable states of others - hence the idea that it represents two kinds of knowledge points to something of an inconsistency in Ryle's thesis, one caused in part by his reliance on ordinary language techniques. I go on to show how the erroneous assumption that the distinction denotes two kinds of knowledge not only has intensely divisive educational and social consequences, but also is fundamentally inimical to providing a coherent epistemological account of vocational capability. I then suggest a preliminary resolution of the 'knowing how-knowing that' dichotomy by invoking Michael Oakeshott's notion of knowledge as a 'manifold of abilities'.

Of central concern in this study is the issue of 'competence-based' education and training. In Chapter 4 I argue that one of the consequences of the continuing influence of ordinary language techniques in philosophy of education is that it has led to a radical misinterpretation of the competence issue and a failure on the part of critics to correctly isolate CBET's unique, identifying features. After examining claims on both sides of the 'competence debate' I show that the prevailing tendency to identify CBET with 'competence' is fundamentally mistaken and that the competence approach is

more properly characterized by its methodological strategy of employing statements to describe 'competence' and 'outcomes'. Attention is drawn to CBET's implicit assumption that such statements can non-problematically describe human capabilities and some preliminary objections are considered. Of particular importance on this score is the fact that the demand for precise specifications causes an 'ontological shift' in the focus of the specification, something which, again, can be seen to be socially divisive in being of greater detriment to the epistemic estimation of some occupations than others. I suggest that the seemingly innocuous suggestion that such statements simply describe the 'facts' relating to competence cannot properly be evaluated until we have explored more fully what it is, ontologically speaking, to be skilled, competent vocationally capable.

Drawing on the work of John Searle it is proposed that such facts might be thought of as referring to a 'constructed' social reality, an ontology of extraordinary complexity that I suggest has profound implications for our understanding of vocational and professional capability. After outlining some of the main features of Searle's constructivist thesis it is noted that certain aspects of his position – based upon philosophical realism and a correspondence conception of truth – are inherently problematic. I argue that Heidegger's conception of Being-in-the-world indicates a possible resolution of some of these difficulties and provides a more coherent ontological account of human engagement. However, recognizing that Searle's position is more generally representative of the prevailing consensus in modern

Western societies – a consensus centred on the foundational status of empirical science – I suggest that it will also be useful to develop Searle's account as a 'default position' from which to critique the orthodox conception of vocational capability. To that end some important areas of correspondence and divergence between Searle and Heidegger are explored. It is concluded that whichever position we adopt, the inadequacies of the orthodoxy, with its empiricist/objectivist assumptions, are manifest and that a different kind of explanation and a different conception of 'objectivity' must be adopted if we are to provide a more coherent account of vocational capability.

Next, I begin to set out an alternative conception of vocational and professional capability based upon Searle's notion of constructed social reality and Heidegger's account of Being-in-the-world. I show how Searle's thesis concerning the assignment of function and his conception Background, allied with Heidegger's 'analytic of everydayness', provide valuable insights into the nature of human capabilities; capabilities which at their most fundamental constitute the means by which we are able to perceive, experience and give meaning to the world around us. I refer to Abercrombie's work on perception, in particular her claim that perception involves the application of 'schemata' and unconscious processes of interpretation and judgement, in order to develop the idea that the way we see the world is profoundly contingent and value-laden. Noting the substantial degree of congruence between these very different perspectives, I argue that the kind of primordial understandings and abilities they suggest are broadly consistent with a

conception of occupational capability based upon Oakeshott's account of knowledge as a manifold of abilities. Moreover, I also suggest that such a conception serves to indicate the profound inadequacy of accounts of vocational capability couched in terms of descriptions of behaviour or propositional knowledge.

One of the most important theoretical issues for VET and yet one of the least discussed in the literature is that of 'rules'. I note the existence of two radically opposed positions on this matter. On the one hand there are those who are keen to stress the importance of such things as 'judgement' and 'reflection' and who would take the view that the highest of human achievements arise from the autonomous creativity of the individual – rather than from behaviour which is 'rulegoverned'. On the other hand there are those who would argue that whenever it makes sense to say that there is a 'right' and a 'wrong' way of doing something, then it follows that that activity must necessarily be rule-governed. The philosophical merits of these two positions are considered through the work of Michael Oakeshott and Peter Winch respectively. It is suggested that in order to extricate a more coherent conception of rule-governed behaviour it is necessary to distinguish three fundamentally different kinds of rules: regulative, explanatory and constitutive. Examining the first two of these it is suggested that while each might be seen to play some part in skilled or competent performance, there are profound difficulties with the idea that either is sufficient to provide an account of vocational capability as something which is essentially rule-governed.

Having dismissed the possibility that either regulative or

explanatory rules are sufficient for rule-governed behaviour, I turn next to consider how the notion of constitutive rules might be said to relate to vocational capability. Examining them first in the context of Searle's constructivist thesis, I concur with Searle in acknowledging that people have the ability to evolve practices which are 'functionally equivalent' to explicit constitutive rules. I suggest, however, that under scrutiny there are difficulties with his account and that the phenomenon he describes is actually indicative of a more fundamental phenomenon – what I refer to as the innate constitutive structure of the Background. In contrast to Searle, whose use of the term is restricted to formal social institutions, I suggest that the notion of a constitutive rule is fundamental to any meaningful behaviour. However, I also acknowledge that this conception of rule-governed behaviour leaves us in need of an explanation of how it is possible for vocational capability to be a social phenomenon. Noting the existence in the literature of claims to the effect that skill is a 'social construct', these claims are examined before being rejected in favour of an alternative strategy. Invoking Anthony Giddens' notion of the duality of structure it is argued that vocational capability is 'socially constructed' by virtue of the capacity human beings have for the reflexive understanding of recursive practices.

Returning to consider CBET in light of all this, it is concluded that CBET's strategy of employing 'competence statements' to provide precise descriptions of competence is based upon certain untenable assumptions relating to the semantic status of such statements and the ontological and epistemological constructs to which they are intended to

correspond. Considering CBET's claim to be able to *infer* competence, it is argued that CBET necessarily *precludes* the use of inference in making judgements about people's capabilities. Importantly, this shows CBET to be fundamentally at odds with the established legal understanding of worker competence and the processes employed in law to judge competence. It is concluded that such considerations are of devastating consequence for the entire project of competence-based and skills-based education and training.

The study concludes by considering various theoretical implications of the proposed alternative conception of occupational capability. The orthodoxy is re-evaluated in the light of this proposed alternative and its inadequacies more clearly identified. Finally, I consider the implications of this for the issue of the vocational-liberal divide and for the 'problem of justification' in higher education.

Notes

- ¹ No special connection is intended here with the notion of 'capability' as Amartya Sen and others have used it. Similarly, no special distinction is implied by my reference to the vocational and the professional the theory developed here is common to *both*; only later will I suggest how the vocational and the professional might be differentiated in light of this theory.
- ² This distinction is brought out by considering that both might be seen to *do* things with more or less dexterity it is the skilled worker's *understanding* of what he or she does

that sets him or her apart.

- ³ That is, the whole gamut of training providers and others who have a commercial interest in the provision of National Vocational Qualifications (NVQs), or in Scotland SVQs.
- ⁴ It was Paul Standish's (1997) paper, 'Heidegger and the technology of further education', which first brought to my attention the acute significance of Martin Heidegger's work for our understanding of human involvements including, as Standish showed, those relating to vocational capability.
- ⁵ Another development which might also be seen to have drawn attention to these questions is the 'rapid destruction and reconstruction of skills' (Harvey, 1990, p. 150); that is, changes to the occupational grouping of tasks the 'flexibility' which has been identified as a characteristic of post-Fordist, postmodern production.

The Orthodox Conception of the Vocational

In the latter half of the twentieth century, the period during which modern philosophy of education effectively developed as a discipline, certain ideas relating to those concepts most closely identified with VET, those of skill and training, began to find expression in a burgeoning literature on philosophy of education. Perhaps somewhat surprisingly these ideas were not the result of any purposeful or extensive examination of the vocational enterprise, of the processes of training, or of what it is to be skilled; indeed, it might even be said that such matters tended to receive relatively scant philosophical attention. Rather, the references to skill and training which began to appear in the literature during this period tended to be subsidiary to other purposes, by-products of a very different project: that of elucidating 'the concept of education'.

It is well known that R. S. Peters was in the vanguard of such endeavours: it was he who did more than anyone else to 'put philosophy of education on the map' (Straughan and Wilson, 1987, p. 1) and who undertook what was probably the 'most rigorous and thoroughgoing analysis of the concept ever undertaken' (Hamm, 1989, p. 29). Not least among Peters' concerns – and he was certainly not alone in this –

was to distance the business of education from vocational or instrumental ends: to be educated a person must 'exhibit some mastery of forms of thought and awareness which are not harnessed purely to utilitarian or vocational purposes' (Peters, 1973, p. 9). For Peters, one way of getting clearer about what education *is* was to be clear about what it is *not*. Thus it was that Peters 'led the way in establishing' (Bridges, 1996, p. 365) the distinction between 'the concept of education' and those concepts, such as training and skill, more typically associated with VET.

As Dearden (1986) notes, the arguments by which Peters made these distinctions were 'mainly linguistic' (p. 72). Adopting the strategies of Oxford philosophy Peters, together with many other philosophers of education, came to see the prime task of philosophy as one of finding the 'logically necessary conditions for the use of a word' (Hirst and Peters, 1970, p. 6): 'what we do is examine the use of words in order to see what principle or principles govern their use. If we can make these explicit we have uncovered the concept' (*ibid.*, p. 4). On this view it is regarded to be of some import to note, for example, that 'We talk more naturally of "educating the emotions" than we do of training them' (Peters, 1980, p. 93). This preoccupation with language use was defended on the grounds that it is essential to obtain clarity in the use of terms:

Clarification of what exactly is meant, for instance, by 'instruction' and 'training', would serve to elucidate in what specific contexts it is proper to employ these terms and on what factors precisely the use of them turns. (Hirst and Peters, 1970, p. 84)

Now it must be stressed that it was never Peters' intention to add to our understanding of the vocational enterprise, nor is there any evidence to suggest that his work at any time has had any direct or intended influence on arrangements for VET. Nevertheless, Peters' work is highly significant here for two reasons. First, because his approach to philosophy of education was for a time highly influential: as we shall see, a generation or more of educational theorists adopted not only his distinctive methodological approach to analysing concepts such as skill and training but often echoed, almost verbatim, his pronouncements on them. To this day Peters' influence continues to reverberate in the work of many leading educational theorists and thus continues, albeit implicitly, to influence the way in which many think and theorize about education and how they respond to questions about skill and training. The second reason why Peters' work is of relevance here is that in his use of 'ordinary language' techniques he inadvertently draws attention to many of the assumptions about skill and training which find expression in everyday speech. 'Inadvertently' because while for Peters such analyses held the promise of conceptual clarification, it will be suggested here that they might more appropriately be regarded as providing an insight into many of the questionable presuppositions which not only remain as common currency in everyday language but also, and more importantly, can be seen to inform much of the thinking behind current policy-making and practice in vocational education and training. I want to suggest that these presuppositions, these ways of thinking about skill and training, might be thought of as constituting an 'orthodoxy',

and that this orthodoxy is reproduced in the work of Peters and other philosophers of education as an identifiable pattern of inter-related theoretical conceptions. It is to this orthodoxy, these conceptions of skill and training, that we now turn.

The anatomy of a mistake

One characteristic which, for Peters, clearly distinguishes the concepts of skill and training from that of education is that of 'specificity'. He suggests that while 'education' suggests a 'lack of specificity' (1973, p. 7), the term 'training' 'has application whenever anything coming up to a clear-cut specification has to be learnt', or when 'there is some specifiable type of performance that has to be mastered' (ibid., p. 15); something which can be 'tied down to specifiable rules' (ibid., p. 16). The idea that the notions of training or skill are distinguished by being more readily disposed to specification is one which continues to find wide acceptance, as exemplified by Richard Pring (1995) when he tells us that 'The advantage of the concept of skill for curriculum planners is that it is quite specific' (p. 153). Similarly, Barnett (1994) says 'We cannot teach "skills" as such: we have to specify the skills we have in mind' (p. 57).

Closely related to the idea of specificity is that of narrowness, the idea that the vocational somehow lends itself to being 'narrowly specified' (Barrow, 1981, p. 58) or has a narrow focus (Kleinig, 1982; Hamm, 1989). On this view, one reason why we distinguish between education and training in ordinary language is because education is in some sense a broader enterprise than training: 'We distinguish between

educating people and training them because for us education is no longer compatible with any narrowly conceived enterprise' (Hirst and Peters, 1970, p. 25; see also Langford, 1973). One interpretation of this 'narrowness' is reflected in the fact that in ordinary language we talk about people being 'trained *for* jobs, *as* mechanics, and *in* science' (original emphasis; Peters, 1973, p. 7), or, conversely, in the fact that 'We do not speak of educating a man as a scientist or as an historian anymore than we speak of educating a man as a cook or a builder' (Gribble, 1969, p. 10). On this view, then, the notion of training 'always suggests confinement' (Peters, 1973, p. 7).

For some, however, the narrowness associated with training is also related to the 'simple nature of the achievement and to the paucity of rational understanding and cognitive implications required for the mastery' (Hamm, 1989, p. 37). The idea that training 'lacks the wider cognitive implications of "education" (Peters, 1980, p. 94), or that it is characterized by a 'lack of cognitive implications' (Chambers, 1984, p. 24), or that skills 'do not have a wide-ranging cognitive content' (Peters, 1966, p. 159; see also Peters, 1980, p. 95), is a recurring one.

Another frequently made claim is that the concepts of training and education are to be distinguished by the fact that they denote two fundamentally different kinds of knowledge. Under Peters' influence, Gilbert Ryle's famous distinction between 'knowing how' and 'knowing that' became widely used in the analysis of educational concepts. The distinction is one which remains as common currency in educational theory and not infrequently adopted for the

purpose of distinguishing between training and education (see, for example, Henderson, 1961; Pring, 1995). Invoking Ryle's distinction, Peters (1980) insists that while education 'involves "knowing that" as well as "knowing how" (p. 96), with many skills there is 'very little to know ... It is largely a matter of "knowing how" rather than "knowing that", of knack rather than understanding' (*ibid.*, p. 95; see also Peters, 1966). Skills and 'know-how' are exemplified by such things as 'riding bicycles, swimming or golf' (Peters, 1980, p. 95). Indeed, Peters' association of 'know-how' with the riding of bicycles seems to have had an enduring influence (see, for example, Pring, 1995, p. 146).

In similar vein Woods and Barrow (1975) see an important distinction to be made between the 'mechanical' or 'knowing-what-to-do kind of understanding' involved in vocational or instrumental ends, and the 'superior' 'reasoned understanding' or capacity to 'understand why' which characterizes the business of education. For Woods and Barrow the distinction is brought out by considering how a failure to understand might be remedied:

Failure to understand in the sense of not knowing what to do can be remedied by giving a simple instruction or set of instructions – 'You just stick this wire in there'. (*Ibid.*, p. 47)

On this view, while someone may thus understand what to do, such instructions do not enable him or her to understand why and it is the latter which characterizes education.

The idea that being trained is somehow characterized by the possession of limited understanding is, again, one which appears to be a common theme: We often say of a man that he is highly trained, but not educated. What lies behind this condemnation? It is not that the man has mastered a skill of which we disapprove. For we could say this of a doctor or even of a philosopher who had mastered certain ploys or moves in argument ... It is rather that he has a very limited conception of what he is doing. (Peters, 1980, p. 93)

Accordingly, training is distinguished from education in that 'little emphasis is placed on the underlying rationale' (original emphasis; Peters, 1973, p. 15). The business of teaching is to be contrasted with training or instructing because teaching 'suggests that a rationale is to be grasped behind the skill or body of knowledge' (original emphasis; *ibid.*, p. 19). The sentiment is echoed in Pring's claim that, as regards skill, 'The role of theory takes a back place because the skilled craftsman knows from doing; he knows practically; success requires no theoretical analysis of principles behind the practice.' (original emphasis; Pring, 1995, p. 153). Thus one can be successfully trained without necessarily understanding the principles involved in what one has been trained to do (Ducasse, 1958).

In much the same way that Peters regards 'rationale' as being something distinct from skill, in the sense that it either may or may not accompany skilled performance, so too with intelligence – a person may be intelligent but lack the skill, or skilled but lack the intelligence:

we can say that a person is generally intelligent in the way he always approaches situations by trying to relate what he is doing to some over-all purpose; but he may lack the skill to bring off what he is trying to do. An intelligent carpenter or golfer may be too unskilled to be a good carpenter or golfer. (Hirst and Peters, 1970, p. 55)

Another point on which, it is claimed, the concepts of education and training diverge is in the different extents to which it is appropriate to associate each with behaviourist learning principles. While stressing the cognitively rich connotations of education, the concepts of training and skill are frequently linked with the behaviourist model. Perhaps one reason for this is the fact that the very term 'skill' has long been appropriated by behaviourists: as Bleth (1965) notes, skill is the 'primary component' (p. 249) in the behaviourist model. So, while being at pains to warn against a behaviourist approach to education, Peters' (1980) account of training is explicitly behaviourist: while an 'educated man' is distinguished 'not so much by what he does' as by his understanding, by what he 'grasps' (p. 96), training, Peters tells us, 'suggests the acquisition of appropriate habits of response in a limited situation' (ibid., p. 94). Again, there is considerable unanimity for the behaviourist conception of training outlined by Peters: the idea that training is essentially about 'forming models of habit and behaviour' (Thomas Greene quoted in M. Greene, 1973, p. 172), that it is related to conditioning (Greene, 1973) or that its purpose is simply to produce 'a certain kind of performance' (Bereiter, 1972, p. 391). Similarly, Bigge (1982) takes training to be 'aimed primarily at acquiring habits or modes of behaviour. It is teaching someone to do so and so: it is shaping behaviour' (original emphasis; p. 117). The point is reiterated by Kleinig (1982) for whom the idea of training, again, is associated with

forming habits and routine responses, being 'more directly connected with behaviour or performance than with independent mastery' (p. 49).

A further important distinction drawn between the concepts of education and training is in relation to what Peters (1973) calls the 'attitudinal aspect' (p. 8) of the sort of knowledge which he sees as an essential part of what it is to be educated. He contrasts this with the 'inert' understanding which characterizes being trained: a person's outlook or general view of the world is not transformed by being trained. In being educated, people 'must come to care about what they are doing' (Gribble, 1969, p. 11) whereas training, according to Ryle (1972), for example, is essentially value neutral: 'a proficiency can always be improperly as well as properly employed' (p. 48); training in penmanship may or may not make a forger. So while in order that we can reasonably claim to be educating someone it is essential that 'something of value is passed on' (Peters, 1980, p. 87); there is no such requirement in order for us to claim that we are training someone - we might, to use Peters' example, be training someone in the art of torture. Indeed, it is possible for training to be 'anti-educative' insofar as it is designed to produce uncritical obedience or unthinking conformity: 'A trained mind may well be indoctrinated and the trained character is all too often mechanical' (Kleinig, 1982, p. 49). Hence it is education, rather than training or instruction, which is rightly connected with the idea of judgement and character (see, for example, Maskell, 1999).

By way of consolidating these accounts of 'training' and 'skill' we can say that, on this view, they are characterized as

follows: first, they are seen as related to specific or definite ends, and in this sense are characterized by a sort of confinement or narrowness of focus. Not only is it possible for these ends to be clearly specified, but so too can the skills required to achieve those ends, as can the processes of training necessary to impart those skills - skilled activity, in short, is something which can be 'tied down' to clear-cut specifications and identifiable rules. These concepts are distinguished by virtue of the fact that they denote a particular kind of knowledge: a knowing how as opposed to a knowing that. It is a kind of knowing characterized predominantly by its lack of cognitive implications and by a kind of understanding which is limited, for one can be trained or skilled without necessarily knowing the rationale or the theoretical principles that lie behind practice. On this account it is appropriate to associate training with behaviourist learning principles because training is primarily about 'shaping behaviour' and forming 'appropriate habits of response'. Furthermore, the notions of training and skill are inert in the sense that a person's view of the world is not transformed by undergoing training or possessing skills; such things are essentially value-neutral and hence have little bearing on, say, a persons character or their capacity for judgement.

Here, then, we have the outlines of what we might call the orthodox account of the concepts of skill and training. Before going on to examine their philosophical validity I want to turn our attention to the matter of how we should properly understand these analyses, for it turns out that there is considerable ambiguity concerning what it is exactly that is

Getting clearer about the orthodoxy

We have already noted that it would be a mistake to regard the above analyses as being explicitly intended to add to our understanding of the vocational enterprise. It would be a misrepresentation of Peters to read him as suggesting that the concepts of skill and training he describes constitute a thoroughgoing account of vocational or professional capability, or that they are intended either to describe or prescribe how the business of vocational preparation is or should be carried out. But, that said, if the concepts presented in these analyses are not intended to be descriptive of the aims or processes of vocational preparation then we might reasonably ask how do these concepts stand in relation to VET? It would be bizarre for such recurrent references to training and skill not to have some bearing on VET, or some import for our understanding of what it is to be vocationally capable.

It is not difficult to discern the broad implicative thrust of these analyses for the concept of education. In short, what all of these authors intend is that our understanding of liberal education should be sufficiently rich and that we come to conceive of education as something which is profoundly life-enhancing. It is a conception which they regard as incompatible not only with being 'harnessed purely to utilitarian or vocational purposes' (Peters, 1973, p. 9) but also with being conceived of in terms of those concepts normally associated with vocational preparation. In broad terms, then, this much is clear. But what is fundamentally at issue here,

and conspicuously disregarded in these analyses, is how these concepts, as they are elucidated here, might be understood in relation to VET. It would seem that although we have here what are claimed to be some of the salient features of the 'concepts' of training and skill, concepts which are steadfastly contrasted with the concept of education, we remain in a state of puzzlement about what exactly it is that is being described.

The only clear consensus seems to be that it is 'concepts' that are being described. Yet, there is a degree of ambiguity in what is meant by 'concept'; indeed, one commentator (Wilson, 1979) has expressed difficulty in understanding what some have meant when they talk about 'concepts' in the context of philosophy of education. He notes that some appear to regard 'concept' as equivalent to 'word' as, for example, when they talk about the 'use' of a concept. For Wilson, 'concept' means 'the range of meaning, or rules governing the use, of the term' (ibid., p. 34); an interpretation which seems in broad agreement with Hirst's and Peters' belief that concepts can be uncovered by identifying the 'principles' which govern the use of words or the 'logically necessary conditions' for their use. As we have seen, the procedure used to establish the detail of these rules, principles or conditions is that of examining the de facto use of terms in ordinary language. Later we will consider the philosophical validity of these procedures, but the more immediate problem here is that despite all this talk about 'concepts', there remains a degree of ambiguity about what it is exactly that is being described.

Since it is a point on which the literature is noticeably

reticent it is left to us to weigh the various possibilities. One possibility is that we might take the concepts of education and training as outlined in these analyses as intended to be exclusively applicable to the liberal and the vocational spheres respectively, i.e. the liberal enterprise being uniquely about 'education' and vocational preparation predominantly concerned with 'training'. Although rather a crude reading, there are some indications in the literature which seem to support this interpretation, as, for example, when Peters notes that 'we talk about a person being trained as a philosopher, scientist or cook ... we do not use the phrase "educated as a philosopher, scientist or cook" (original emphasis; 1980, p. 93). Here, Peters seems to be suggesting that any and all of the preparation required for any kind of vocation is necessarily a qualitatively different exercise from that of education and that the line between education and training is essentially accordant with that drawn between the liberal and the vocational. But there are two immediate difficulties with this interpretation. First, many people would acknowledge that training and the acquisition of skills, even as conceived above, have some valid and useful part to play in a liberal or general education. The second difficulty is that, given the epistemological and cognitive thinness of the concepts of training and skill delineated in these analyses, to suggest that this is all that VET consists of is patently unconvincing: it is difficult to see how the vocational preparation of, say, a medical doctor could be conceived of in such impoverished terms. On the above view training might equip the doctor with certain physical skills, instil appropriate habits or behaviour, provide manual dexterity or

the right 'knack' in the performance of tasks. But training, thus conceived, would be a far from sufficient preparation: the doctor will also require a considerable amount of knowledge, a deep understanding and an acute capacity for judgement, and will certainly be required to grasp the rationale behind what he or she is doing and know the reason why of things. Neither would it be sufficient for such understanding to be inert, for it would be essential to adopt the values appropriate to medical practice and come to care for what he or she is doing.

One way out of this difficulty and, at first sight, a more credible reading of these analyses might be to understand them as suggesting that both the liberal and the vocational spheres of provision comprise elements of education and training. Accordingly, we might acknowledge on the one hand that training and the development of skill have a place in the liberal sphere and, on the other, that vocational preparation can be thought of as consisting partly of training and partly of education – we do, after all, refer to vocational education and training. But then another difficulty arises: we might reasonably ask what exactly is achieved by making such a distinction. For if the concepts of skill and training really are as thin as these analyses suggest, and, as Peters indicates, they are rightly associated with the kind of capabilities involved in 'riding bicycles, swimming, or golf' (ibid., p. 95), then the need to distinguish them from education effectively disappears. First, because distinction becomes prosaic: we hardly need to be persuaded that there is a world of difference between being educated and being able to ride a bicycle. Second, because the threat to

Peters' conception of a liberal education comes not from the proposal that it should be directed at such things as riding bicycles, but rather from demands that it should be directed at vocational or instrumental ends. Our acknowledgement that being educated is vastly different from being able to ride a bicycle is of little consequence unless we are able to ascertain that vocational capability is in some sense substantially like riding bicycles and this, as we have already seen, seems to be controverted by those instances of vocational capability which cannot adequately be accounted for in such impoverished terms. So even if we accept the idea that the concepts of skill and training, as delineated here, are features of both the liberal and the vocational spheres, it is difficult to see how this furthers our understanding of how the processes of VET are to be distinguished from those of education, and yet it is supposedly for this very reason that these concepts are being delineated. Furthermore, if we were to say that 'skill' is only one aspect of vocational capability, and 'training' is only one part of what would be required by way of a complete vocational preparation, then we would appear to be in need of further concepts to describe what it is to be more fully capable or what is required by way of a more complete preparation. On this interpretation, to describe plumbers as 'skilled' would presumably be an incomplete description of their capabilities and to say that they have been 'trained' would be to acknowledge receipt of only some part of a fuller preparation, and then perhaps only a minor part.

A variation on this reading, one which might be seen to avoid some of the above objections, would be to understand

these analyses as relating to VET not in any definitive or absolute sense but rather as a more general indication of what the vocational *tends* towards. For example, it might be argued that although there are some instances of vocational capability which transcend the concept of 'skill' and that the preparation required in some such instances may go beyond the concept of 'training', nevertheless, there is an overall *tendency* for the vocational to exhibit the characteristics delineated in these analyses, and it is this tendency which distinguishes the notion of training from that of education. So, rather than claiming to be universally or comprehensively descriptive of all VET, or even some identifiable portion of it, on this reading these concepts might be understood as having a far looser meaning and as being pertinent to different occupations in different degrees.

On the face of it this is a fairly weak claim, but it is by no means innocuous. Part of its appeal – and the reason why it is likely to be adopted as a default position by those who hold the orthodox view – is that its ambiguity renders it largely impervious to criticism. Whether or to what extent the orthodox account is appropriate for describing the capabilities and preparation of, say, a doctor, a plumber or a supermarket shelf-filler becomes a moot point, and one where dissent from the orthodoxy must be argued case by case. But the most crucial feature of this interpretation is its inherent divisiveness, for to adopt such an interpretation is to be encouraged to discriminate between those occupations which are deemed to be more suitably described by the orthodox conception and those which are not. For example, we might take the view that the orthodox concepts of skill

and training are entirely appropriate for the purpose of describing the capabilities and preparation of, say, a plumber, but that they are less, if at all, pertinent to the practice of architecture. Perhaps in the first instance this might be justified by pointing to differences in the nature of the work, but ultimately it would inevitably become necessary to discriminate on the grounds of alleged epistemological differences between occupations. Ronald Barnett (1994) typifies this sort of position when he claims to be able to place occupations along an 'axis' according to whether they are characterized more by 'formal knowledge' or by 'physical action'. We shall consider this sort of claim in more detail in Chapter 3; the point to note here is that when the orthodox concepts of skill and training are allied with assumptions of this kind they become the grounds for discriminating, not simply between the liberal and the vocational, but between the professions and the crafts, between white collar and blue collar, and so on. Suffice it to say that the questionable epistemological validity of such judgements and their potentially divisive consequences will be a recurring theme throughout this study.

It would appear, then, that it is extremely difficult to extract from these analyses any clear and consistent theoretical stance which might be non-problematically associated with the concepts they purport to elucidate. We might already begin to suspect that this lack of cohesion is due to some fundamental difficulty with these supposed 'concepts'. This is not, however, to suggest that the orthodoxy is in any way insignificant, for, as we shall see, the assumptions articulated in these analyses can be seen to have

far-reaching theoretical and practical consequences.

Consequences of the orthodoxy

For evidence that these kinds of assumptions can have substantive practical consequences for VET we need look no further than current competence-based approaches to education and training. There is a remarkable degree of correspondence between the orthodoxy and the assumptions which underpin CBET methodology. This is not to say that the competence movement has purposefully sought to develop its methods by reference to this or indeed any theoretical position; indeed, it might even be said that there is a conspicuous lack of any theoretical justification for CBET's methods (Hyland, 1994). Rather, it would seem that the correspondence between the orthodox position and CBET is due more to the fact that the invocation of ordinary language usage which underlies the orthodox account - its preoccupation with what we mean when we use words such as skill or training - tends to coincide with CBET's naïve attempts to ground educational practice in essentially the same aphoristic commonplaces; often ascribing to such commonplaces a kind of 'slogan status' (ibid., p. 27).

We might note that the very same presumptions about specificity and narrowness of focus which characterize the orthodox conception are at the heart of CBET methodology. Fundamental to CBET is the idea that it is possible, by means of functional analysis, to identify specific ends or outcomes and then isolate and focus on the individual capabilities which will attain those ends (see, for example, Debling, 1989, p. 87; Mitchell, 1989, pp. 56–9; Mathews, 1995, pp. 247–8).

Even more fundamental to the competence approach is the idea that it is possible for such capabilities to be 'tied down' to identifiable rules and precise and clear-cut specifications – or, to use the terminology of CBET, specified by means of 'competence statements' (see, for example, Jessup, 1991). CBET can also be seen to adopt the orthodox assumption that there are essentially two discrete and separately identifiable epistemic forms or 'constructs' (Wolf, 1989): the idea that being competent is about having 'skills and knowledge' (my emphasis; Jessup, 1991, p. 57), a knowing how and a knowing that – usually described as 'performance' and 'underpinning knowledge'.

Perhaps most crucial of all - again a feature which CBET has in common with the orthodoxy - is CBET's inherent behaviourism. Frequently associated with behavioural psychology (Bull, 1985; Smithers, 1993), CBET, particularly in its NVQ guise, has been widely criticized for its behaviourist approach to assessment (Ashworth and Saxton, 1990; Hodkinson, 1992; Hyland, 1992, 1993a, 1993b, 1994). It has been pointed out that the 'most prevalent construct of competence is behaviourist. It rests on a description of behaviour' (Norris, 1991, p. 332), and that CBET employs 'simplistic behavioural objectives' (Collins, 1991, p. 90) which expressly make 'overt behaviour' the 'significant variable' in assessment (Marshall, 1991, p. 61). And as Terry Hyland (1997) has argued, competence strategies are 'not just contingently but intrinsically behaviouristic' (original emphasis; p. 492); it is an inherent feature of the competence approach.

There is, then, a substantial degree of correspondence between the orthodox conception of skill and many of the

assumptions which either implicitly or explicitly underpin current competence-based approaches to education and training. Some might be surprised by the suggestion that theoretical precedents for CBET can be found in the work of 'liberal' philosophers of education, not least because CBET might appear to be fundamentally at odds with any conception of a liberal education. In order to account for this incongruity we should note that there is one crucial difference between competence strategists and those who promote the orthodoxy as a defence of liberal education: while the orthodox concepts of skill and training were originally conceived as a way of differentiating the vocational and the liberal, the competence strategist simply recognizes no such distinction. As Gilbert Jessup (1991), then Director of the National Council for Vocational Qualifications, was keen to point out, CBET's approach is appropriate 'for all learning which is considered important or that people want' (p. 130); it is thus that CBET is able effectively to 'eradicate the distinction between education and training' (ibid., p. 4). We might describe CBET's position by saying that while it enthusiastically embraces the orthodoxy, it dismisses the claim that such features are characteristic of training as opposed to education or that they constitute grounds for distinguishing training and education.

But it is not only in VET that the orthodoxy can be seen to have substantive consequences. Amid increasing political interest in skills, and galvanized by the prevailing view that they are 'central to economic success' (Campbell, 2000, p. 2), the orthodox assumptions relating to skill now find application far beyond VET. Everywhere there is "skills talk",

the tendency to call all manner of human knacks, abilities, competencies, capacities, qualities and virtues alike "skills" (Blake, Smith and Standish, 1998, p. 56). In the 'language of performativity, of effectiveness' (Blake, Smeyers, Smith and Standish, 1998, p. 133) it is not 'barmy theory' (ibid., p. 82) that individuals or nations require in order to succeed in the world, but skills and competences: 'Competence becomes a common noun in a kind of aggressive reification: a practical skill that gets results' (original emphasis; ibid.). Hence, it is no longer, say, mastery of the subject that is a mark of excellence in the teacher but such things as 'communication' skills'. Importantly, those who speak this 'contemporary language of skills' (Barnett, 1994, p. 55) do so in the idiom of the orthodoxy, for, just as with competence, it is precisely those features which the orthodoxy ascribes to 'skill' which gives it its political and managerial appeal. Above all, to apply the orthodox conception of skill to educationally complex phenomena is to be allowed to perpetrate the deception of representing such phenomena as essentially simple, quantifiable and non-controversial. It allows one to talk of such things as 'communication skills', 'problem-solving skills' or 'parenting skills' in ways which belie both the complexity of the capabilities indicated by these terms and the extent of what would be required in order to attain them.

Not surprisingly, the spread of 'skills talk' from VET to other educational sectors has met with fierce criticism. It has been argued that the new vocabulary of skills and competences not only 'represents an epistemological assault on the very character of what counts as reason in the university' (*ibid.*, p. 71) but also is fundamentally

inappropriate for the vocational preparation of professionals (Pring, 1995).

Now what is crucially important here is that this counterattack has been directed not at the orthodox assumptions which underpin this 'skills talk', but rather at the notion of skill per se. Barnett (1994), for example, in attempting to distance the university from the rationale of skills, reasons as follows: '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 skills in question. A higher education designed around skills is no higher education' (p. 61). Richard Pring similarly militates against the notion of skill:

The disadvantage of attaching so much importance to skill is that the concept fails to do justice to the other mental qualities and cognitive achievements which are so much more than skills ... Skills which make one competent are necessary but not sufficient; teachers need to be more than good at a craft ... communication is much more than a skill. It involves sensitive understanding of the audience and an understanding of that which is to be communicated. (Pring, 1995, pp. 153–4)

Conceived in these terms – in terms of the orthodoxy, as something lacking in 'mental qualities and cognitive achievements' and 'understanding' – it could hardly be denied that 'the concept of skill' is indeed insufficient to account for the capabilities of teachers, or to denote what it is that is involved in communication. But this kind of argument requires closer attention. The obvious corollary of

wish to extend the 'skills agenda' into higher education or the training of professionals. It is simply to note that the orthodoxy is firmly entrenched on *both* sides of the debate about skills – promoted both by those who would advocate a skills approach, and by those who would oppose it.

What is clear is that the orthodox conceptualization of skill and training is no mere idiosyncrasy but an identifiable set of inter-related assumptions which have been and continue to be of substantive theoretical and practical import. The assumptions which constitute this orthodoxy, first formally articulated by those who sought to defend liberal education from vocationalizing tendencies, are held in common not just by those who would promote competence approaches in VET and skills-based approaches in education generally, but also, importantly, by those who would wish to resist such tendencies. The question now is whether there is any coherent philosophical justification for these assumptions. Even if we already suspect that the assumptions which make up the orthodoxy are utterly implausible, we nonetheless stand in need of some explanation as to how a generation of philosophers of education could get it so wrong. It is to this philosophical background that we now turn.

Notes

- ⁶ Not all commentators would regard CBET as incompatible with a liberal education; see, for example, Bridges (1996).
- ⁷ The point here is that were it not for this equating of the notion of 'skill' with the capabilities of certain occupations an association which, as we shall see, Pring makes explicit

- below the disagreement might be taken to be simply about what is meant by the term 'skill'.
- ⁸ It has not gone unnoticed, for example, that 'Middle class professions such as medicine, law and architecture are remarkably unwilling to agree that their own qualifications like plumbing and nursing are vocational and competence-based' (TES, 1997).

Philosophical Foundations of the Orthodoxy

We have noted the way in which attempts to justify the orthodox conceptions of skill and training tend to employ philosophical methods which have their roots in what has become known as 'Oxford philosophy'. The term Oxford philosophy encompasses two main phases of philosophical activity, the first being logical positivism. Originating in Vienna between the two world wars, logical positivism was introduced into Oxford by A. J. Ayer in 1936 with his highly influential book Language, Truth and Logic, but there were also important influences from Cambridge, particularly from Moore, Wittgenstein, Russell and Whitehead. For those who came under the sway of logical positivism the essential and indeed sole task of philosophy was to determine the criterion of demarcation between sense and non-sense; that is, to distinguish between statements which are meaningful and those which are meaningless. On this view there are only two forms of meaningful, indicative statement. First, there are analytic statements such as those in mathematics and logic which are true or false by definition. If a statement is not analytic, then it must be synthetic and, for the logical positivist, meaningful if and only if it is empirically verifiable - if its truth or falsity is capable of being ascertained by

experience. For the logical positivist, synthetic statements which could not be verified by either empirical science or direct experience (i.e. common sense) were to be regarded as empty claims based on groundless presupposition or subjective opinion. This, the central tenet of logical positivism, became known as the Verification Principle. For our purposes it is of interest to note here that since the only evidence acceptable for verifying statements about mental processes or intentional states is evidence of observed behaviour, verificationism inevitably tends towards behaviourism.⁹

The reign of logical positivism turned out to be short lived not least because it had effectively been refuted before it began. Karl Popper's Logic der Forschung (1934; published in 1959 as The Logic of Scientific Discovery) reiterated the point, long since established by Hume, that since a finite number of observations could not provide a basis for unrestrictedly general statements about the world, it is not possible for any scientific law to be empirically verified. Accordingly, not even science could meet the criterion of the Verification Principle and, moreover, since the Verification Principle was itself neither analytic nor empirically verifiable, it too was by its own criterion meaningless. But it was logical positivism's other, and perhaps even more fundamental mistake which was to have the most lasting consequences – its assumption that the proper role of philosophy is that of establishing a criterion of meaning. With this, logical positivism effectively changed the conception of what philosophy is.

Wittgenstein's influence in this change was instrumental; indeed, it might be said that prior to Wittgenstein's (1978)

pronouncement that 'All philosophy is a "critique of language" (p. 19) philosophers would never have accepted the idea that philosophy could be restricted to matters of language or the uses of words (Mundle, 1979). Logical positivism inherited from Wittgenstein's Tractatus Logico-Philosophicus the idea 'that there are no genuine philosophical problems, and that all a philosopher can do is to unmask and dissolve the linguistic puzzles which have been proposed by traditional philosophy' (Popper, 1978, p. 70). The philosophical problems of more than two millennia were thus dismissed as emanating from an abuse or misuse of language; such problems, it was assumed, would simply evaporate once the linguistic mistakes were correctly diagnosed (Gellner, 1959). The mistake, as Peter Winch (1965) was later to say, was to assume that we can make a clear distinction between the world and the language we use to describe the world and then suppose that it is out of the latter that the problems of philosophy arise. Short lived though it was, logical positivism was a turning point: 'It was at that point in its history that philosophy in the empiricist tradition stopped regarding its task as the understanding of the world and saw itself as clarifying formulations in language ...' (Magee, 1998, p. 48). In short, philosophy was no longer the aim of philosophy (see Scruton, 1997).

In the 1950s logical positivism came to be superseded by the second phase of Oxford philosophy: linguistic analysis or linguistic philosophy. While abandoning logical positivism's presumptions about the primacy of science as a first-order activity, linguistic analysis, nevertheless and rather oddly, retained logical positivism's assumption that the proper role Verification Principle meant that, with the exception of logic, the whole of philosophy was effectively outlawed. As Magee says, philosophers became reluctant to say anything unless it could meet the standards of evidence required for scientific utterances and the term 'metaphysics' became a term of contempt for anything which couldn't. Philosophy consisted of the analysis of familiar words, eventually degenerating into 'a nit-picking dissection of any and every commonplace utterance' (p. 92):

if one studied philosophy at Oxford during that period, nearly all discussions and investigations were about some piece of linguistic utterance ... 'What exactly do you mean by ...' became the commonest opening to a challenging question, and 'Suppose we wanted to say ...' the commonest introduction to a conjecture; and in both cases this would be followed by a discussion of the word, or forms of words ... (Original emphasis; *ibid.*, p. 79)

Like Peter Winch, Magee remonstrates that there is a clear distinction to be made between philosophy conceived as an attempt to understand the world, dealing with questions about the extent to which we can have knowledge of it, and philosophy conceived as linguistic analysis with its discussions about meaning and detailed distinctions of linguistic usage. As Magee points out, even Locke, with his famous emphasis on the importance of getting clear about concepts, nevertheless demonstrates in his own work that he never saw the main task of philosophy as being either exclusively or even chiefly about language. For Magee, linguistic analysis 'can do no more than clarify what we are

already in possession of (ibid., p. 114); it cannot provide solutions to philosophical problems about non-linguistic reality. On Magee's view, only those who fail to recognize that reality presents us with philosophical problems could believe linguistic clarification to be the central task of philosophy. The linguistic analysts had effectively abandoned what had since Thales been the most important task of philosophy that of understanding the world. In the same vein, Mundle (1979) argued that linguistic analysis constitutes a rejection of philosophy; it leaves serious philosophical problems and derives from fundamental untouched a misunderstanding of the relations between grammar and philosophy. We might say that the fundamental mistake made by the linguistic analysts is that which Schopenhauer (1969) had famously warned against when, in his critique of Kant, he made the point that philosophy should properly be regarded as a science (Wissenschaft) in concepts rather than of concepts. As Quine (1960) points out, while clarification may help either a physicist or a philosopher, it does not follow that either physics or ontology is 'really about language'. Similarly, Popper (1959; 1978) reminds us that the successful operation of science is not at all dependent on a continual debate about the meaning of its fundamental terms and that for philosophy to be so concerned is to preclude from discussion matters of any real philosophical substance. For David Bridges (1997), who has criticized the use of linguistic techniques in education, this kind of analysis reached its 'preposterous apotheosis' with R. M. Hare's claim that 'disputes between trade unions and management could be brought to an end if only we get clarity and agreement as to

the meaning of the word "fair" (pp. 181-2).

Although it was the logical positivists who had first pressed the term 'metaphysics' into a pejorative sense, using it to denote meaninglessness (Quine, 1969), their hostility to any kind of explanatory theory was shared by the linguistic analysts, who failed to realize that the linguistic distinctions they were making had little significance except in relation to a wider explanatory framework. Richard Rorty (1980) has pointed out that the very idea of conceptual analysis, of philosophy as the explication of meanings, is one which is rooted in an erroneous view of knowledge as accurate representation of reality and of the mind mirroring or reflecting, more or less accurately, that reality. According to Rorty, without this view of knowledge the idea that philosophy could consist in conceptual analysis 'would not have made sense' (p. 12). The crucial point here is that although linguistic philosophy rarely proffered any explicit, coherent doctrine or philosophical position, the distinctions drawn by linguistic analysts were nevertheless irredeemably grounded in implicit assumptions about the world.

In the absence of any supporting explanatory theory, such assumptions could only be justified by spurious linguistic reasoning. In 1959 Ernest Gellner identified numerous fallacious procedural rules which underpinned the methodology of linguistic analysis. First, 'the argument from the paradigm case' – which is to argue from the actual use of words to some claim about the world. Second, 'the generalised version of the naturalistic fallacy'; that is, the inference of answers to evaluative questions by recourse to the actual use of words. Third, 'the contrast theory of

meaning', which is to assume that a term only has meaning if it is not entirely inclusive, its meaning dependent upon distinctions. Gellner concluded that the entire movement of linguistic analysis, with its 'impressionistic lexicography' (p. 265), was profoundly mistaken.

In another thoroughgoing critique of linguistic philosophy, C. W. K. Mundle (1979) showed that Austin, Ayer, Ryle, et al. were guilty of gross grammatical and logical errors. Mundle demonstrated that linguistic philosophy is characterized by what he called 'legislative linguistics'; that is, the espousing in the interests of a particular theory false assertions about what we do, or cannot, or may not, say – without having established the rules of language use upon which such assumptions are based. Mundle also showed how linguistic philosophers can be seen to invent rules about the use of language and then apply those rules as though they were a priori thereby deducing what we cannot or may not say, or what we do or do not mean when we use certain words, what Mundle calls 'a priori linguistics'.

In mainstream philosophy the 'linguistic turn' was relatively short lived: by 1956 Copleston, in his survey of contemporary philosophers, was able to report that there were few who would still assimilate philosophical problems to problems of language. Certainly by the 1970s the idea that philosophical problems could be resolved by appealing to linguistic usage had fallen into general disrepute (Passmore, 1988), even to the extent that a new generation of Oxford philosophers had come to regard it as 'impoverished and fraudulent' (Platts, 1979; see also Scruton, 1982). What the linguistic analysts had failed or simply not wanted to

acknowledge was the simple fact that scrutinizing the use of words will not 'reveal significant non-contingent truths about reality' (Jonathan, 1985, p. 17). Despite its decline in mainstream philosophy, the linguistic methodology continued to have a strong influence in philosophy of education and in the 1970s British philosophy of education was still 'almost exclusively associated with the school of linguistic analysis' (Bridges, 1997, p. 181). When, eventually, the use of linguistic analysis in philosophy of education did decline it was perhaps not so much because of any explicit philosophical repudiation of its tenets, but more because 'people became bored with endless analysis of terms ... perhaps also because people came to question the relevance of these analyses and to expose some of the inconsistencies' (Halliday, 1990, p. 29). It is perhaps for this reason that while there are few philosophers of education who today would overtly and unconditionally endorse linguistic techniques, nevertheless, a residue of such techniques can be seen to persist in philosophy of education.

It is significant that even those who employed linguistic techniques in philosophy of education at times expressed reservations about the validity of the methodology. For example, Hirst and Peters (1970) warned against adopting a 'crude view of the relationship between words and things' (p. 12), saying that: 'To do conceptual analysis, unless something depends on getting clearer about the structure underlying how we speak, may be a fascinating pastime, but it is not philosophy' (*ibid.*, p. 10). However, they also adopted the Oxford line that 'getting clearer' *is* the priority and that the proper role of philosophy *is* precisely to be concerned with

meaning can be arrived at by reference to the ordinary use of words.

But one problem for the linguistic analyst, as Halliday (1990) has pointed out, is how to decide what counts as 'ordinary' or 'normal' usage. At best, the choice will tend to be determined by the analyst's own preconceptions about education, skill, training, etc.; hence, at the very least, linguistic analysis is open to the charge that its methodology 'simply reinforces its prior commitment to certain values or norms' (ibid., p. 24). At worst, 'objectivity' is realized by wilfully restricting the focus of the analysis to an exiguously narrow selection from the range of possible uses or meanings of a particular term, selecting only those which support some broader thesis. Far from being the 'objective', definitive accounts they are claimed to be, the orthodox 'concepts' of skill and training might more appropriately be regarded as having been purposefully configured from examples of ordinary usage selected according to whether or not they happen to coincide with the analyst's wider purposes. 11 In so doing they can thus be seen to employ the kind of spurious linguistic reasoning which Gellner (1959) and Mundle (1979) had shown to be characteristic of linguistic analysis: 'legislating' about what we do, or cannot, or may not, say in relation to a given concept and arguing from a particular usage of words to some claim about the world.

It was precisely by such means that Peters was able to create 'an over-simple distinction' (Bridges, 1996, p. 365) between education and training. The 'analyses' by which the orthodox conceptions of skill and training are supposedly legitimated can be seen to contain many instances of this

kind of reasoning¹² and Peters is dismissive of those who might not share his particular analysis of a 'concept':

The concept of educating people, as distinct from merely training them, has developed and is mirrored in the different words that people use who have developed this differentiated concept. The fact that there may be many people who do not have this concept, or who have it but use the words loosely, does not effect the conceptual distinction to which I am drawing attention. (Peters, 1966, p. 30)

One characteristic feature of linguistic analysis, one which can be seen to have had generally pernicious consequences for philosophy of education, particularly in relation to the orthodoxy, is its inherent tendency towards the drawing of distinctions between words (Gellner, 1959; Magee, 1998). Typically, the explication of a concept would entail its being contrasted with another concept, as, for example, education with training. Moreover, each concept would be elucidated by examples of ordinary usage selected with the sole purpose of highlighting the supposed antithetical relationship between the two terms - the fact that not all instances of ordinary usage support this opposition (instances, for example, where the words 'training' and 'education' are effectively synonymous (Daveney, 1973)) being purposefully disregarded in order to emphasize a dichotomous relationship between the terms. There is thus a sense in which linguistic methodology is congenitally prone towards the divisive and that rather than attempting to identify unifying themes, principles or common features, it tends to engender the very

educational and philosophical dualisms which John Dewey (1966) recognized as being so 'deeply entangled ... with the whole subject of vocational education' (p. 307). Indeed, it turns out that the linguistic techniques of Oxford philosophy provided the means by which explications of terms such as skill and training could be represented as 'objective', disinterested analyses while substantively supporting other priorities. As we shall now see, under scrutiny these analyses can be seen to form part of an identifiable, interested and value-laden account of the educational enterprise.

Two epistemologies – two cultures

In laying bare the meanings of terms in an ostensibly objective, value-free manner, linguistic analysis claimed to be detached from matters of value. Political and moral issues such as, for example, the optimum balance for education between the liberal and the vocational, or the kind of education parents should choose for their children, were claimed to be beyond the remit of analysis (Peters, 1980). However, analysis was not at all the objective, disinterested investigation it purported to be, for its analyses turn out to be intensely value-laden (Harris, 1980). As one radical critic explains, the 'second-order' activities of linguistic analysis are far from neutral and should more properly be seen as a disguised representation of certain political and class interests:

Analysis takes language, everyday theory and common sense as given and fails to comprehend the ensemble as a product of certain practices which are historically

contingent, and politically and economically ordered. (Matthews, 1980, p. 164)

Similarly, Dennis Cato (1987) has argued that the kind of analyses offered by Peters are 'not the spectatorial mapping' they are claimed to be and that Peters clearly 'imports his own values into the clarificatory activity' (p. 35).

Linguistic analysis is also value-laden in a further, far less subtle sense, for its strategy can often be seen to be one of arranging its explications of concepts in such a way as to make certain moral or political choices a foregone conclusion. Thus, in order to promote a particular conception of liberal, non-instrumental education, the tactic was to contrast the concept of 'education' – carefully elucidated as something profoundly rich and life-enhancing – with concepts such as 'training' and 'skill' depicted in such a way as to stress their epistemological and cognitive vacuity.

Another feature of linguistic analysis is its inherent conservatism. Alasdair MacIntyre (1981) has pointed out that the technique of analytical philosophy is essentially one of describing the language of the present. Richard Rorty (1980) makes a similar point when he says that traditional philosophy's search for objectivity involves a 'self-deceptive effort to eternalise the normal discourse of the day' (p. 11). But the analyses produced by Peters *et al.* are conservative in a further, though related sense, of promoting – along with their conception of liberal education – an identifiable set of values and priorities. In his attack on 'liberal' education Kevin Harris points out that analytical philosophers of education such as Hirst and Peters

managed to 'justify' in their collected works virtually every aspect of the social and educational *status quo* that might serve the interests of those wishing to preserve the *status quo*, and to present those justifications as rational, logical, and disinterested. The end result was to serve and satisfy not only a large number of people at the decision-making level, but also to fulfil a necessary general ideological function of producing 'interest-free' justifications for the continuance of social practices which actually serve particular *political* interests. (Original italics; Harris, 1980, p. 31)

Although radical critics typically characterize their target as 'liberal' philosophy of education, since the perpetuation of existing social practices is a feature of conservatism rather than liberalism, it would perhaps be more accurate, as Penny Enslin (1985) has suggested, to identify these tendencies as *conservative* rather than liberal.

For our purposes, of pivotal importance in these valueladen analyses is the opposition created between intrinsic and extrinsic value; this is a distinction closely identified in the orthodoxy with that between education and training (see, for example, Peters, 1964, 1966), where, in contrast to VET, a liberal education 'can have no ends beyond itself. Its value derives from principles and standards implicit in it' (Peters, 1964, p. 47). Edel (1985) has noted that the intrinsic-extrinsic distinction is just one of a number of polarities employed to elucidate the notion of a liberal education. It is possible, as he says, to discern various such polarities in the literature; for example, the liberal might be contrasted with the narrow and the technical, or alternatively it might be regarded as broadly into the prismatic colours (see Dawkins, 1999).

Indeed, it might be said that there is a specifically British genealogy for the humanities-science variant of the 'intrinsically valuable-extrinsically useful' distinction in the form of a certain cultural and institutional hostility to science. It is not insignificant, for example, that the sciences were only gradually introduced into Oxbridge as late as the mid- to late nineteenth century and, even then, the applied sciences continued to be regarded as inferior (Ashby, 1958). In 1867 a sub-committee of the British Association for the Advancement of Science bemoaned the fact that scientific education in universities was not 'on a par' with, nor attracted the same 'rewards' as, a mathematical or classical education (Roderick and Stephens, 1972, p. 11).

Of course, this cultural bias was not without its critics. The dispute between T. H. Huxley (1880) and Matthew Arnold (1882) about the role of the sciences in education prefigured the later exchange, on precisely the same lines, between C. P. Snow and F. R. Leavis. Huxley suggested that the traditional classical education should give way to a more scientific education, arguing that science was equally a part of culture and that it not only provided a rigorous mental training, but also contributed to national economic well-being. In response, Matthew Arnold (1882) conceded that 'literature' might include the great works of science but nevertheless maintained that it was an education based on great literature – particularly the classics – which was necessary for cultivating the 'educated man'. As Collini notes, the dispute between Huxley and Arnold:

symbolised the ways in which social and institutional

snobberies clustered around this topic ... Not for the last time in British cultural history, questions about the proper place of the sciences and the humanities in the nation's educational system appeared to be inextricably entangled with elusive but highly charged matters of institutional status and social class. (Collini, 1964, pp. xv-xvi)

C. P. Snow's famous Rede Lecture of 1959, 'The two cultures', highlighted still further the division between the 'literary intellectuals' and the natural scientists, each of whom regarded each other with mutual suspicion and incomprehension.¹³ In a paper which was a precursor of his 1959 lecture, Snow had rounded on what he saw as the snobbish and nostalgic social attitudes of the literary elite:

The traditional culture, which is, of course, mainly literary, is behaving like a state whose power is rapidly declining – standing on its precarious dignity, spending far too much energy on Alexandrian intricacies, occasionally letting fly in fits of aggressive pique quite beyond its means, too much on the defensive to show any generous imagination to the forces which must inevitably reshape it. (Snow, 1956, p. 413)

In *The Two Cultures* Snow (1964) argued that the continued dominance of this elite over the social and political order was profoundly damaging not only to individual cultivation but also to social well-being; the many potential benefits of science were being lost through political mismanagement and the cultural and educational disparagement of science. To this day there are heads of industry who, similarly, would

'blame the teachers' for their 'anti-industry bias' in placing the 'life of the mind over the practical life' (Weinstock, 1976, p. 2; cited in Hyland, 1994, p. 4).

Snow was to suggest that this kind of division was an inherent feature of any advanced industrial society (see Snow, 1960). Though in which direction the snobberies run seems to be a somewhat more contingent matter: as Fuller (1989) has noted, it is common in American universities for humanities students to be disparagingly referred to as 'non-science majors' (p. 6), and in Britain there are undoubtedly scientists, industrialists, engineers, and the like, who would snobbishly exalt the scientific and the practical and regard the humanities and the academic with disdain.

At one level these divisions appear trivial: nothing more than a kind of scholarly group inclusiveness fired, perhaps, by a mixture of loyalty and anxiety. Nevertheless, their consequences for the philosophy and theory of education should not be underestimated. It would not be unreasonable to suggest that the orthodox conceptions of skill and training – purposefully depicted as epistemologically and cognitively impoverished and set in contrast to a 'rich' conception of a liberal education – can be seen to reflect many of these very same cultural and social divisions. The putative epistemic differentiation of the vocational and the liberal, one which the linguistic analysts contrived to substantiate using little more than spurious linguistic reasoning, can often be seen to be motivated by the selfsame cultural divisions.

But there is another equally divisive feature within the orthodoxy, for wrapped up with the more overt epistemological claims we can recognize a certain kind of

metaphysical presumption. In its naïve form it has the simplistic appeal of a truism: that instrumentalist means are well suited to instrumental ends. We see, for example, that the precepts of instrumental reason were deemed to be entirely apposite in relation to the concepts of skill and training. Here, it was claimed, was learning which was inert, value-free and rightly conceived of in terms of clear-cut specifications, identifiable rules and behaviourist descriptions of performance; a kind of knowledge appropriately framed by empirical science or just sheer common sense. This was in stark contrast to an account of the liberal enterprise which, with the arts and humanities at its head, was held to have a 'monopoly of value and the imagination' (Edel, 1985, p. 259). Technical rationality - that 'heritage of Positivism' (Schön, 1996, p. 31) - was implicitly invoked by the linguistic analysts, not universally as the logical positivists would have had it, but selectively effectively a metaphysics of partiality designed to accommodate the social, political and cultural prejudices of the age. But, again, this purported metaphysical divide, like its epistemological counterpart, appears to be supported by nothing more than linguistic sleight of hand, by the use of a priori and legislative linguistics, ultimately derived from a misconceived view of philosophy as the arbiter of meaning.

Of course, it would be tempting to conclude from all this that

this differential basis for vocational and academic studies has nothing more than historical association to support it. Beyond the contingent fact that the classical gentry ideal came to be associated with the most powerful political and economic groups in Britain, there are no intrinsic or logical reasons for the liberal/vocational dichotomy in education. (Hyland, 1994, p. 117)

However, caution is needed. Even acknowledging that the methods of the linguistic analysts fail to substantiate the claim that there are epistemic grounds for the distinction between the vocational and the academic, we cannot take this as equivalent to there being no grounds. In other words, it remains possible that there may be grounds for the distinction. This is a possibility we shall return to later.

The difficulties associated with Oxford philosophy were to dog philosophy of education long after they had been exorcized from mainstream philosophy, and even to this day they continue to exert a discernible influence, as we shall see when we turn to the recent debate about competence-based education and training. Whatever misgivings we might have as regards the way in which the linguistic analysts characterized the liberal-vocational divide, the fact is that one of its most salient features remains stubbornly intact. The idea that the vocational is somehow epistemologically distinctive, that it is marked off by a certain kind of knowledge, a 'knowing how' as opposed to a 'knowing that', is one which has persisted in the literature. Our next task will be to challenge the claim, one which is fundamental to the orthodoxy, that it is possible to make an epistemological distinction between 'knowing how' and 'knowing that'.

Notes

⁹ On this point see Scruton, 1997.

Knowing How and Knowing That

Of all the works of linguistic analysis one of the most consummate and almost certainly one of the most influential was Gilbert Ryle's The Concept of Mind (1949), a work dedicated to exposing the alleged misuse of a single concept. Ryle sets out to demonstrate that 'when we describe people as exercising qualities of mind, we are not referring to occult episodes of which their overt acts and utterances are effects; we are referring to those overt acts and utterances themselves' (p. 25). Ryle's prime concern, then, in the Oxford manner, is with our descriptions of the mental, with what we mean when we use words such as 'intelligent', 'clever' or 'logical'. The Concept of Mind is expressly a work of linguistic analysis, and with its frequent allusion to the ordinary usage of words, and close regard to the distinctions implied by our choosing to employ one term in particular circumstances rather than another, it is a model of its kind. As is typical of work of linguistic analysis, it tends to assimilate questions about things in the world to questions about the meanings of words, often conflating the two and treating answers to the latter as though they were answers to the former. Even Ryle's title is ambiguous as to its intended focus, for to claim that a 'concept' is the object of attention is to evade the crucial of whether the chief concern matter is some

epistemological/ontological feature of the world or whether the primary interest is one of semantics.

Chief among the linguistic distinctions which Ryle draws attention to, and the one which has been so influential in philosophy of education, arises from his observation that in talking about 'knowing' we tend to distinguish between knowing how and knowing that. Famously, Ryle's purpose in drawing attention to this distinction was to debunk the 'intellectualist legend', the official doctrine that we can assimilate knowing how to knowing that and that the former is essentially and logically subordinate to the latter in the sense that intelligent performance is necessarily guided by, or involves, the prior consideration of rules, maxims, regulative propositions, etc. For Ryle, this customary way of thinking about the mental is patent nonsense. The idea that a chef should have to recite his recipes before being able to cook, or that someone must first rehearse the appropriate moral imperatives before being able to save a drowning man, is manifestly not the case. The presumption that acting involves doing two things, that we are required first to 'do a bit of theory and then to do a bit of practice' (ibid., p. 29), is, on Ryle's view, mistaken for a number of reasons. First, he reminds us that we are often unable to cite the regulating principles which guide our actions. 14 Second, he points to the fact that there are many cases where our abilities precede the articulation of explanatory theory, where theory can be seen to follow practice: 'Rules of correct reasoning were first extracted by Aristotle, yet men knew how to avoid and detect fallacies before they learned his lessons' (ibid., p. 30). Third, and for Ryle the most crucial objection to the prevailing view,

is that if choosing and applying regulative propositions is itself an operation required to be carried out intelligently, then this too, according to the official dogma, must be guided by further propositions. Accordingly, if the intellectualist legend were true, any and every performance would be preceded by an infinite regress of principles guiding principles.

So, Ryle argues, contrary to the official doctrine that intellectual operations are primarily instances of knowing that, intelligence consists primarily in knowing how to do things. The long-standing assumption that the mind's 'defining property' is its 'capacity to attain knowledge of truths' or that mental-conduct concepts are properly defined 'in terms of concepts of cognition' (ibid., p. 26) is, according to Ryle, simply mistaken. Intelligence cannot consist in the accumulation of facts for the simple reason that 'there is no incompatibility between being well-informed and being silly'; neither can it consist in some 'capacity for rigorous theory' (ibid., pp. 25-6) for theorizing is just one practice among many that may be done more or less intelligently. All this is not to deny the existence of the mental but rather to challenge the assumption that the 'core of mental conduct' consists of 'intellectual operations' (ibid., p. 26). We should therefore, on Ryle's view, recognize that when we use mental-conduct concepts such as 'intelligence' or 'stupidity', or related adjectives such as 'clever', 'sensible', 'careful', 'stupid', 'dull' or 'careless' - terms we habitually use to predicate the mental - we are actually indicating complexes of behaviour: 'Overt intelligent performances are not clues to the workings of minds; they are those workings' (ibid., p. 58).

Ryle was, of course, all too aware that this left him open to being stigmatized as behaviourist (*ibid.*, see p. 327), and, since he clearly takes statements about the mental to *mean* the same as statements about behaviour, it would certainly be appropriate to see him as subscribing to logical behaviourism (see Rorty, 1980). In this respect his position is closely related to the neo-positivist idea that the meaning of propositions consists in the way in which they can be publicly verified. Notwithstanding any reservations Ryle might have had about the behaviourist implications of his argument, ultimately he believed his to be the only tenable account if the only alternative was, as he believed it to be, a choice between either a Hobbesian mechanistic conception of mind or the Cartesian dualism which characterizes the official doctrine.

Even if behaviourism were substantially true, one difficulty for Ryle is that it would be impossible to give an account of the requisite dispositions to behave unless we were able to provide 'infinitely long lists' of possible behaviour (Rorty, 1980, p. 98). And it is worth noting here the congenitally reductionistic tendencies of competence-based education and training in attempting just such accounts. However, there are even more serious difficulties which beset Ryle's account. For while behaviourism, at a stroke, solves the problem of other minds - the question of how it is possible for us to have knowledge of the mental states of others - it nevertheless, as Quinton (1973) has objected, does it rather too well; for, if our observations of behaviour really are sufficient on this count, it leaves us in need of an explanation as to why we often have the level of doubt we do about the mental states of others. Why, for example, we doubt whether descriptions of the

observable aspects of a performance really are sufficient to provide a complete account of a particular ability (see, for example, Moss, 1981). The crucial problem for Ryle, and for behaviourism generally, is that behaviour is neither a sufficient nor a necessary condition for the mental (Marres, 1989). Behaviour is not a necessary condition, for there are many instances where mental states occur without being accompanied by behaviour. Feelings, for example, do not have to give rise to behaviour. Neither is behaviour a sufficient condition, for it can be simulated, faked, etc. Moreover, it is not possible for specific behaviour to be non-problematically associated with particular mental states. Alisdair MacIntyre (1971) makes the point that feelings of resentment might be accompanied by virtually any type of behaviour. In such cases it is not possible to determine specific characteristics which would enable us to identify certain types of behaviour with resentment. Since the relationship between many mental states and behaviour is in this sense contingent, it might also be said that the identification of mental states with future behaviour is problematic since such behaviour need not necessarily follow: as Marres (1989) notes, 'When connected behaviour does occur, it is evidence of, and not identical with, the mental states' (p. 38).

But these are not the only difficulties which beset the argument of *The Concept of Mind*. As has already been indicated, it is a work which has all the features we might expect of a work of linguistic analysis. First, there are claims relating to facts of language usage, not least of which is the fact that in ordinary language we distinguish between knowing how and knowing that. While we can readily

of unease about it stems from its apparently inescapable behaviourist consequences. One challenge which The Concept of Mind poses is how we might acknowledge this important point about access without also having to subscribe to behaviourism. Without anticipating too much, suffice it to say for the moment that if we adopt Ryle's view of the agent as a disengaged, passive, neutral spectator - a view which, for Ryle, is a corollary of his logical positivism (see Rorty, 1980) such behaviourist consequences do indeed follow. However, these consequences might be avoided if we are able to reject this view in favour of a conception of human agency characterized more by what Charles Taylor (1997) has described as being 'engaged with or at grips with the world' (p. 23), a view of the agent as essentially embodied, an agent whose world is shaped partly by such embodiment and partly by being engaged in shared social practices and forms of life.

A further challenge posed by *The Concept of Mind* concerns the way in which Ryle depicts what he perceives to be the mentalistic alternative to his behavioural–dispositional account: how he identifies the mental with the notion of 'theory' and how he conceives of this in relation to practice. For Ryle, any attempt to reinstate the mental back into the picture of intelligent performance necessarily involves us in a view of the mental as something which is divorced, and at some remove, from practice. The predominant feature of the mental on this view is 'theory', i.e. the conscious and explicit application of maxims, rules, avowals, stores of propositions, etc., a sphere of activity which is ontologically distinct and temporally prior to action. The challenge here will be to develop an account of human capability which not only

avoids Ryle's behaviourism, but at the same time avoids resort to an account of the mental as something divorced from practice, as an ontologically and temporally distinct sphere of activity concerned with the explicit and conscious manipulation of theory or propositions.

But the most immediate issue here is Ryle's centrally important distinction between knowing how and knowing that. It is a distinction which continues to be highly influential in much theorizing about education. Not only is it a prominent feature of the orthodox conception of skill/training but it also corresponds closely with some of the basic assumptions underpinning current policy in relation to competence-based education and training. Yet the prevailing assumption that such terms denote an epistemological distinction turns out to be fundamentally mistaken.

Applying the 'knowing how-knowing that' distinction

It is useful to recognize that there are two senses in which we make a distinction between knowing how and knowing that: one trivial and one not so trivial. The trivial sense of the distinction arises merely from the rules of grammar: it is simply grammatically correct to say that someone knows how when we happen to be talking about their doing something, and that someone knows that if we happen to be talking about their being in possession of some fact or piece of information. Our aversion to saying 'he knows that to drive a car' derives less from a point of epistemology or even semantics than it does from grammatical correctness. At the risk of appearing frivolous we might say that such formalities no more

demonstrate the existence of two forms of knowledge than the gender of French nouns indicate the sex of everyday objects. Any inclination to derive epistemology from syntax evaporates when we consider that the rules of grammar also allow us to say that someone knows *how* to state a fact.

The rules of grammar aside, however, there are prima facie instances where we do seem to apply the distinction to differentiate between two types of knowing, where we purposefully designate someone's knowledge as an instance of knowing how as opposed to knowing that, or vice versa. Perhaps the first thing we should note is that while the distinction appears credible with the sort of examples chosen by Ryle and Peters, it is not necessarily as convincing in all cases. Edel (1973; see also Hager, 1999), for example, has argued that many occupational activities elude classification as instances of knowing how, for example those where complex skills are applied in teamwork situations using complex technologies. Nevertheless, the distinction is one which persists in the literature with even those who treat it with ambivalence conceding that the distinction is one which 'remains' (Eraut, 1994, p. 107). Although there is, as we shall see, a wide divergence of opinion about precisely what kind of knowledge is indicated by each of these terms, nevertheless, the basic assumption that in using them we are referring to two different kinds of knowledge has, ever since Ryle brought the distinction to philosophical prominence, gone largely unquestioned.

Yet I want to suggest that it is a mistake to assume the distinction to have an epistemological basis, not least because by Ryle's own account our use of the distinction is clearly not

about distinguishing two distinct modes of knowledge but about distinguishing the kinds of *evidence* we have when we make judgements about the knowledge of others. The point here is that our judgements – as Ryle himself was keen to point out – are necessarily based on inferences from available evidence: usually either from people's actions or from their making some kind of declaration (written or verbal) about what they know. What Ryle seems to have missed – as have many others who have assumed an epistemological basis for the distinction – is that we employ the phrases knowing how and knowing that respectively, according to *how* the fact of someone's knowing was made evident to us. It might be said that Heidegger (1962) conveys something of this in his insight that 'Assertion communicates entities in the "how" of their uncoveredness' (p. 266).

Of course, the distinction is not restricted to being expressed in terms of knowing how and knowing that – for example, Bartram's (1990) distinction between 'procedural knowledge' and 'declarative knowledge' and Eraut's (1994) distinction between 'process knowledge' and 'propositional knowledge' amount to much the same thing. What is odd here is the way in which an epistemological basis for these distinctions is assumed even while employing terms which reveal that the distinction is really about the way in which we determine whether someone is knowledgeable, i.e. whether we discern it from some declaration of knowledge or whether, as Bartram himself says, it is 'inferred from one's actions' (p. 55).¹⁵

Michael Oakeshott makes what appears at first sight to be a similar distinction in *Rationalism* in *Politics* when he

distinguishes 'practical' and 'technical' knowledge, the first being the kind which 'exists in use' and the second the sort of knowledge to be found in textbooks or manuals (see Oakeshott, 1991, p. 12). Eraut (1985) has taken Oakeshott to task for attempting to classify knowledge according to its source, for example from books or from personal experience. Yet Oakeshott would be justified to make this kind of distinction if by so doing, his intention was to draw attention to the kinds of evidence we have for judging someone to be knowledgeable. Certainly it would be a mistake for Oakeshott to assume an epistemological as well as an evidential basis for the distinction although, pace Eraut, it is not entirely clear that Oakeshott actually does assume this. 16 But the main point here is that when various commentators refer to different kinds of knowledge, the distinction can often be seen to be more about how we come to know about someone's knowing rather than about the kind of knowledge someone has.

What is of interest is why we should choose to make this kind of distinction if it refers not, as is commonly assumed, to two different kinds of knowledge but to the kinds of evidence upon which our inferences are based. It would seem that one reason for applying the distinction arises when there is a conflict between the sources of evidence. For example, we use the distinction to characterize those cases where a person, though being able to recite the facts, propositions or rules which relate to a performance, is nevertheless unable to carry out that performance. Thus we might say that a person 'knows that' but does not 'know how'. Conversely, we might also use the distinction as a way of articulating the apparent

view that 'All education aims, in the first instance, at "know how" (p. 92). They would recognize the limitations of an education confined to propositional knowledge – the kind of knowledge delineated by Ryle's knowing that or William James' 'knowledge about' – and point to the richness of knowing and learning how (Aiken, 1966).

But perhaps more important here are the similarities between Ryle's position and the sort of assumptions implicit in the competence approach - similarities which have certainly not gone unnoticed in the literature. The parallels are perhaps at their most striking in Ryle's declaration that: 'In ordinary life ... as well as in the special business of teaching, we are much more concerned with people's competences than with their cognitive repertoires, with the operations than with the truths that they learn' (Ryle, 1949, p. 28). As Terry Hyland (1994) has noted, it is a statement which could serve as a philosophical justification for NVQ apologists were they, as Hyland aptly says, actually ever to seek theoretical justification for their methods. The important point here is that the thick-thin configuration of knowing how and knowing that formulated by Ryle corresponds with the sort of aims adopted by CBET. Just as Ryle gives pride of place to behaviour and behavioural dispositions, seeing intelligence, competence, etc. as residing primarily in knowing how, similarly, CBET affords overriding priority to competence, performance - to knowing how.

Although Ryle and CBET might be said to share the same thick-thin conceptions of knowing how and knowing that, it is important to recognize that they are motivated by quite different concerns. For Ryle the thick-thin configuration

arises from what he saw as the necessary limits imposed on what it is possible for us to mean by our statements about the mental. CBET's conception, on the other hand, might more properly be regarded as a purposeful reaction to what some would see as the 'previous domination of knowledge' in education (Mansfield, 1990, p. 21), a domination perceived to be at the expense of the more practical, 'doing' aspects of human affairs. Where Ryle and CBET converge is at the point where Ryle's invocation of ordinary language usage - with what we mean, for example, when we say that someone 'knows how' to do something intelligently - coincides with CBET's naïve attempts to ground educational practice in the selfsame aphoristic commonplaces. It may appear somewhat anomalous to identify CBET with a thick conception of knowing how, for a frequent complaint directed at CBET is that it is characterized by a conception of 'know-how' which is conspicuously narrow and mechanistic and thus perhaps more appropriately described as thin. But CBET's defects are more convoluted than they first appear and, as will be argued later, it is necessary to distinguish between CBET's aims and its methodology. While we might correctly characterize CBET's aims as incorporating a Rylean thick-thin conception of knowing how-knowing that (and hence open to the charge of having an insufficient regard for knowing that), it will turn out that the methodological strategy employed by CBET necessarily engenders a thin formulation of knowing how. Consequently, if pressed to describe CBET in terms of the knowing how-knowing that distinction we might say that what CBET substantively delivers is a thin-thin configuration.

Of course, the danger, for both Ryle and CBET, in affording

knowing how such a broad conceptual remit is that knowing that, by implication, becomes conceptually diminished. To the extent that 'know-how' is regarded as epistemologically sufficient for (or indeed equivalent to) consummate performance, then knowing that - indeed knowledge and theory generally insofar as they are seen as equivalent to knowing that - comes to be regarded as superfluous to intelligent action. Those who begin to think of knowing that in such impoverished terms, perhaps merely as the ability to state facts, are likely to succumb to the idea that such knowledge is extraneous to vocational capability and largely irrelevant to VET's purposes. They might come to think that 'Knowledge – simply stated as knowledge – means little' (Mansfield, 1990, p. 21) and that there is little value in learning 'bucketfuls of facts', (Wolf, 1989, p. 41; a phrase Wolf borrows from the Higginson Report). Certainly, Ryle was correct when he observed that people do not normally preface their actions with a recital of relevant propositions, so if this is what knowing that consists of, then it appears to be of little vocational significance. It would be difficult to think of many vocational activities for which it is necessary to employ propositional knowledge in this way. Thus it is that those who conceive of knowledge in such terms ultimately come to believe that 'even in the most professional occupations the proportion of "knowledge-heavy" competences is quite few' (Moran, 1991, p. 8), even going so far as to cast doubt on the idea that knowledge is 'an essential prerequisite for competent performance' (ibid).

It would seem, then, that to take this thick-thin configuration of knowing how and knowing that to its logical