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Competence: A tale of two constructs

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Abstract

This article examines the 'integrated conception of competence' as conceived by Paul Hager and David Beckett and suggests that its characterization in terms intended to distance it from behaviouristic and reductionist notions of competence is not sufficient to differentiate it from other models. Taking up Hager and Beckett's idea that competence must be inferred from behaviour, it is suggested that this indicates how the integrated conception is more properly distinguished by virtue of the method used rather than what it is that is assessed. Drawing on the work of Wittgenstein and Donald Davidson, it is argued that it is possible to discern two logically distinct methodological approaches to competence assessment, allowing a clear distinction to be made between the integrated conception and the kind of approach which predominates in the UK's framework of vocational qualifications. While the latter is shown to be rightly criticized for its deficiencies, in contrast the integrated conception is seen to suggest a methodological approach that is capable of acknowledging the full richness of occupational practice.

Keywords: competence, Paul Hager, assessment, vocational education

Introduction

For more than three decades Professor Paul Hager has been an important voice in professional and vocational education and a principal contributor to Australia's ongoing programme of research into vocational education and training. In particular, he has been a firm advocate of competence-based education and training (CBET) during a period in which competence strategies have come to be adopted in many parts of the world, in the UK as in Australia; although it remains a moot point, one central to our present concerns, whether or to what extent all strategies identified as 'competence based' are substantively one and the same. It is well known, of course, that CBET has attracted no small amount of critical attention, particularly in its UK guise of National and Scottish Vocational Qualifications (NVQs/SVQs). And it is generally acknowledged that there have been two main strands to this criticism: first, a concern that the breaking down of occupational expertise into discrete tasks amounts to a kind of reductionism that fails to capture the rich complexity of human capabilities; secondly, the complaint that such strategies are intrinsically behaviouristic and thus neglectful of knowledge and understanding.

Now the 'integrated conception of competence' as conceived by Hager and Beckett (1995; cf. Hager, 1994) was from its inception expressly such as might be assumed to be immune to these two complaints. So called because it emphasizes the need to integrate 'key tasks' with personal attributes such as 'knowledge, skills, attitudes, values, etc.' (Hager & Beckett, 1995, p. 2), the integrated conception was intentionally differentiated from strategies that might be focused solely or even predominantly on behaviour. Similarly with the issue of reductionism: the integrated conception was mapped out in purposefully holistic terms, not only by virtue of incorporating personal attributes along with key tasks but also in being sensitive to the essentially situated and interconnected nature of professional action and in requiring the functional analysis of an occupational role take place at an 'appropriate level of generality' (Hager & Beckett, 1995, p. 3).

On the face of it, then, the integrated approach might seem readily distinguishable from, for example, the kind of strategy that has come to predominate in the UK's system of vocational qualifications. Yet although it is clear that there are 'different ways of thinking about competence' (Hager & Gonczi, 1996, p. 15) the distinction between the integrated conception and alternative approaches seems never to have been as firmly established as it might have been. Perhaps one reason for this arises from an accident of history. During the period in which CBET came to prominence there still persisted in many areas of philosophy of education a somewhat unhelpful preoccupation with linguistic analysis. With commentators keen to focus on a 'concept' and 'the concept of competence' duly singled out for critical attention, much of the critical onslaught came to be directed indiscriminately at any strategy associated with the term 'competence'; indeed, in some circles the very word came to stand for something irredeemably flawed and educationally inadequate. And in being directed ostensibly at a 'concept' this criticism tended to be impervious to any facts relating to the methods actually used or substantive differences between approaches.

Another reason why the integrated conception was perhaps never sufficiently distinguished from other strategies is that in being characterized as resistant to reductionist and behaviourist tendencies it might *appear* no different from other variants of CBET. Proponents of the NVQ/SVQ system, for example, would similarly resist the allegation of behaviourism, insisting that their methods can readily accommodate the assessment of 'underpinning knowledge' or indeed any other attribute one might care to mention. Likewise with the issue of reductionism: as Hager and Beckett (1995) themselves rightly note, terms such as reductionist and holistic are 'relative terms when applied to competency standards' (p. 3) and if an individual standard's being reductive or holistic is a largely contingent and relative matter then, again, it becomes less clear how this could be a basis for characterizing any approach as intrinsically different from any other.

Such considerations not only point up some of the difficulties involved in making a clear distinction between ostensibly different approaches to CBET, but also reveal an underlying uncertainty about the distinguishing characteristics of CBET, an uncertainty that affects the case of both advocates and critics alike. And this goes some way towards explaining why, despite the increasing prevalence of CBET around the world, there remains an undercurrent of vaguely articulated scepticism, a residue of doubt

that fails to find expression save for disdainful remarks about ‘tick boxes’ and ‘can dos’. Even after more than 20 years of vigorous debate about the issue of competence there remains doubt as to whether all the questions about CBET’s substantive identifying features have been satisfactorily resolved.

My own small contribution to this debate, incidentally—the relevance of which will become clear later—was to suggest that what characterized CBET strategies, at least those employed in the UK, was a somewhat idiosyncratic reliance on the use of language in the form of competence ‘statements’ (Lum, 1999). Such statements seemed central to the methods of CBET, certainly in its UK guise. Especially telling in this respect was a proclamation by the then Director of the UK’s National Council for Vocational Qualifications:

For accurate communication of the outcomes of competence and attainment, a precision in the use of language in such statements will need to be established, approaching that of a science. The overall model stands or falls on how effectively we can state competence and attainment. (Gilbert Jessup, 1991, p. 134)

The thrust of my argument was that those on either side of the debate who had concentrated their efforts on attacking or defending ‘the concept of competence’ had missed the point: the crucial thing was not what was meant by competence but whether it was possible to *describe* competence with sufficient ‘precision’. Noting the profound difficulty we have in describing even the simplest of abilities, I argued that it was precisely this demand for precision that caused competence statements to gravitate towards the things that *can* be described, i.e. the manifest behaviours or more concrete consequences of competence, hence the accusation of behaviourism so often levelled against CBET.

My intended target was the NVQ/SVQ system of which I had personal experience, but in failing to make this explicit I too was guilty of what could be perceived to be indiscriminate criticism of any approach connected with the term competence. Although I certainly had no experience of Australian competence strategies I knew Hager’s work well enough to know that his nuanced accounts of competence in professional settings, his evident concern for the ‘richness of practice’ (Beckett & Hager, 2002), was a world away from the kind of thinking that underpinned much of the NVQ/SVQ system. Anyone who is familiar with Hager’s work cannot help but be struck by his impressively acute analyses of professional and vocational expertise, in occupations as diverse as law (Hager & Beckett, 1995), teaching (Hager, 2011), building and construction (Hager, Crowley, & Melville, 2001), ambulance officers (Beckett and Hager, 2000) and professional orchestral musicians (Hager & Johnsson, 2009). Reading Hager, I felt particularly attuned to his insistent rejection of dualisms—not least the spurious opposition that is so often made between vocational and general education (Hager, 1990)—sensing that we had in common the very same aversion to the social snobberies and prejudices that so often can be seen to have had a pernicious effect on the whole subject of vocational education. Shortly after my article appeared, Paul gave a critical response in a paper he gave at a meeting of the British Philosophy of Education Society, taking me to task on my claims about the

ineffability of competence. Unfortunately, I do not think the paper was ever published but I was left with the impression that while unresolved issues remained in relation to the role of competence statements—the role of rules in professional and vocational activities, for example—nevertheless, our perspectives and concerns were in many respects more convergent than divergent.

While I think I was broadly correct in my point about the use of statements in the UK system, more recently I have come to the view that my argument did not attend sufficiently to the assessor's potential role in *interpreting* or giving meaning to statements. As we shall see, it turns out that language has a far more pivotal role in this issue than I originally anticipated. What is more to the point, however, is that I have since increasingly felt that this cannot be the whole picture, not least because there is clearly something incoherent about the accusation of behaviourism in the context of assessment. Certainly we can recognize the potential shortcomings of a behaviour-centred curriculum or pedagogy, and how provision stands to be impoverished to the extent that it is centred exclusively on performance, that is, on the contingent outward effects of knowledge rather than knowledge proper. But CBET's proponents have always been at pains to stress that they are concerned not with educational inputs but with outcomes, with assessment. And it is this which seems to render the charge of behaviourism incoherent. First, because there is an obvious sense in which any and every assessment must be based on behaviour. As Gilbert Ryle famously insisted in *The concept of mind* (1949), we simply do not have direct access to the contents or workings of other people's minds. It seems incontrovertible that our assessment of even the most abstract knowledge or understanding must be based on behaviour of some kind or other. Importantly, this undercuts not only the critics' case against competence-based assessment but also the counterclaim that it is possible to assess knowledge and understanding as distinct from behaviour. Indeed, a second and seemingly contradictory point is that we *do* routinely make meaningful judgements about other people's capabilities as distinct from their behaviour, such judgements evidently being not only possible but vital to both our professional and everyday dealings with other people. Moreover, it is precisely this that is the source of what we might call the 'basic worry' that lies at the heart of the critical case against CBET, the intuition that it is perfectly possible to have knowledge of a person's capabilities that *believes* what might otherwise be indicated by their behaviour.

The crucial question is how to reconcile these apparent contradictions. And this brings us to what seems to me to be the most significant feature of the integrated approach: the idea that competence should be *inferred* from behaviour (Hager & Beckett 1995; cf. Hager, 1995). The important thing about this is that it brings to the fore the question of *how* competence should be assessed and the suggestion that it is in the way this is done that the integrated approach is distinctive. The vast bulk of the literature on competence has always revolved around the question of *what* is assessed, whether it should be conceived in reductive or holistic terms, in terms of behaviour or understanding, and so on. But the suggestion that assessment should involve inference shifts our attention to what it is *we do* when we determine what a person knows or what they can do. Hager and Beckett say little about this process, about how we come to make such inferences. What *is* clear from their account is that the process needs to

be such as will yield a sufficiently rich and holistically comprehensive acknowledgement of a person's capabilities, encompassing the full gamut of relevant attributes. Somewhat paradoxically, we will have cause to question whether 'inference' best describes the process that is substantively at issue; nevertheless, the core idea of Hager and Beckett's account, that assessment should not merely acknowledge behavioural evidence but should consist in some process of active engagement *with* that evidence, turns out to be of crucial importance.

In what follows I will try to become clearer about the nature of this process and some of the wider implications of the integrated conception of competence for assessment methodology. Indeed, I will suggest that what distinguishes the integrated conception is not its ontological focus but what it implies for the *method* of assessment. More precisely, I will argue that it is possible to identify two logically distinct senses in which we might determine a person's competence and that this, in turn, indicates two fundamentally different methodological strategies, differentiated by virtue of the kind of judgement they employ. The upshot, I will suggest, is that the integrated conception can be seen to be consistent with an assessment methodology that is diametrically opposed to that which predominates in the UK. What is most significant of all, however, is that seen thus, the integrated conception can be seen to resolve the 'basic worry' that underpins the critical response to CBET, in contrast to other arrangements which are justly regarded as cause for concern. Our first task in becoming clearer about this is to look more closely at the idea that the process at issue is one of inference.

A Matter of Inference?

There are clearly some senses in which we can reasonably claim to make inferences about a person's capabilities from their behaviour. One obvious example is when we infer that someone is likely to be capable of performing a task on the basis that they have performed it successfully in the past. Sometimes such inferences might be based less on behaviour and more on what we know of a person's history, the facts relating to their experience, upbringing, education, and so on. Knowing that a person has studied degree-level mathematics might allow us to make certain broad inferences about the kind of things they would be likely to be able to do. Moreover, we can see how more complex chains of reasoning might arise: we might infer from a person's performance of x that they have probably had a certain kind of training, and assuming that they have received such training we might further infer that they would probably be capable of doing y and z . But it is worth noting that unless the doing of x somehow *entails* the doing of y or z then the doing of x would not, in and of itself, allow us to infer that that person is capable of doing y or z . It turns out to be of no small significance, as we shall see, that this kind of reasoning necessitates our having knowledge of circumstances which extend *beyond* the doing of x .

Sometimes claims to infer competence from behaviour are made when strictly speaking no inference is made at all. Implicit in the UK's competence approach is the idea that a person's being competent can be inferred from the fact that they are able to demonstrate such and such behaviour. More properly understood, this amounts to

saying that a person is *deemed* competent by virtue of their demonstrating the requisite behaviours: no process of inference is employed whatsoever. In contrast, on the integrated model the suggestion is of an explicit acknowledgement of competence understood not only in terms of relevant behaviours but also in terms of attributes, knowledge, etc., as *distinct from* behaviour, the process of assessment being such as to allow us to derive the one from the other.

The question here is whether this process is best described as one of inference. The notion of inference suggests itself because it is a process which *prima facie* seems to involve a leap from one ontology to another, from observable outward behaviours on the one hand to unobservable inner states on the other. To say that we must make inferences about those states is one way of acknowledging the fact that we do not have direct access to those states. Of course the difficulties involved in claiming to traverse this ontological divide are as well known as they are contentious. According to logical behaviourists such as Ryle, our belief that mental epithets such as ‘intelligent’ and ‘competent’ refer to some hidden inner realm amounts to self-deception. Those with firmer behaviourist or eliminativist inclinations will go further, calling into question the very existence of this supposed inner realm. Yet, as Wittgenstein recognized, the fundamental issue here may not be one of ontology at all, and certainly not one restricted to consideration of *other* minds.

If one says that knowing ABC is a state of the mind, one is thinking of a state of a mental apparatus (perhaps of the brain) by means of which we explain the *manifestations* of that knowledge. Such a state is called a disposition. But there are objections to speaking of a state of mind here, inasmuch as there ought to be two different criteria for such a state: a knowledge of the construction of the apparatus, quite apart from what it does. (Wittgenstein, 1953, §149; original italics)

What rightly puzzles Wittgenstein here is how it is possible for us to say anything at all about even our own inner mental states understood as something ontologically distinct from their manifestations given that those manifestations are all we can know and that any attempt to characterize the former would seem to involve us in simply reiterating what we know about the latter. The common assumption is that we *infer* mental states from their outward manifestations rather like, to use a crude analogy, inferring the presence of an engine under the bonnet of a car from the fact that we hear revving and see emissions from the exhaust. The crucial difference—and this is the crux of Wittgenstein’s insight—is that unlike car engines other minds are *in principle* inaccessible. If the inner workings of cars were by their very nature similarly inaccessible such that no one had ever seen under the bonnet of a car and as a matter of principle never could, then we would be similarly incapable of inferring anything about those workings.

Now it would be a misreading of Wittgenstein to take this to be an endorsement of behaviourism (cf. McGinn, 1997). The essential thing is how the issue is at root one of *epistemology* rather than ontology. We might say that the distinction between inner states and outward manifestations, although demarcated in ontological terms, should more properly be regarded as an epistemological distinction because it concerns what

happens in *our* minds as part of the process of determining what another person knows. The fact is that we *do* ascribe to other human beings *putative* inner states such as knowledge, beliefs and emotions, often in such a way as to differentiate those states from instances of behaviour. Philosophers sometimes refer to this facility as ‘folk psychology’ in order to distinguish it from philosophic theorizing proper: a mildly disparaging term which risks understating its profound pedagogical importance. We might think, for example, of the teacher who just *knows* that her pupil does not understand even though he answered her question correctly; or conversely, that he *does* understand despite failing to answer correctly. But to acknowledge the meaningfulness of such judgements is not to suggest that the teacher has privileged access to other minds, and neither is it to say that she has succeeded in inferring one ontology from another. True, the teacher would be unabashed in elucidating her judgement in explicitly ontological terms, as a case in which outward appearances were at odds with the pupil’s inner capabilities. As Wittgenstein would say, it is as though we are compelled by the very grammar of our language to posit the existence and properties of mental states as distinct from behaviour even while recognizing the logical difficulty in accepting any such supposition. Yet perhaps even this is to understate the matter, for as we shall see, it is not merely that we are inclined to describe it in these terms but it would seem, ordinarily at least, that we cannot help but *understand* it in these terms too. However, for our purposes the main point here is that to describe this process as one of inference is to automatically frame the issue in terms of ontology and the kind of precedence we afford to the ‘outer’ as opposed to the ‘inner’. And quite apart from the contentious metaphysical issues this raises, couching it in these terms, as we shall see, ultimately serves to undermine the integrity of the integrated conception. What we need, I want to suggest, is a somewhat different way of characterizing this process if we are to be clear about what it is that distinguishes the integrated conception of competence.

Two Constructs, Two Methods

We have noted how we might sometimes infer that a person is likely to be able to do *x* from the fact that they have been known to do *x* successfully on previous occasions. But if I am asked whether my elderly aunt would be capable of making her way by public transport from Aberystwyth to Kensington, a journey she has never made before, my response would derive not from any computation of previous performances but rather from *my understanding* of my aunt and her capabilities. Donald Davidson (2002) has commented on the remarkable ability we have to take what we glean about a person from the things they do or say and assemble this into a ‘convincing picture of a mind’ (p. 15). We probably could not even begin to say how we do this but the fact that we can do it seems incontrovertible. It might be more appropriate, of course—being mindful of Wittgenstein’s point about distinguishing mind states from their manifestations—to speak here of a ‘picture of a person’ rather than a ‘picture of a mind’. But that point aside, it seems indisputable that we all carry around some such ‘picture’ for every person we know, however long or briefly we happen to have known them, assembled from whatever and however much information we have

available to us. And it would seem that we modify such pictures, perhaps largely unconsciously, continually revising them as we come into possession of more detailed or more relevant information.

Now it seems to me that the implications of this for educational assessment have never been fully explored. Consider, again, the teacher in our previous example. If pressed to say whether her pupil knows the thing in question she would say something like, ‘Well, it depends on what you mean by “know”’. However, contrary to what she might suppose, the distinction at issue here is not that of the pupil’s behaviour as against his understanding, but rather, the pupil’s behaviour as against the ‘picture’ she has in *her* mind with respect to that pupil. This may seem like hair-splitting but the difference turns out to be quite crucial, as will start to become apparent with what I have elsewhere called the Right/Wrong Scenario:

Imagine that we wished to assess a person’s knowledge of, say, current affairs by means of oral questioning. And suppose that this person was able to answer our questions correctly but with each and every answer betrayed some either quite subtle or perhaps quite radical misunderstanding. Perhaps on being asked who the current British Prime Minister is the response comes ‘David Cameron—leader of the Liberal Democrats’, or ‘David Cameron—the Welshman who lives at N^o 9 Downing Street’, or ‘David Cameron—a lizard-like alien from Mars who lives in the sewers of New York’. Let us say, then, that with each and every ‘correct’ answer comes countervailing evidence which suggests that the respondent does not fully understand the matter in hand ... The question here is whether and in what sense there could be said to be a correct or appropriate interpretation of such a response. (Lum, 2012, p. 596)

In other words, what is it exactly that would determine whether responses of this kind are deemed correct or incorrect? Now it might be thought that this simply depends on the purpose of the test, on what it is we are trying to find out, and that any such anomalies could be dealt with by making appropriate modifications to the test. If it matters to us whether the respondent knows which party David Cameron leads, then we need only include a question to that effect. This, we might say, is the standard way of thinking about validity in test design. However, this would be to miss the first crucial point about the Right/Wrong Scenario, which is that *however many* questions are included, this scenario could still obtain. I should stress that this scenario is by no means restricted to assessment involving oral questioning; exactly the same situation could arise with any form of assessment, with a practical test, for example, where we could imagine each task being completed ‘correctly’ but with the test candidate then doing or saying something that suggests that he does not fully understand the matter in hand.

The next point to be derived from this is that it would seem clear that whether we deem such responses to be correct or incorrect will depend on the *kind* of assessment we choose to employ. By way of illustration, we might imagine the above scenario arising in two different situations: one in which the questions are used in a door-to-door survey of voters and one in which the very same questions are used as part of an

interview process to assess applicants for an internship at Westminster. In the case of the door-to-door survey there is an interest only in whether the respondent gives the requisite answer; accordingly, responses such as these are likely to merit an affirmative tick in the relevant box. In the case of the interview, however, we can imagine a negative judgement resulting, the very same responses raising serious doubts about the applicant's understanding. In each case the same questions are used, the same responses are sought and the very same responses are received, yet we have two very different answers to the question of whether the person could be said to 'know'.

Now it seems to me that we can only account for this divergence by acknowledging that in each case a different *method* of assessment is used, what I have elsewhere (Lum, 2012) dubbed the prescriptive and expansive modes, each mode being distinguished by virtue of employing a different kind of judgement. Hager too has distinguished what he calls the 'judgemental model' of assessment from the 'scientific measurement model' (Hager & Butler, 1996) and this distinction certainly serves to highlight the limitations of statistical approaches to assessment. However, as I hope will become clear, the distinction I have in mind has the merit of being still more basic, still more fundamental to the facility we bring to bear when we set out to determine what another human being knows.

I want to suggest that an assessor operating in the prescriptive mode employs what are essentially *judgements of identity*, that is, they are concerned only with determining whether the person's behaviour, performance or product corresponds with that prescribed. Providing that the respondent in the door-to-door survey is able to give the required response, he will be deemed to 'know' the thing in question, any indications to the contrary being treated as irrelevant. In contrast, an assessor operating in the expansive mode employs what we might call *judgements of significance*, that is, the assessor actively evaluates the evidence, engaging in a process of selecting and ascribing significance to the range of evidence available.

Now it seems to me that these two modes are no mere theoretical constructs but that they represent a natural bifurcation in our facility to gauge and make sense of other human beings. In short, these are the processes we instinctively bring to bear in evaluating what other human beings know, think, feel, etc. In our everyday dealings with people we vacillate between the two modes, constantly comparing the two and continually modifying the 'picture' we have of the person and their capabilities. In determining what a person knows we will, like the teacher in our example, give precedence to the mode that most suits our purposes, and while sometimes it will suit our purposes to acknowledge certain specific behaviour, at other times it will be more pertinent to make an expansive evaluation of the evidence, drawing on the 'picture' we have of that person's capabilities. It is not without significance that when we try to articulate what it is a person knows we will inevitably resort to ontologically oriented descriptions, contrasting understanding with behaviour, thinking with doing, and so on. This is at its most conspicuous when circumstances are such that the two modes are at variance; for we invariably rationalize the apparent contradiction in ontological terms, seeing the 'outer' as being somehow at odds with the 'inner', even coming to conceive of the person's abilities in these terms.

What I am suggesting, then, is that these two modes are a basic, natural feature of our capacity to evaluate and interact with other human beings. Our main interest here, however, lies in the implications of this for *formal* assessment. Another thing illustrated by the Right/Wrong Scenario is the sense in which reliability is fundamentally dependent upon *consistency* of mode use, since what counts as correct may depend on the mode used. Any equivocation on this score, either between designers and assessors, between assessors, or between instances of assessment, will threaten the reliability of assessment. It is here that we can see the important role played by language, for in any formal assessment the one thing that can implicitly prompt the use of one mode or the other is the *language* in which the competence statements, descriptors, criteria, etc., are framed. Whereas statements couched in terms of behaviours or other concrete outcomes will prompt judgements of identity characteristic of the prescriptive mode, statements centred on attributes of the person will prompt judgements of significance in the expansive mode. Somewhat paradoxically, then, it is the ontological differentiation of statements that is key.

What should be clear from this is that the integrated conception of competence, in stressing the importance of attributes such as ‘knowledge, skills, attitudes, values, etc.’, implicitly indicates the use of judgements of significance in the expansive mode. Only by using judgements of this kind is it possible to acknowledge the complex and variable nature of the evidence associated with such attributes. Prescriptive mode judgements have a place too, in respect of acknowledging the performance of key tasks, but it is a characteristic feature of expansive mode judgements that in any educational context they will always trump judgements in the prescriptive mode. (Think of the teacher who *knows* what the pupil understands, contrary to what might be deduced from his behaviour.) And this indicates how the integrated conception is able to respond to the ‘basic worry’ that underlies the critical case against CBET, the intuition that it is possible to have knowledge of a person’s capabilities that belies what might be indicated by their behaviour. More properly understood as a variance between the two modes, it becomes clear that the complaint is only pertinent against arrangements of the kind found in the UK’s NVQ/SVQ system, where the demand for ‘precision’ means that overriding precedence is given to judgements of identity in the prescriptive mode.

We are now in a position to see why it is important to be resolute in seeing the distinction that is fundamentally at issue *not* as ontological but as epistemological/methodological. Quite apart from any metaphysical complications it might raise, to conceive of the matter in ontological terms is to unavoidably invoke the possibility of inferential hazard. R. F. Dearden (1979) captured the crux of the matter:

... the inferential gap between behavioural evidence or product on the one hand and learned capacity on the other cannot be crossed with complete logical security, and attributing relative permanence to the capacity involves the further hazards of induction. (p. 115)

Presented as a choice between ‘objective’ behavioural evidence on the one hand and tentative speculation about inner states on the other, it is not difficult to see how the former might come to have the upper hand. However, on the view presented here

we have seen that this is *not* the choice at issue; rather, the choice is between judgements that are confined to *prescribed* evidence and judgements that are based on the most *expansive* consideration of evidence, making full use of the assessor's facility to select and assign significance to any evidence that is available. Seen thus, it is clear that it is the expansive mode that has the advantage.

This by no means answers all the questions potentially raised by this matter, but it hopefully goes some way towards getting clearer about what it is that distinguishes the integrated conception of competence from the kind of strategies currently employed in the UK. Perhaps the most noteworthy thing about this, if I am right, is that the issue turns out not to revolve around behaviour after all; indeed, it is surely not without significance that in getting clearer about what it is that distinguishes the integrated conception of competence it has been necessary to dispense with what is probably the most fundamental dualism of all.

I recall a conversation with Paul Hager some years ago in which I explained a dilemma I was facing. After teaching electrical engineering for many years I felt that the time had come for a career change such as would allow me to follow my long-held passion for philosophy. My quandary was whether to look for a teaching post in a philosophy department or, alternatively, to seek a position in an education department where I could pursue my interests in philosophy of education. Paul's response was unhesitant: the opportunity to apply philosophy to real-world practical problems held vastly more interesting possibilities than the comparatively detached world of academic philosophy. I have since come to appreciate just how right he was and I have never once regretted taking his advice.

References

- Beckett, D., & Hager, P. (2000). Making judgments as the basis for workplace learning: Towards an epistemology of practice. *International Journal of Lifelong Education*, 19, 300–311.
- Beckett, D., & Hager, P. (2002). *Life, work and learning: Practice in post-modernity*. London: Routledge.
- Davidson, D. (2002). Knowing one's own mind. In *Subjective, intersubjective, objective* (pp. 15–38). Oxford: Oxford University Press.
- Dearden, R. F. (1979). The assessment of learning. *British Journal of Educational Studies*, 28, 111–124.
- Hager, P. (1990). Vocational education/general education: A false dichotomy? *Studies in Continuing Education*, 12, 12–23.
- Hager, P. (1994). Is there a cogent philosophical argument against competency standards? *Australian Journal of Education*, 38, 3–18.
- Hager, P. (1995). Competency standards—A help or a hindrance? An Australian perspective *Vocational Aspect of Education*, 47, 141–151.
- Hager, P. (2011). Refurbishing MacIntyre's account of practice. *Journal of Philosophy of Education*, 45, 545–561.
- Hager, P., & Beckett, D. (1995). Philosophical underpinnings of the integrated conception of competence. *Educational Philosophy and Theory*, 27, 1–24.
- Hager, P., & Butler, J. (1996). Two models of educational assessment. *Assessment & Evaluation in Higher Education*, 21, 367–378.

- Hager, P., Crowley, S., & Melville, B. (2001). *Changing conceptions of training for evolving workplaces: The case of the Australian building and construction industry*. Sydney: UTS Research Centre for Vocational Education & Training.
- Hager, P., & Gonczi, A. (1996). What is competence? *Medical Teacher*, 18, 15–18.
- Hager, P., & Johnsson, M. C. (2009). Learning to become a professional orchestral musician: Going beyond skill and technique. *Journal of Vocational Education and Training*, 61, 103–118.
- Jessup, G. (1991). *Outcomes: NVQs and the emerging model of education and training*. London: Falmer Press.
- Lum, G. (1999). Where's the competence in competence-based education and training? *Journal of Philosophy of Education*, 33, 403–418.
- Lum, G. (2012). Two concepts of assessment. *Journal of Philosophy of Education*, 46, 589–602.
- McGinn, M. (1997). *Wittgenstein and the philosophical investigations*. London: Routledge.
- Ryle, G. (1949). *The concept of mind*. London: Hutchinson.
- Wittgenstein, L. (1953). *Philosophical investigations*. Oxford: Blackwell.