Chapter 7
Mindful Working and Skilful Means: Enhancing the Affective Elements of Vocational Education and Training Through the Ethical Foundations of Mindfulness

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7.1 Introduction

Mindfulness-based interventions (MBIs) which make use of the direct awareness and present-moment attention adapted from Buddhist mindfulness practices are now influential in a wide range of fields and disciplines including psychology, psychotherapy, mind-body health professions and education and training at all levels. Although MBIs – by nature developmental, contemplative, process oriented and radically experiential – do not fit easily into formal educational contexts (Hyland 2011), their use in programmes of professional and vocational development has led to adaptations which involve standardisation of inputs and the quantitative measurement of outcomes. It will be suggested that instances of such standardisation – described as 'McMindfulness' by critical commentators (Purser and Loy 2013) – may be counterproductive and serve to emasculate mindfulness practices. After examining the nature and current state of development of MBIs, I go on to question whether these standardising trends – particularly when allied with competence-based education and training (CBET) approaches concerned with prescriptive outcomes – can be reconciled with the foundational values and principles of mindfulness. Finally, some suggestions are made with the aim of ensuring the moral and affective integrity of MBIs connected with the personal development and vocational education and training (VET) of students, trainees and employees.

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7.2   Mindfulness: Origins and Growth

Mindfulness has become something of a boom industry over the last few decades thanks largely to the work of Kabat-Zinn (1990) who developed a mindfulness-based stress reduction (MBSR) programme in his work at the University of Massachusetts Medical School in 1979. Since then, the work of Kabat-Zinn and associates (Kabat-Zinn 2005; Segal et al. 2002; Williams, et al. 2007; Williams and Kabat-Zinn 2013) has been responsible for a massive global expansion of interest in mindfulness-based interventions in a diverse range of domains including work in schools, prisons, workplaces and hospitals, in addition to wide applications in psychology, psychotherapy, education and medicine. An Internet search on the concept of mindfulness brings up around 18 million items, and, in terms of publications, numbers have grown from one or two per year in 1980 to around 400 per year in 2011 (Williams and Kabat-Zinn 2013, p. 3; the growth of mindfulness research papers has been exponential in recent years, see *American Mindfulness Research Association*, https://goamra.org/).

Thich Nhat Hanh (1999) – the renowned Vietnamese Buddhist teacher and campaigner for world peace and justice – describes mindfulness as being 'at the heart of the Buddha's teachings'. It involves 'attention to the present moment' which is 'inclusive and loving 'and 'which accepts everything without judging or reacting' (p. 64). Kabat-Zinn (1990, 1994) and associates have been largely responsible for transforming the original spiritual notion into a powerful and ubiquitous therapeutic tool based on forms of meditation and mindful practices. Mindfulness simply means 'paying attention in a particular way, on purpose, in the present moment and non-judgementally' in a way which 'nurtures greater awareness, clarity and acceptance of present-moment reality'. Such practice – whether this involves breathing or walking meditation or giving full non-judgemental attention to everyday activities – can offer a 'powerful route for getting ourselves unstuck, back in touch with our own wisdom and vitality' (Kabat-Zinn 1994, pp. 4–5).

Since all educational activity involves some level of judgement, this non-judgemental aspect of mindfulness practice needs to be explained. If we are driving a car, mindfully we are, of course, making all kinds of essential first-order judgements concerned with speed, distance, other motorists and pedestrians. What mindfulness attempts to achieve is the fostering of this present-moment activity without adding second-order judgements concerned with worries about yesterday, plans for tomorrow or other extraneous notions. It involves switching off the autopilot, the default mode of the mind which is often preoccupied with regrets, anxieties or pointless rumination. Mindful driving is, thus, just driving in the here and now. Such non-judgemental awareness has been demonstrated to enhance clarity, focus and, ultimately, general mind/body well-being. Gunatarana's conception of mindfulness as 'mirror thought' (2011) expresses this non-judgemental aspect very well. As he comments:

> Mindfulness…just perceives… It takes place in the here and now. It is the observance of
> what is happening right now, in the present. It stays forever in the present, perpetually on
> the crest of the ongoing wave of passing time. (pp. 133–4)

Thus, when we are mindfully driving, teaching, solving a problem in physics, repairing an electrical fault or writing about educational theory, we are engaged in just *these* activities at a first-order level. We are not also involved in second-order judgements involving the appraisal of our second-order feelings, thoughts about the past/future or other extraneous rumination about these activities.

7.3 Mindfulness, Education and Psychology

The various mindfulness-based interventions (MBIs) – in psychotherapy, mind-body health and education – referred to above represent connections between Eastern spiritual traditions and Western science. Psychology, psychotherapy and related fields are the ones which tend to predominate in terms of this process of mutual interrelationship. A number of psychologists and psychotherapists (Epstein 2005) have regarded Buddhism as a form of study of the nature of the mind. Germer (2005) asserts simply that 'reading early Buddhist texts will convince the clinician that the Buddha was essentially a psychologist' (p. 13).

The neuroscientific evidence about the impact of MBIs on the functioning of the brain – and the resultant possibility of changing cognitive, affective and psychomotor activity – are directly relevant to education in general and VET in particular. A good place to start is with the relationship between the mind and brain. Siegel (2007) explains that the brain 'is an integrated part of the whole body'. He goes on to elaborate this statement:

> Because the mind itself can be viewed as both embodied and relational, our brains actually
> can be considered the social organ of the body. Our minds connect with one another via
> neural circuitry in our bodies that is hard-wired to take in others' signals. (p. 48)

What needs to be added to this is that 'attention to the present moment, one aspect of mindfulness, can be directly shaped by our ongoing communication with others, and from the activities in our own brains' (ibid., p. 50). Recent neuroscientific work indicates that, on the one hand, neural networks in the brain can be altered by experience and, on the other, that mindfulness practice can help to bring about such change. As Doidge (2007) observes, the 'idea that the brain can change its own structure and function through thought and activity is…the most important alteration in our view of the brain since we first sketched out its basic anatomy and the workings of its basic component, the neuron' (pp, xv–xvi). He goes on to describe a wide range of cases – from physical ailments to emotional disorders – in which brain changes have been demonstrated to be connected with either cures or improvements in health.

Siegel (2007) has suggested that 'at the heart of mindfulness is the teachable capacity for reflection' and that this 'learnable skill is just a breath away from being

readily available as the fourth "R" of basic education' (pp. 259–260). Siegel's work has shown that 'resilience can be learned through experience' (p. 215), and he picks out the key features of mindfulness strategies – approaching rather than avoiding difficult states, replacing rumination with observation based on curiosity and kindness and the reflection on thoughts and feelings using notation and labelling (ibid., pp. 216–225) – as ways of establishing calm and stability by integrating left and right hemispheres of the brain.

If we then connect this notion of changing the mind/brain through learning (unlearning and relearning) through experience, we can begin to see the powerful educative aspects of mindfulness-based approaches. Through the standard practices outlined in the literature – attending to the breath, mindful walking or movement or, indeed, any technique which helps us to still the restless and wandering mind and 'learn to pay attention to the *experience of paying attention* (Schoeberlein and Sheth 2009, p. xii, original italics) – it is possible to reduce unhelpful rumination and experiential avoidance in our mental lives and, when appropriate, to switch off the automatic pilot for longer and longer periods. The ethical and attitudinal bases of the practice also indicate that mindfulness 'is not just about paying *more* attention, but rather about cultivating a *different*, wiser kind of attention' (Williams et al. 2007, p. 99, original italics). Experiments using MRI and EEG brain scanning have demonstrated clear and direct connections between meditation and changes in the brain, particularly in relation to brain states and different types of emotion (Goleman 2003). The capacity to generate compassion, lovingkindness and 'introspective skill' (ibid., pp. 11–23) in training the mind through meditation has been observed in laboratory experiments with meditators. More specifically, Davidson et al. (2003) found 'a shift in the baseline of long-term meditators toward left anterior activation' of the brain, and this left shift was also linked with enhancement of immune functions of people who had completed mindfulness courses. fMRI scans of the brain's prefrontal cortex have connected negative emotions with the right area and positive feelings with the left (Goleman 2003, p. 340).

Research on the introduction of mindfulness in schools and colleges tends to confirm these observations. The 'present-moment reality' developed through mindfulness is widely acknowledged in educational psychology as not just 'more effective, but also more enjoyable' (Langer 2003, p. 43) in many spheres of learning, and there is now a wealth of evidence aggregated through the *Mindfulness in Education Network* (http:/ /www mindfuled.org) about the general educational benefits of the approach. On the basis of work done in American schools, Schoeberlein and Sheth (2009) list a wide range of benefits of mindfulness for both teachers – improving focus and awareness, increasing responsiveness to student needs and enhancing classroom climate – and students in supporting readiness to learn, strengthening attention and concentration, reducing anxiety and enhancing social and emotional learning. As they put it:

> Mindfulness and education are beautifully interwoven. Mindfulness is about being present with and to your inner experience as well as your outer environment, including other people. When teachers are fully present, they teach better. When students are fully present, the quality of their learning is better. (p. xi)

The use of mindfulness in British schools is showing similarly promising results. Burnett (2011) has shown its value when incorporated into moral/religious education or personal and social health programmes (PSHE), and the controlled trial conduct by Huppert and Johnson (2010) with 173 secondary school pupils indicated a positive impact of mindfulness-based approaches on emotional stability and an increase of well-being. The therapeutic applications of mindfulness strategies were recommended in the report sponsored by the Department for Business Innovation and Skills, *Mental Capital and Wellbeing* (Government Office for Science 2008), and there are a number of well-established centres for the research and teaching in mindfulness-based approaches: the Centre for Mindfulness Research and Practice at the University of Wales, Bangor (www.bangor.ac.uk/mindfulness), the Oxford Cognitive Therapy Centre (www.octc.co.uk), and the University of Exeter (www.exeter.ac.uk).

In addition to the studies noted above, a body of educational research evidence is beginning to emerge from the UK *Mindfulness in Schools Project* (MiSP; Burnett 2011). A project undertaken in secondary schools connected with the MiSP (officially called the .b project) by Hennelly (2011) involving 64 mixed-gender pupils reported that mindfulness training brought about immediate improvements in adolescents' functioning and well-being and (on the basis of a questionnaire survey conducted 6 months after experience on the .b programme) established that these positive effects were maintained. More recently, a large-scale experimental project conducted by Kuyken et al. (2013) investigated the impact of mindfulness training in a study involving a total of 522 young people aged 12–16 in 12 secondary schools connected with the MiSP initiative. The results indicated that the pupils

> who participated in the intervention reported fewer depressive symptoms post-treatment and at follow-up and lower stress and greater well-being at follow-up. The degree to which students in the intervention group practised the mindfulness skills was associated with better well-being and less stress at 3-month follow-up. (p. 1)

7.4 Vocational Education and Training and the Mindful Workplace

Chaskalson (2011) has investigated the increasing use of MBIs in workplace settings, and a number of corporations are now showing an interest in introducing mindfulness training for their employees (see Aetna.com 2014). Although Chaskalson initially appears to be examining the applications of mindfulness to training and work in general, the analysis is restricted mainly to the links between the efficacy of MBIs in promoting emotional intelligence (EI) at the level of management and leadership. Much is made of Goleman's work in this sphere, particularly its applications in the workplace. In the light of his theories of emotional intelligence (Goleman 1996), Goleman (2001) had originally analysed data from competence models used in leading companies such as IBM, British Airways and

Credit Suisse, as well as public-sector organisations in the attempt to discover those personal capabilities that underpinned optimal performance at all levels.

Chaskalson ([2011]) cites a broad range of studies which indicate the importance of EI in teamwork, creative thinking, leadership and innovation in different work environments before explaining how MBSR programmes may contribute to the development of EI through the cultivation of insight, focus, concentration and empathy. In a concluding section (ibid., pp. 164–5), he sums up the research findings about the typical impact of the 8-week MBSR course on participants. These included a reduction in participants' levels of stress, an increase in their emotional intelligence, increased attention span and lower rates of absenteeism. Some of the problems and pitfalls of measurement in this field – particularly when tailor-made psychological tests based on self-reporting are used – will be discussed in more detail below. At this stage, it is worth pointing a number of related problems involved in applying standardised mindfulness courses such as MBSR/MBCT in workplace settings.

Chaskalson (pp. 168–170) fully recognises the logistical problems of organising and delivering MBSR courses in the workplace. They are costly in time and effort to both employers and employees and – unless adapted to specific work environments – may seem remote from everyday working practices. More significantly – as may be discerned by the potential benefits listed above – they tend to be used primarily to develop skills and traits linked to productive workplace outcomes whether or not these are representative of foundational mindfulness principles. The appropriation of MBIs by corporations such as Google has been labelled the 'gentrification of the dharma' by Eaton ([2014]), who reports that 'many Buddhists now fear their religion is turning into a designer drug for the elite' (p. 1). In a similar critical vein, Stone ([2014]) has observed that:

> Mindfulness meditation has exploded into an industry that ranges from the monastery to the military. Google, General Mills, Procter & Gamble, Monsanto and the U.S. Army are just a handful of the many enormous institutions that bring meditative practice to their workforce. (p. 1)

He goes on to point out the dangers – and in the case of the US Army, the monstrous absurdity – of allowing Buddhist principles of non-violence and lovingkindness to be appropriated by organisations concerned with ends which are diametrically opposed to the principles upon which mindfulness is founded.

It is true that the affective aspects of learning have tended to be seriously neglected at all levels, and there are direct connections between educating the emotions and cultivating mindfulness (Hyland [2010], [2014b]). If the use of mindfulness is able to reduce stress and enhance mind/body well-being in anyone – whether they are employees, soldiers or monks – through the mindful control of destructive emotions, then, of course, such strategies are worthy of our provisional approval. However, if emotional literacy, greater attention focus and economic productivity rather than mindfulness rooted in fundamental ethical principles become the primary goals – as seems to be the case in Chaskalson's account and the corporate programmes noted above – then the rationale for and viability of full 8-week MBSR

courses for either employers or trainees become questionable. For this reason, workplace training in this sphere generally takes the form of short subject- or trait-specific courses (typically over 1 or 2 days) aimed at enhancing leadership, management or teamwork qualities (Aetna.com 2014; Eaton 2014). Moreover, the outcomes sought are almost always designed with any eye to increasing productivity as the question becomes, 'Can mindfulness increase profits?' (http://mindfulnet.org/, 2014).

All this is perhaps both predictable and in the nature of the economics of VET and trainee development, though it does raise the question of what any of this has to do with the concept of mindfulness outlined earlier in this chapter. Where are the references to the longitudinal cultivation of values and traits in keeping with the compassionate and equanimous elements of mindfulness? Such developments represent to a paradigm case of the decontextualising and denaturing of the original formulation of the Kabat-Zinn vision which has been correctly labelled 'McMindfulness'. It is also a classic example of the commodification of the educational enterprise which has rightly been labelled the 'McDonaldisation' of learning and teaching over the last few decades (Hartley 1995; Hyland 1999). There are clear connections here between this mutation of mindfulness and the outcome-based assessment strategies associated with CBET, and these are worth examining in more detail.

7.5 Competence, McMindfulness and the Assessment of Outcomes

As indicated above, MBIs are increasingly influential in a growing range of fields including education and training at all levels. However, there are tensions between the ethical and attitudinal foundations of mindfulness and the bureaucratic and assessment demands of educational systems and corporate structures. Practitioners seeking to resolve some of these tensions and potential difficulties have adopted a number of strategies which involve the modification and adaptation of mindfulness conceptions and principles. The main techniques in this restructuring of MBIs are standardisation of inputs and the quantitative assessment of outputs, and I intend to discuss each of these developments in turn.

7.5.1 McMindfulness and the Standardisation of the Present Moment

The exponential progress of mindfulness perspectives in academic disciplines has been driven in the main by the use of MBIs in psychology and psychotherapy. The original mindfulness-based stress reduction (MBSR) developed by Kabat-Zinn

(1990) at the University of Massachusetts Medical Center in 1979 has itself been standardised as an 8-week part-time programme which is now delivered worldwide in a diverse range of settings (Hyland 2011). This programme has subsequently been modified – specifically aimed at people with low mood disorder or mild depression – and linked with cognitive behavioural principles (Williams, et al. 2007) to produce an 8-week mindfulness-based cognitive therapy (MBCT) course which, as indicated in earlier sections, is increasingly influential in counselling, psychotherapy and many other related personal development and training contexts.

Although the foundational ethical and affective principles of the MBSR/MBCT programmes are, theoretically, meant to be unchanged in all the different contexts in which they are now applied, it is inevitable that the removal from their natural home and constant iteration/reinterpretation have resulted in changes and modifications, not all of which are in keeping with the original blueprint (Kabat-Zinn 2013). The sheer volume of contemporary applications of MBIs is staggering and, by itself, is responsible for the adulteration of the original aims.

This populist appeal of mindfulness notions are noted by Purser and Loy (2013) in their critical evaluation of what they call 'McMindfulness' programmes. As they express the key issues:

> The mindfulness revolution appears to offer a universal panacea for resolving almost every area of daily concern… Almost daily, the media cite scientific studies that report the numerous health benefits of mindfulness meditation and how such a simple practice can effect neurological changes in the brain. (p. 1)

The upshot of all this, inevitably, is a marginalisation of the original foundational principles and a distortion of the ultimate aims and procedures. As Purser and Loy conclude:

> While a stripped-down, secularized technique–what some critics are now calling "McMindfulness"–may make it more palatable to the corporate world, decontextualizing mindfulness from its original liberative and transformative purpose, as well as its foundation in social ethics, amounts to a Faustian bargain. Rather than applying mindfulness as a means to awaken individuals and organizations from the unwholesome roots of greed, ill will and delusion, it is usually being refashioned into a banal, therapeutic, self-help technique that can actually reinforce those roots. (ibid)

On another level, the wholesale expropriation of MBIs by academic psychologists and mind-body health professionals – reflected in the ever-burgeoning academic publications noted earlier – has exacerbated the 'decontextualisation' referred to by Purser and Loy by transmuting mindfulness practice into just another academic field of study. The overwhelming majority of such academic publications involve the quantitative measurement of mindfulness (Baer 2013) – the mutation of present-moment 'being' into outcome-oriented 'doing'. Such developments have led to a proliferation of mindfulness measurement scales (see *Mindfulness Research Guide*, 2014; http://www.mindfulexperience.org/measurement), most of them claiming quantitative outcomes based on qualitative self-reporting.

All of these scales are connected with the various benefits of MBIs in the areas of depression, addiction and mind-body well-being, and it is such evidence-based

positive results of the strategies which, according to Baer (2013), both justify such measurement and explain their consistent influence. As she concludes:

> Adaptations from the original Buddhist teachings may be necessary, and intended and unrecognised conceptual slippage may be hard to avoid. (p. 258)

All these developments – and the 'conceptual slippage' referred to by Baer – mean that contemporary MBIs are quite some way from both the Buddhist home of mindfulness and also the original secular therapeutic aims. Kabat-Zinn's evaluation of all these developments is, naturally, both interesting and informative. Since his original work on the MBSR programme has spawned the current mindfulness revolution, Kabat-Zinn's criticisms of contemporary developments are understandably nuanced. Acknowledging the 'challenging circumstances relating to the major cultural and epistemological shifts' as Buddhist meditation was introduced into clinical and psychological settings, Williams and Kabat-Zinn (2013) observe that:

> Buddhist scholars, in particular, may feel that the essential meaning of mindfulness may have been exploited, or distorted, or abstracted from its essential ecological niche in ways that may threaten its deep meaning, its integrity, and its potential value. (p. 11)

The answer to such challenges is the 'building of bridges with an open mind' (ibid., p. 12) between all Western and Buddhist perspectives. More fundamentally, all those concerned with mindfulness practice – teachers, trainers, practitioners and academic researchers – should be aware at all times of the 'ethical foundation of MBSR' (Kabat-Zinn 2013, p. 294) and its roots in the universal *dharma* of loving-kindness, compassion and the relief of suffering in ourselves and others.

Since the exponential development of the mindfulness industry, Grossman (2011) has been forceful in his criticisms of mindfulness measurement scales, particularly those relying upon self-reports by MBI course participants. The key weaknesses are that they decontextualise mindfulness from its ethical and attitudinal foundations; measure only specific aspects of mindfulness such as the capacity to stay in the present moment, attention span or transitory emotional state; and, in general terms, present a false and adulterated perspective on what mindfulness really is. Such developments are of precious little benefit to any of the interested parties whether they are, learners, teachers, mindfulness practitioners or external agencies interested in the potential benefits of MBIs.

More recently, Grossman and Van Dam (2011) have summarised some of the limitations of this overly quantitative approach to mindfulness. As they observe:

> Unlike testing mathematical skills, there is no litmus test for mindfulness, no telltale growth or activity in the brain, nor are there any behavioural referents that have been documented as specific to mindfulness. This situation opens the door for definitions of mindfulness that are in danger of losing any relationship to the practices and teachings that gave rise to MBSR and MBCT. (p. 232)

The proliferation of mindfulness scales which has accompanied the exponential growth of programmes has exacerbated this denaturing of the original conception, and it is now no longer clear precisely what is being measured. Such developments are counterproductive and unhelpful to all those working in the field since they tend

to 'misconstrue and banalize the construct of mindfulness' (p. 234). Along with the gradualness of mindfulness development, this 'way of being' is not susceptible to summative psychological testing. Instead, Grossman and Van Dam recommend formative assessment techniques employing longitudinal interviews and observations of MBI participants in specific contexts. More significantly – especially in the light of what I argue below about mindfulness and competence – the critics make the eminently sensible suggestion that 'one viable option for preserving the integrity and richness of the Buddhist understanding of mindfulness might be to call those various qualities now purporting to be mindfulness by names much closer to what they actually represent' (ibid., p. 234). Thus, such scales may legitimately be said to measure attention span or ability to still the mind for a given period; this is not the same at all as measuring mindfulness. I make very similar points below about CBET systems which attempt to make the concept of competence bear far more weight than it can possibly carry.

7.5.2   Competence and the Quantitative Measurement of Mindfulness

The standardisation of mindfulness approaches linked to the quantitative measurement of outcomes has precise parallels with the way CBET was applied to all aspects of learning and curriculum from the 1980s onwards and is, thus, subject to similar weaknesses and criticisms. In later sections of this volume, commentators will be drawing attention to the application of competence approaches to various levels of learning. The criticisms of this process set out below are, therefore, intended to be taken as a cautionary note, a framework of sceptical ideas which may assist us in steering clear of the more obvious traps and pitfalls.

The story of how CBET was introduced into VET in England through the establishment of the National Council for Vocational Qualifications (NCVQ) in 1986 has been told by many commentators in the field (Bees & Swords 1990; Bates 1998) including myself. Following a number of critical reviews and reports about the work of the NCVQ throughout the 1990s (Beaumont 1996), the NCVQ was abolished in 1997 (general NVQs were phased out completely by 2008, and NVQs now play a much reduced role in the English system) and subsumed under the overarching Qualifications and Curriculum Authority (QCA). In my own critique, I argued that NVQs – and indeed all programmes and qualifications supported by CBET functional analysis – were 'logically and conceptually confused, epistemologically ambiguous, and based on largely discredited behaviourist learning principles' (Hyland 1994, p. x). This conclusion was supported by philosophical argument, policy analysis and empirical research (Hyland 1997, 1998, 2006, 2008). Given the wealth of critical analysis surrounding CBET offered elsewhere and in other sections of this volume, I do not intend to rehearse all of the old arguments here. Instead, I will offer some specific critical comments intended to supplement the

earlier arguments as a preliminary to the primary task of explaining what I take to be the serious tensions and conflicts between the learning project associated with MBIs and the outcome-based behaviourism inherent in CBET systems.

The fact that the NVQ system persists – and, indeed, has been exported to other countries – can be explained by the aggressive marketing and commercialism of the international market for pre-packaged VET commodities (Hyland 1998, 2006) combined with powerful political pressures concerned with face-saving (given the massive public investment in NVQs) and the irresistible appeal of apparently quick and easy solutions to difficult educational and economic problems. It was, for instance, obviously a rich mixture of largely noneducational and political vested interests which inspired the major project reported by Arguelles and Gonczi (2000) involving the mapping of the impact of CBET on educational systems in Mexico, Australia, New Zealand, Costa Rica, France and South Africa. The upshot of this massive public investment (with World Bank support) is summed up by Gonczi in the remarkably frank conclusion that:

> Industrial survival in the competitive workplace depends on innovative solutions to improvement which is the antithesis of prescribed procedures (as laid out in competency standards). We are left with the conclusion that the *foundation of the CBET system is shaky at best*. (p. 26, emphasis added)

In a recent major national review of all aspects of VET provision in England, the Wolf Report (2011) was highly critical of current provision – particularly for 16–19-year-olds – declaring that 'at least 350,000 get little to no benefit from the post-16 education system' (p. 7). The result is that 'many of England's 14–19 year olds do not, at present, progress successfully into either secure employment or higher-level education and training' (ibid., p. 8). In particular, the research conducted as part of the review concluded that:

> low-level vocational qualifications, notably NVQs, have, on average, absolutely no significant economic value to the holders unless they are gained as part of a completed apprenticeship. This is especially true if they were gained on a government-financed scheme. (ibid., p. 150)

Amongst the many proposals for the improvement of practice, the report recommended the delay of specialisation in terms of vocational/academic tracks until age 16, the enhancement of English and Mathematics teaching for 16–19-year-olds and – in line with Continental systems of provision – the expansion of high-quality work experience and apprenticeships for young people (ibid., pp. 160–171). Moreover, the deskilling of vocational roles via the introduction of CBET strategies which has reinforced the vocational/academic divide in Britain (Hyland 2002) has additionally resulted in the further disadvantage of young trainees pursuing competence-based qualifications as against their more privileged academic peers (Roe et al. 2006; Billett 2014).

7.5.3   Reworking the Concept of Competence

Against the background of the fundamental flaws of CBET systems outlined above, it is quite natural for contemporary proponents of such programmes to insist, first, that their own favoured strategies are broader and less limited than the NCVQ model and, second, that the newly modified competence systems somehow manage to transcend the difficulties uncovered in all the critical surveys. However, I think there are deep-seated problems attached to such apologetics which I hope to illustrate here in relation to attempts to apply competence strategies to the MBIs discussed earlier.

The radically behaviouristic nature of *all* CBET systems has been noted by a number of commentators (Marshall 1991; Hodkinson and Issitt 1995; Hyland 1997, 2008); thus, the attempt to change the nature of programmes based on such models by calling them 'holistic' (Hager and Beckett 1995) or as 'integrated capability' or 'situated professionalism' (Mulder 2011), though understandable in pragmatic terms, has little to recommend it. If the behaviouristic functionalism of CBET is such as to render it unsuitable for certain forms of VET or training, then why – is it legitimate to ask – not just say so and move on to more appropriate strategies? Of course, the main reason for this irrational intransigence – as hinted above – is the power of the competence slogan and its practical appeal to industry, corporate management and educators unduly concerned with quantitative educational measurement (Hyland 1998, 2008).

Lum (2009) demonstrates clearly that what really distinguishes any training strategy as competence based is the idea that the 'enterprise can be meaningfully and sufficiently specified by means of statements of outcome, performance criteria, range statements, and the like' (p. 66). I would endorse Lum's argument that this specification of outcomes is the essence of CBET, the 'singular assumption that the educational enterprise can be unequivocally, accurately and sufficiently delineated by means of such statements' (ibid. p. 67). The critical literature referred to above indicates that the search for such spurious specification of outcomes breaks down at levels beyond those of basic skills and accomplishments. The ever-increasing specification of competence statements which has attempted to solve these intractable problems has been counterproductive and fallen foul of the law of diminishing returns.

At bottom, there is a fundamental confusion here between epistemological and ontological categories of ascription. Personal qualities of character such as temperance, industry, honesty, reliability, patience and so on are fundamentally constitutive of persons – definitive of what people are – in the sense in which competencies and skills are not. The notion of a good doctor, or good chef, plumber, nurse, electrician, teacher, airline pilot, etc., is not synonymous with the idea of a person who possesses a range of skills or competencies. Such occupational roles and descriptions need to incorporate the crucial ethical and affective dimensions of working life in which virtues, dispositions, values and attitudes shape social practices in determining how people actually use the skills they have acquired in pursuing aims and goals (Hyland 1997, 2008).

Lum ([2009](#)) illustrates this general point graphically in his discussion of the difference between how CBET systems assess competence – on the basis of whether a person was able to perform a prespecified task – and how, for example, a court of law might determine the occupational competence of an employee involved in an industrial accident or dispute with an employer. In such a case, the court would be interested in far more than a person's performance in relation to CBET statements or criteria.

As Lum expresses it:

> The court's attention would be focused on what the person had received by way of training and experience, whether that person had been provided with all the information necessary to do the job safely, and so on…for CBET, competence is determined solely on the basis of performance evidence *regardless* of what someone may or may not have received by way of training, the length of time on the job, experience, etc. Clearly, the law recognizes something that the competence strategist fails to see: that the substantive extent of a person's competence may be very different from that indicated by any de facto performance, that competence cannot be presumed from the fact of such performance but must be inferred by making use of *all* available and relevant evidence. (ibid., p. 173, original italics)

Moreover, such additional evidence – and this applies to all vocational and professional roles – will require trainers and assessors to go beyond CBET systems to make use of assessment models drawn from, for example, models of teacher, medical or management education linked to higher education programmes of learning, teaching and formative assessment.

Lum concludes his critique of exclusively skill-based and competence-based practice in VET by arguing that the 'bureaucratization of education' – of which CBET is a paradigm case with its 'demand for precise specifications' – tends to compound 'two mistakes that are of devastating consequence for the educational enterprise'. These are:

> The first is to deflect attention away from the learner and his or her capabilities towards ontologies at some remove from the person. The second is to preclude from the business of assessment the very processes of inference and judgement that are so vital for making the best estimation of a person's capabilities. (ibid., p. 173)

Lum's critique – in combination with the other limitations of CBET referred to earlier – is especially pertinent to attempts to apply the competence model to general capabilities and dispositions concerned with, for example, the character, emotions and values of people. A good example of these problems is illustrated in the 'clustering competencies' model developed by Boyatzis et al. ([2000](#)) which seeks to define high-level character traits and capabilities in terms of a competence approach that can predict behaviour in the field of business leadership and management. Clusters connected with self-awareness, self-regulation, motivation, empathy, social skills, etc. (p. 348–9) are identified by the researchers.

Now, although all such qualities and traits – perhaps especially empathy, social skills conscientiousness, optimism and emotional awareness – are clearly important ingredients in management and leadership spheres (indeed, many postgraduate programmes would aim to foster them), not a single one of them can be legitimately described as competencies within the framework of standard CBET systems. It is a

classic case of overworking the competence model, trying to make it bear far more weight than it can possibly carry (cf. Hyland 1992 on 'moral competence'). Emotional awareness and empathy are affective character traits, and trustworthiness and co-operation are ethical qualities; they cannot be described as competencies without offending ordinary language.

Moreover, the argument that these higher-level traits and dispositions cannot be captured by CBET systems is not simply a linguistic quibble. The significance here is that by attempting to squeeze such qualities into CBET models – for example, by writing competence statements for loyalty, honesty, empathy, mindfulness and so on – programmes which incorporate such moral/affective components are thereby distorted and emasculated. In addition to the downgrading and deskilling on many occupational programmes following the introduction of CBET in the UK (Hyland and Winch 2007; Wolf 2011), research studies have also indicated its negative impact at the postgraduate level (Barnett 1994; Hartley 1995; Hyland 1996). An extremely telling study by Grugulis (1997) which involved the incorporation of competence techniques into a higher-level management programme concluded that the 'apparently rational and relevant competencies resulted in distinctly irrelevant activities and that, rather than representing a model of best practice, the management competencies were, at best, irrelevant and, at worst, actively harmful' (p. 428).

7.5.4 Mindfulness and Competence

The 'McMindfulness' programmes referred to earlier represent a classic case of such, often unintentional, distortion of foundational values and principles in the name of standardisation of inputs and outputs to satisfy extrinsic ends. The differences and contrasts between the mindfulness practices outlined in earlier sections and competence strategies may be illustrated graphically as follows:

Mindfulness	Competence
Process based	Product based
Informed by general principles	Directed by prescriptive statements
Ongoing, developmental	Outcome oriented
General, broad based	Specific, task oriented
Holistic	Atomistic
Fostering values and emotions	Developing skills
Informal diagnosis of progress	Formal performative assessment
Humanistic	Behavioural
Education as an ongoing journey	Education as a particular destination

Although such dichotomous features are not exhaustive of the conflicts and differences between MBIs and CBET, they do serve to characterise and highlight the chief weaknesses and problems of 'McMindfulness' approaches. Mindfulness is a subjective process involving long-term developmental learning, whereas CBET

systems are concerned with products, outcomes which can be measured, quantified and delivered to customers in the education and training market. Mindfulness traits are linked to 'being', and competence qualities are connected with 'doing' (or, rather, the measurement of doing through performance), and no amount of casuistry and rhetoric will be sufficient to paper over these radical differences.

It may well be that the MBSR workplace programmes described by Chaskalson (2011) do, in fact, enhance the well-being of employees in ways which lead to higher productivity levels in companies. If this is the case, the experiments may be continued to the benefit of all (they would certainly be discontinued if there was no economic pay-off!). However, what is being developed in such cases – as in most of the 'McMindfulness' programmes – is not mindfulness but something else: attention span, stress-related coping strategies, positive attitudes to work and so on. Against any potential gains in these areas, the losses are significant since such programmes will fail to develop the ethical and affective qualities which – on a long-term basis – have the potential for transforming VET and working practices (Stone 2014). If workplace learning is to be transformed on a more permanent basis, then programmes would need to be informed by the basic foundational qualities outlined by Kabat-Zinn (1990) and by the principles of teaching and assessment outlined by McCown et al. (2011).

7.6   Conclusions

The unfavourable comparisons between English and continental vocational education and training (VET) systems made in the Wolf Report (2011) – and indeed in many national reviews of VET in Britain since the Royal Commission on Technical Education reported in 1884 (Musgrave 1964) – point towards the low status of vocational pursuits in the UK compared to that in Continental Europe and elsewhere (Keep 2006: Hyland and Winch 2007, Pilz 2012; Billett 2014). In the light of these cultural differences, it is unlikely that structural, funding or curriculum reforms alone will succeed in enhancing VET provision without corresponding changes in the value foundation of vocational studies.

As I have argued at length elsewhere (Hyland 2002; 2014a), the upgrading of vocational studies will not be achieved by tinkering with curriculum content or assessment techniques, and the 'permanent revolution' (Keep 2006) of VET reforms over the last few decades has not succeeded in enhancing the second-class status of vocational studies. The reconstruction of VET requires a reorientation of its foundational values if the reforms proposed by Wolf (2011) and others are to have any chance of lasting success. By the same token – although European and other national systems have their own peculiar problems – the global policy agenda concerned only with cognitive outcomes expressed as behaviourist skills and competencies is, arguably, unlikely to meet the key challenges. A reconstructed model of VET needs

to emphasise the values, craft and aesthetic features of vocationalism if the perennial problems are to be dealt with adequately.

Granger (2006) makes use of Pirsig's ideas to illustrate the educational importance of Dewey's aesthetic ideas for both vocational and general education. Pirsig's (1974) description of the differences between a 'high-quality' and 'low-quality' motorcycle shop and the characteristics of a craftsmanlike mechanic are quoted by Granger. He argues that 'attending to things…means reaching out as complete beings to meet the world in a way that brings us closer to it as an equal partner in the full lived situation, and in the concrete and particular here and now' (Granger 2006, p. 118).

Such a conception of craftlike and careful work is on all fours with the non-judgemental present-moment awareness at the core of mindfulness, and Granger demonstrates forcefully the value of such notions to educational theory and practice. Such values are also incorporated in Sennett's (2008) comprehensive and painstaking analysis of the nature and significance of craftsmanship in human history. Craftsmen are 'dedicated to good work for its own sake', and all 'craftsmanship is founded on skill developed to a high degree' (p. 20). Such work is inextricably linked to codes of ethics. As Sennett explains:

> Craftsmen take pride in skills that mature. This is why simple imitation is not a sustaining satisfaction: the skill has to evolve. The slowness of craft time serves as a source of satisfaction; practice beds in, making the skill one's own. (ibid., p. 295)

This perspective on work is quite some way from the behaviourist, competence-based approach to VET and also demonstrates the crucial importance of the traditional apprenticeship system. Although this system was far from perfect, Vickerstaff's (2007) research on young people who had qualified through this route indicated the valuable socialising and developmental nature of this form of vocational training. As she notes: it 'meant something to be an apprentice: it was an expected, respected and structured path to adulthood' (p. 342) in addition to providing the long-term fostering of vocational and craft knowledge and skill. It also required the collective effort of 'family help, community backing and intergenerational support' (ibid), factors which the shorter, modern apprenticeships of recent years (Rikowski 1999) have not quite been able to achieve.

The concept of apprenticeship – like the traditional idea of craft – brings together long-term knowledge and skill development, ethical practice and social-collective involvement, all factors which are vital to the regeneration of VET at a time when, until recently, short-term skill training has held centre stage in the contemporary 'training market' (Ainley 2007). In this respect, the recent Wolf Report (2011) called for a major overhaul of the VET system in England and an increase in high-quality apprenticeships for young people (see also Keep 2012). Moreover, the conception of apprenticeship as a generic model for VET learning in all spheres is now emerging on a global level (Fuller and Unwin 2011). In this area, the recent Cavendish Report on VET in the National Health Service in the UK and the Richard Review of apprenticeships in England (Read 2013) make interesting reading. Summarising some of the key findings, Read brings out the full extent of recent

trends away from outcome-based competence and skill assessment in professional and vocational education and training towards process-oriented learning and development. As she notes, the recent reports are highly 'critical of the tick-box approach to vocational training and assessment' and recommend a new focus on 'curriculum and programme design' (2013, p. 18). The Richard Review of apprenticeships saw the purpose of apprenticeships 'not in the intricate detail of occupational standards, or the micro-level prescriptions of today's vocational qualifications' but in the development of 'new knowledge and skills' (ibid., p. 19). Along with the Wolf Report, all this can be interpreted as a critique of CBET and recommendations for a return to traditional modes of learning which aim to foster 'deep knowledge and skills' (ibid., p. 20).

Dewey's broad conception of vocational studies which 'stress the full intellectual and social meaning of a vocation' (1966, p. 316) – allied with the mindfulness and craft perspectives outlined above – are on all fours with such contemporary VET trends. The Buddhist conception of 'right livelihood' incorporates many of the core principles of craft and skill development advocated by Dewey, Pirsig, Sennett and others: precise and careful work, aesthetic and emotional appreciation, ethical procedures and links with the community. As Hanh (1999) reminds us, 'To practice Right Livelihood means to practice Right Mindfulness' (p. 116). Applying the precepts of mindfulness specifically to working life, Hanh (1991) advises us to:

> keep your attention focused on the work, be alert and ready to handle ably and intelligently any situation which may arise – this is mindfulness. There is no reason why mindfulness should be different from focusing all one's attention on one's work, to be alert and to be using one's best judgment. (Hanh 1991, p. 14)

Mindfulness is also about conducting life with skill – indeed, the notion of 'skilful means' (Keown 2005, pp. 18ff) has a special place in Buddhist ethics and practice – and the development of the central quality of present-moment awareness can assist both in enhancing vocational preparation and in connecting this to all aspects of personal and social life. The pursuit of measurable outcomes to satisfy external bodies – though naturally an important feature of national VET systems – needs to be balanced against affective goals linked to the needs and interests of learners and trainees. The introduction of mindfulness into workplace settings has served to highlight some of the tensions inherent in this sphere and has also foregrounded the importance of the holistic aspects of vocational studies.

References

Aetna.com. (2014). *Mindfulness at work and Viniyoga stress reduction programs.* http://www.aetna.com/index.html. Accessed 6 Jan 2014.

Ainley, P. (2007). Across the great divide. From a welfare state to a new market state: The case of VET. *Journal of Vocational Education and Training, 59*(3), 369–384.

Arguelles, A., & Gonczi, A. (Eds.). (2000). *Competency based education and training: A world perspective*. Mexico: Conalep/Noriega.

Baer, R. A. (2013). Measuring mindfulness. In J. M. G. Williams & J. Kabat-Zinn (Eds.), *Mindfulness: Diverse perspectives on its meaning, origins and applications* (pp. 241–261). Abingdon: Routledge.

Barnett, R. (1994). *The limits of competence*. London: Society for research into Higher Education/ Open University Press.

Bates, I. (1998). *The competence and outcomes movement: The landscape of research*. Leeds: University of Leeds School of Education.

Beaumont, G. (1996). *Review of 100 NVQs and SVQs*. London: Department for Education and Employment.

Bees, M. & Swords, M. (eds). (Ed.). (1990). *National vocational qualifications and further education*. London: Kogan Page/National Council for Vocational Qualifications.

Billett, S. (2014). The standing of vocational education: Sources of its societal esteem and implications for its enactment. *Journal of Vocational Education and Training, 66*(1), 1–21.

Boyatzis, R. E., Goleman, D., & Rhee, K. (2000). Clustering competence in emotional intelligence: Insights from the Emotional Competence Inventory (ECI). In R. Bar-On & J. D. A. Parker (Eds.), *Handbook of emotional intelligence* (pp. 343–362). San Francisco: Jossey-Bass.

Burnett, R. (2011). Mindfulness in schools: Learning lessons from the adults. *Secular and Buddhist; Buddhist Studies Review, 28*(1), 79–120.

Chaskalson, M. (2011). *The mindful workplace*. Oxford: Wiley-Blackwell.

Davidson, R. J., et al. (2003). Alterations in brain and immune function produced by mindfulness meditation. *Psychosomatic Medicine, 65*(4), 564–570.

Dewey, J. (1966). *Democracy and education*. New York: Free Press.

Doidge, N. (2007). *The brain that changes itself*. London: Penguin.

Eaton, J. (2014, March 5). Gentrifying the dharma: How the 1 percent is hijacking mindfulness. *Salon*. http://www.salon.com/2014/03/05/gentrifying_the_dharma_how_the_1_is_hijacking_mindfulness/. Accessed 6 May 2014.

Epstein, M. (2005). *Thoughts without a thinker: Psychotherapy from a Buddhist perspective*. New York: Basic Books.

Fuller, A., & Unwin, L. (Eds.). (2011). Apprenticeship as an evolving model of learning. Special Issue of the *Journal of Vocational Education and Training, 63*(3), 261–266.

Germer, C. K. (2005). Mindfulness: What is it? What does it matter? In C. K. Germer, R. D. Siegel, & P. R. Fulton (Eds.), *Mindfulness and psychotherapy* (pp. 8–17). New York: Guilford Press.

Goleman, D. (1996). *Emotional intelligence*. London: Bloomsbury.

Goleman, D. (2001). An EI based theory of performance. In C. Cherniss & D. Goleman (Eds.), *The emotionally intelligent workplace* (pp. 27–44). San Francisco: Jossey-Bass.

Goleman, D. (2003). *Destructive emotions: How can we overcome them*? [A scientific dialogue with the Dalai Lama narrated by Daniel Goleman] New York: Bantam Books.

Government Office for Science. (2008). *Mental capital and wellbeing: Executive summary*. London: Government Office for Science.

Granger, D. A. (2006). *John Dewey, Robert Pirsig and the art of living: Revisioning aesthetic education*. New York: Palgrave.

Grossman, P. (2011). Defining mindfulness by how poorly I think I pay attention during everyday awareness and other intractable problems for psychology's (re)invention of mindfulness: Comment on Brown et al. (2011). *Psychological Assessment, 23*, 1034–1040.

Grossman, P., & Van Dam, T. (2011). Mindfulness, by any other name…Trials and tribulations of *Sati* in western psychology and science. *Contemporary Buddhism, 12*(1), 219–239.

Grugulis, I. (1997). The consequences of competence: A critical assessment of the management NVQ. *Personnel Review, 26*(6), 428–444.

Hager, P., & Beckett, D. (1995). Philosophical underpinnings of the integrated theory of competence. *Educational Philosophy and Theory, 27*(1), 1–24.

Hanh, T. N. (1991). *The miracle of mindfulness*. London: Rider.

Hanh, T. N. (1999). *The heart of the Buddha's teaching*. New York: Broadway Books.

Hartley, D. (1995). The McDonaldisation of higher education; food for thought? *Oxford Review of Education, 21*(4), 409–423.

Hennelly, S. (2011). *The immediate and sustained effects of the .b mindfulness programme on adolescents' social and emotional well-being and academic functioning.* Unpublished MA dissertation, Oxford Brookes University.

Hodkinson, P., & Issitt, M. (Eds.). (1995). *The challenge of competence*. London: Cassell.

Huppert, F. A., & Johnson, D. (2010). A controlled trial of mindfulness training in schools: The importance of practice for an impact on well-being. *Journal of Positive Psychology, 5*(4), 264–274.

Hyland, T. (1992). Moral vocationalism. *Journal of Moral Education, 21*(2), 139–150.

Hyland, T. (1994). *Competence, education and NVQs: Dissenting perspectives*. London: Cassell.

Hyland, T. (1996). Through a Glass Darkly: A critique of the NCVQ visions for higher level vocational qualifications. *Oxford Review of Education, 22*(3), 357–362.

Hyland, T. (1997). Reconsidering Competence. *Journal of Philosophy of Education, 31*(3), 491–503.

Hyland, T. (1998). Exporting failure: The strange case of NVQs and overseas markets. *Educational Studies, 34*(3), 369–380.

Hyland, T. (1999). *Vocational studies, lifelong learning and social values*. Aldershot: Ashgate.

Hyland, T. (2002). On the upgrading of vocational studies: Analysing prejudice and subordination in English education. *Educational Review, 54*(2), 287–296.

Hyland, T. (2006). Swimming against the tide: Behaviourist reductionism in the harmonisation of European higher education systems. *Prospero, 12*(1), 24–30.

Hyland, T. (2008). Reductionist trends in education and training for work: Skills, competences and work-based learning. In P. Gonon, K. Kraus, S. Stolz, & J. Oelkers (Eds.), *Work, education and employability* (pp. 129–146). Bern: Peter Lang.

Hyland, T. (2010). Mindfulness, adult learning and therapeutic education. *International Journal of Lifelong Education, 29*(5), 517–532.

Hyland, T. (2011). *Mindfulness and learning: Celebrating the affective dimension of education*. Dordrecht: Springer Press.

Hyland, T. (2014a). Reconstructing vocational education and training for the 21st century: Mindfulness, craft, and values. *Sage Open, 4*(1), 1–15.

Hyland, T. (2014b). Mindfulness-based interventions and the affective domain of education. *Educational Studies, 40*(3), 277–291.

Hyland, T., & Winch, C. (2007). *A guide to vocational education and training*. London: Continuum.

Kabat-Zinn, J. (1990). *Full catastrophe living*. London: Piatkus.

Kabat-Zinn, J. (1994). *Mindfulness meditation for everyday life*. London: Piatkus.

Kabat-Zinn, J. (2005). *Coming to our senses*. London: Piatkus.

Kabat-Zinn, J. (2013). Some reflections on the origins of MBSR, skilful means, and the trouble with maps. In J. M. G. Williams & J. Kabat-Zinn (Eds.), *Mindfulness: Diverse perspectives on its meaning, origins and applications* (pp. 281–307). Abingdon: Routledge.

Keown, D. (2005). *Buddhist ethics*. Oxford: Oxford University Press.

Keep, E. (2006). State Control of the English education and training system – playing with the biggest train set in the world. *Journal of Vocational Education and Training, 58*(1), 47–64.

Keep, E. (2012). Where next for vocational education? *British Journal of Sociology of Education, 33*(2), 315–322.

Kuyken, W., Weare, K., Ukoumunne, O. C., Vicary, R., Motton, N., Burnett, R., Cullen, C., Hennelly, S., & Huppert, F. (2013). Effectiveness of the mindfulness in schools programme: Non-randomised controlled feasibility study. *The British Journal of Psychiatry, 203*, 126–131.

Langer, E. (2003). A mindful education. *Educational Psychologist, 28*(1), 43–50.

Lum, G. (2009). *Vocational and professional capability*. London: Continuum.

Marshall, K. (1991). NVQs: An assessment of the outcomes approach to education and training. *Journal of Further & Higher Education, 15*(3), 56–64.

McCown, D., Reibel, D., & Micozzi, M. S. (2011). *Teaching mindfulness: A practical guide for clinicians and educators*. Dordrecht: Springer.

Mindfulnet.org/ (2014). *Mindfulness in the workplace.* http://mindfulnet.org/. Accessed 2 Apr 2014.

Mulder, M. (2011). The concept of competence: Blessing or curse? In I. Torniainen, S. Mahlamäku-Kultanen, P. Nokelainen, & P. Ilsley (Eds.), *Innovations for competence management* (pp. 11–24). Lahti: Lahti University of Applied Sciences.

Musgrave, P. W. (1964). The definition of technical education, 1860–1910. *The Vocational Aspect of Secondary and Further Education, 34*(1), 105–111.

Pilz, M. (Ed.). (2012). *The future of vocational education and training in a changing world*. Dodrecht: Springer.

Pirsig, R. M. (1974). *Zen and the art of motorcycle maintenance*. London: Corgi.

Purser, R., & Loy, D. (2013, July 1). Beyond McMindfulness. *Huffington Post*. http://www.huffingtonpost.com/ron-purser/beyond-mcmindfulness_b_3519289.html. Accessed 21 Feb 2014.

Read, H. (2013). Making the most of the workplace. In *Tuition*, Issue 14, Autumn (pp. 18–20). London: Institute for Learning.

Rikowski, G. (1999). *Three types of apprenticeship, three forms of mastery*. Birmingham: University of Birmingham School of Education.

Roe, P., Wiseman, J., & Costello, M. (2006). *Perceptions and use of NVQs: A survey of employers in England*. Nottingham: Department for Education and Skills Publications.

Schoeberlein, D., & Sheth, S. (2009). *Mindful teaching and teaching mindfulness*. Boston: Wisdom Publications.

Segal, Z. V., Williams, J. M., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy*. New York: Guildford Press.

Sennett, R. (2008). *The craftsman*. London: Penguin.

Siegel, D. J. (2007). *The mindful brain*. New York: W.W. Norton & Co.

Stone, M. (2014, March 17). Abusing the Buddha: How the U.S. Army and Google co-opt mindfulness. *Salon*. http://www.salon.com/2014/03/17/abusing_the_buddha_how_the_u_s_army_and_google_co_opt_mindfulness/. Accessed 11 May 2014.

Vickerstaff, S. (2007). 'I was just the boy around the place': What made apprenticeships successful? *Journal of Vocational Education and Training, 59*(3), 331–348.

Williams, J. M. G., & Kabat-Zinn, J. (Eds.). (2013). *Mindfulness: Diverse perspectives on its meaning, origins and applications*. Abingdon: Routledge.

Williams, J. M., Teasdale, J., Segal, Z., & Kabat-Zinn, J. (2007). *The mindful way through depression*. London: The Guilford Press.

Wolf Report. (2011). *Review of vocational education*. London: Department for Education.