

Employability and Good Learning in Higher Education

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ABSTRACT *Many governments are concerned that investment in higher education should increase the stock of human capital, which is seen as a source of national economic well-being. This concern often leads to an expectation that higher education will foster the learning outcomes that employers value. In the UK it has taken the form of pressure on higher education institutions to improve students' employability. This paper briefly reviews some current responses, claiming that they are inadequate. An analysis of the concept of employability follows, leading to a claim that it necessarily entails complex learning. This gives way to a view of what needs to be done to improve the chances of such learning occurring. The main implication for teaching is contained in the claim that employability policies are not well-served by piecemeal actions. Rather, teaching that enhances employability is associated with systemic thinking about programmes and learning environments.*

1. Employability and Higher Education

Over the past 50 years expectations of higher education (HE) have grown. While it can be argued that subject matter has become more complex, governments, employers and other stakeholders have come to expect higher education to contribute to the development of a variety of complex 'skills', which—they argue—enhances the stock of human capital and makes for national economic well-being. In the words of a recent UK Government report:

Human capital directly increases productivity by raising the productive potential of employees. [...] Improving skills and human capital is important in promoting growth, both as an input to production and by aiding technological progress. This has been recognised both in endogenous growth theory and also in empirical studies comparing growth in different countries. (HM Treasury, 2000, pp. 26, 32)

In the UK higher education institutions (HEIs) are now charged with promoting graduate employability—contributing directly to the stock of human capital—and their performances are monitored.

We argue that a concern for employability is not inimical to good learning, but

is supportive of it. The student learning that makes for strong claims to employability comes from years, not semesters; through programmes, not modules; and in environments, not classes. The claim that follows is simple. Given what we know about human learning (see section 3) and given an interest in the learning that is necessary for the development of ‘employability’, there is a need for teachers to break from attempts to improve higher education that rely on:

- improving the work of the individual teacher;
- changing single courses or modules;
- improving instruction (without improving task and assessment design);
- changing the formal curriculum (it is the whole learning environment that matters);
- attending to the cognitive, whilst ignoring self-theories, motivation and perceptions;
- concentrating on what happens in the real or virtual classroom with scant thought about the messages from and potential within the environment as a whole;
- using simplistic change strategies, which researchers know to be faulty (Fullan, 1999).

We review such approaches in section 2 of this paper, explaining why they seem to us to be useful, but not sufficient responses to employability policies. We then challenge the view that graduate employability can be validly measured by graduate employment rates, arguing that employers want graduates who present convincing evidence that they have both personal qualities and complex achievements that bode well for workplace performance. We argue, particularly in section 4, that higher education for employability and good learning needs to have programmes and whole institutions as its concern, and be based on notions such as complexity, affordances, learning architectures, soft systems thinking, fuzziness, learning cultures and connectionist networks.

Constraint on space does not let us tease out all the practical implications of this position, although our Skills *plus* project work with 16 departments in four universities in the North-west of England provides plenty of insights into what can be done to put the position into practice. In this paper we are trying to do something more basic and more powerful, that is to sketch a way of thinking about employability and good learning that invites fresh thinking about teaching, in terms of both design and classroom practices, that is likely to help students develop strong claims to employability. We begin, then, by explaining our reservations about mainstream attempts to improve student employability.

2. Enhancing Employability

Four ways of enhancing student employability are:

Work Experience

Employers generally prefer to hire people who have workplace experience, especially

those who can show what they have learned from it, so one way of increasing students' competitiveness in the labour market is to design work attachments into degree programmes. However, there are variations in quantity of work attachment, quality and reported learning benefits (Blackwell *et al.*, 2001).

Entrepreneurship Modules

Although there is a lot of interest in adding entrepreneurship to the curriculum, this strategy is open to much the same objection as work attachments. Good enrichment strategies have most impact when the underlying curriculum stimulates those complex learning achievements that underlie entrepreneurship. Detached, one-off modules can be valuable, but they are also risk being treated as marginal.

Careers Advice

If, as in the UK, employability is 'measured' in terms of the percentage of students in work 6 months after graduation, then an institution's contribution to student employability (and its performance in this respect) could be related to the quality of its careers service. The main problem is that many careers advisers do not usually have an input into programme design and delivery, and may find themselves advising students whose programmes have done little to help them make strong claims to employability. Good careers advice is of course a necessity, but it is no substitute for degree programmes designed with the employability policy in mind.

Portfolios, Profiles and Records of Achievement

Portfolios (sometimes called profiles, sometimes records of achievement) should get students reflecting on their achievements; collecting and presenting supportive evidence; identifying and then acting on priorities for development. This thinking is behind the UK Quality Assurance Agency's expectation that students graduating in 2005 will have progress files documenting their achievements. Significant problems are that students have been lukewarm, academic staff may claim that they have more important things to do than to wade through complex documentation, and portfolios cannot retrieve the situation for programmes that pay no other attention to employability (Wright & Knight, 2000).

These four ways of enhancing employability are additive in that they expect more of staff. (In *Skills plus* we have tried to put working smarter ahead of working harder.) They are also disconnected in that they are not integral to undergraduate programmes, often seeming more like transient events than the sustained learning engagements that underlie the complex learning achievements expected by employers of new graduates. Lastly, these practical initiatives are under-conceptualised because they are not formally connected to considered theories of learning and employability.

These objections may not apply to a fifth approach, which centres on increasing the vocational relevance of HE programmes. It is an obvious response to increase the amount of applied or vocational material in programmes, and the number of places in such vocationally-enhanced programmes. It is not sufficient. There are limits to the number of vocational programmes that can be mounted, the number of vocational graduates who can be appropriately employed and the number of students wanting to make career decisions at age 18. Besides, it is consistently said that many advertisements for 'graduate jobs' are more or less indifferent to applicants' subject of study (Purcell & Pitcher, 1996), which raises questions about the 'subject matter relevance' strategy. Furthermore, life-long learning perspectives are leading to a view of first cycle higher education as an enabling device for future learning (with an emphasis on *generic* achievements), rather than immediate vocational passport (Yorke, 1999a).

Any of these five enhancement activities could find a place within the account of how to foster employability that we offer in section 4, which centres upon the design of learning environments to promote good complex learning and the employability claims that can be derived from it. These environments should also enrich more specific approaches, such as the five described above. First, though, we need to reappraise the concept of employability, not least because it is often seen to be inimical to good learning. We are claiming that, far from there being a tension, there ought to be symbiosis.

3. Reconceptualising Employability

In the UK there is a (Treasury) view that HEIs' contribution to employability can be appraised by looking at employment rates approximately 6 months after graduation [see Higher Education Funding Council for England (HEFCE), 2001]. There are conceptual and practical objections: the practical problems include the first destination survey's insensitivity to the type of job graduates get and the difficulties of getting recent graduates to respond to requests for information about what they are doing; the conceptual reservation is that, whereas 'employability' surely signifies a fitness for graduate employment, these first destination data say as much about the graduate labour market and we know that it is nothing like a perfect market (Coleman & Keep, 2001). The labour market discriminates against some groups that, when taken in conjunction with regional variations and the impact of economic cycles on hiring patterns, means that it is naïve to assume that 'employability' should correlate closely with getting a graduate job (and even more so *within 6 months* of graduation).

Empirical research into 'employability' does not lead to consensus about what it subsumes. For example, Harvey and colleagues (1997) found that employers want graduates with knowledge, intellect, willingness to learn, self-management skills, communication skills, team-working and interpersonal skills, but the Association of Graduate Recruiters (1995) suggests it comprises 'career management skills and effective learning skills': self-awareness, self-promotion, exploring and creating opportunities, action planning, networking, matching and decision-making, nego-

tiation, political awareness, coping with uncertainty, development focus, transfer skills and self-confidence. Yorke, (1999b) found that small and medium enterprises on Merseyside particularly valued skill at oral communication, handling one's own work load, team-working, managing others, getting to the heart of problems, critical analysis, summarising and group problem-solving. Valued attributes included being able to work under pressure, commitment, working varied hours, dependability, imagination/creativity, getting on with people and willingness to learn.

Such findings have often been interpreted to mean that higher education should promote generic skills alongside subject-specific understandings and skills. We have difficulties with this skills-based account of employability. First, it is plain that the word 'skills' is not sufficient to capture the diverse social practices that employers have identified with employability. Barnett (1994) exposed limitations to skills-based accounts of the work of HEIs and Eraut (1994) developed an account of professional competence that goes beyond skills. More recently, Holmes (2001) has provided a useful summary of some of the main lines of criticism of the notion of skills. While we see a case for talking about 'social practices', rather than 'skills',¹ pragmatism suggests keeping the language, but using it with a sharp awareness of its limitations. We might talk about skills, but such talk needs to be underpinned by careful thought about how learners might best be put in positions where they can, by showing success in a variety of valued social practices, make good claims to employability.

Even if the language of skills is used for the sake of convenience, we are saying that employability is about more than skills: it is about Skills *plus*. A closer look at what employers say they look for in new graduate hires and a reprise of literatures on competence suggests that this *plus* includes at least two other things. First, the popular notion of the reflective practitioner can hardly be ignored. Its significance is disputed (e.g. Donnelly, 1999), but the underlying idea that effectiveness is related to mindfulness is hardly controversial. It aligns quite well with the psychological concept of metacognition, which we prefer because, unlike reflection, it is not easily confused with 'any old example of thinking' (Parker, 1997, p. 34).

The second part of the *plus* is made up of self-theories, particularly attributional patterns (how we explain what we experience), locus of control (whether we think we are generally able to affect our experiences) and their motivational concomitants (whether we therefore strive, comply or resist). Figure 1 provides a summary of a complex and important area that we can only review lightly in this paper: for fuller treatments, see Dweck (1999) and Ryan & La Guardia (1999). Our argument is that there is evidence that we tend to prefer the self theories described in some cells *and* that we can learn to change our preferences. We believe that employability involves more than having understanding, skilled social practices and well-developed metacognition. An implication of Figure 1 is that malleable self-theories are important for students who can make good claims to employability. People who persist in the face of difficulty, those who are the most likely to succeed on novel tasks and with fresh problems, are those most likely to fit into cell A. Contrary to this, students who tend to interpret the world with entity theories (cells C and D) are vulnerable to learned helplessness, which can paralyse effort and reduce their employability,

Self-theories	Internal attributions (high internal locus of control)	External attributions (low internal locus of control)
Incremental theories—things are malleable, people make a difference	A. Effort is important: the more effort we make, the more we are likely to succeed. People here see intelligence, for example, as a social and practical achievement, not as a God-given.	B. Luck, fate and chance play a great part in life. Some people have all the luck, others don't. That said, luck might change, especially if our efforts make us well placed to seize the chance.
Entity theories—things are fixed and people have little chance of making a difference	C. Fixed traits, such as intelligence, essentially determine what we can and cannot do. People here believe that they do well because they are naturally clever or fail because they were born stupid.	D. Specific circumstances keep holding us back or usually explain our success. This victim thinking can foster inertia: 'what's the point of trying?'

FIG. 1. Self theories and attribution.

regardless of their other strengths. Similarly, students who favour entity theories and who have found that their native wit has made things easy for them until now are likely to crumble when they do face difficulties because their beliefs tell them that there is nothing to do but stop trying or give up. Dweck (1999) is clear that even if these 'entity theorists' are highly intelligent they can learn helplessness. Cell C and D people are more likely to be quitters, and are therefore less well placed to make robust claims to employability.

Ours is a view of employability as the confluence of understanding, subject-specific and generic social practices (or skills), metacognition (reflection or strategic thinking) and cell A incremental self-theories. We shall refer to this as the USEM model of curriculum, the acronym referring to Understanding, Skills, Efficacy beliefs (self-theories) and Metacognition. This Skills *plus* position has some profound implications for higher education systems that have the promotion of student employability as curriculum goal.

It could be objected that higher education is primarily about developing advanced understandings of worthwhile subject matter, not about employability. However, learning, teaching, assessment and curriculum experts regularly say that good subject matter *understanding* comes from the active construction of meanings (e.g. Goodyear, 2002). That, in turn, involves instruction, tasks and learning environments that call upon incremental self-theories, self-motivation, reflection and a range of social practices, amongst other things. In other words, graduate employability is fostered by teaching approaches that take this set of factors into account. Whilst academic staff might reject employability as a curriculum goal, they are much more likely to accept that curriculum *processes* can improve the chances that students

will gain in terms of employability. In this way, we say that good subject matter understanding is compatible with employability policies, and that employability and good learning are highly compatible.

Another response to the complexities of the USEM or similar models of employability combines applause and regret. The goals are applauded, while it is regretted that, by and large, they consist of skills, dispositions and qualities formed before entry to higher education and are impervious to change—it denies malleability. Although there is evidence to the contrary (Dweck, 1999), there can be no guarantee that any individual will become metacognitively sharp, adept at seeing possibilities for acting efficaciously, and skilled in a variety of social practices. Yet, higher education can increase the probabilities that, *in general*, students will complex learning achievements (Astin, 1997; Mentkowski and associates, 2000). These substantial US studies of the undergraduate experience argue that students in certain higher education environments—notably small liberal arts colleges—are more likely to show evidence of complex and subtle learning than those engaged for four years with different higher education settings—for example, part-time undergraduates in large metropolitan universities. The message is that good learning environments can improve the odds of groups of students becoming more employable but they do not guarantee that any individual will become articulate, emotionally-intelligent and self-motivating.

These studies show that the complex learning upon which claims to employability rest is a slow process (see also Claxton, 1998). That means that we need to think about how employability, which we have described as a complex set of learning achievements, is to be supported at programme, not study-unit level: through systems, rather than through the separate practices reviewed in section 2. However, this work of systems design is more complicated than it might appear at first sight. For example, learning is not determinate, by which we mean that we cannot predict what a person will learn, how or when. As we have just said, we can make good, albeit fuzzy, predictions about the learning of groups, but that draws upon the probabilistic thinking of complexity theories (Knight, 2001), rather than upon the misleading certainties of traditional instructional design processes (see Ganasan *et al.*, 2002). It follows that good teaching—and we take teaching to comprise designing, as well as doing—should be understood to include engagement with the creation of learning environments that stimulate students to develop well-founded, evidence-based claims to employability.

4. Learning

It is important to remember that learning does not come from instruction alone (Eraut, 2000). It is salutary to hear that professionals may learn six times as much non-formally as they do formally (Becher, 1999). There is a growing recognition that much learning is ‘embedded in the day-to-day’ (Coleman & Keep, 2001, p. 16)—we learn through doing tasks in activity systems (this concept is elaborated in Trowler & Knight, 2000) and with others in our workgroups or communities of practice (Wenger, 1998). Some tasks, ways of working and social groupings really

encourage new thinking and doing; they are rich in opportunities for different forms of learning. On this analysis, direct instruction can be one of many stimuli for learning, but learning can also be encouraged by giving people new tools with which to work, creating new rules or codes, and making it easier for people to share problems, brainstorm answers and talk (face-to-face or electronically). In this view the physical architecture of the place in which work takes place, the electronic architecture and the learning tasks can all affect what people learn. Some of the learning is intentional and the product of instruction. Much is not, but emerges from the construction of meanings in the flux of using tools and rules, and the contributions of other people when tackling tasks. There is little research here, but a prudent interim conclusion would be that we should not become fixed on the development of individual teachers' instructional skills, important though this is: instead, we should worry a lot more about the development of 'learning departments' that create student learning environments and programmes favourable to the development of employability.

We propose that learning is an outcome of the interplay between the four elements. They are shown in Figure 2, which is a design-sketch of environments for good learning. It broadly identifies the work that educational architects need to do to respond fully to government employability policies. The rest of this section is a commentary on the four elements and the mediating set comprising self-theories, perception and motivation.

1. There is a lot of phenomenographic research that tells us about the importance of student approaches to learning in general and about the beliefs that lie behind them. We know that students who think they are trying to reproduce faithfully information as a part of a 'right-or-wrong' game have less time for sense-making than those who want to transform information by making a sense of it that is fit for a time and purpose (Prosser & Trigwell, 1999, provide a good summary of this research). Good learning, whether directed at employability or not, depends on the quality of students' general approaches and beliefs. There is a lot of evidence that approaches can be changed for the better by well-designed learning environments, programmes and practices (Prosser & Trigwell, 1999). It is not easy to develop learning environments that will do the job, though.
2. Student approaches to studying are about studying *something* and, as such, they are more specific than their general learning dispositions. They may take 'deep' or sense-making approaches; apathetic, 'just-getting-by' approaches; surface approaches, where the aim is compliance, rather than understanding; or strategic approaches (which involve using that one of the other three approaches that makes best sense in the circumstances). The approaches to study that students use reflect general approaches to learning and the sorts of tasks, lectures or tests we design.

The main implications for teaching are: (i) we need to know more about good task design—there is no HE equivalent of the seminal works on classroom tasks done by Doyle (1983) and Bennett and colleagues (1984), although Ohlsson (1995) offers a helpful view of epistemic tasks that foster understanding; (ii) there

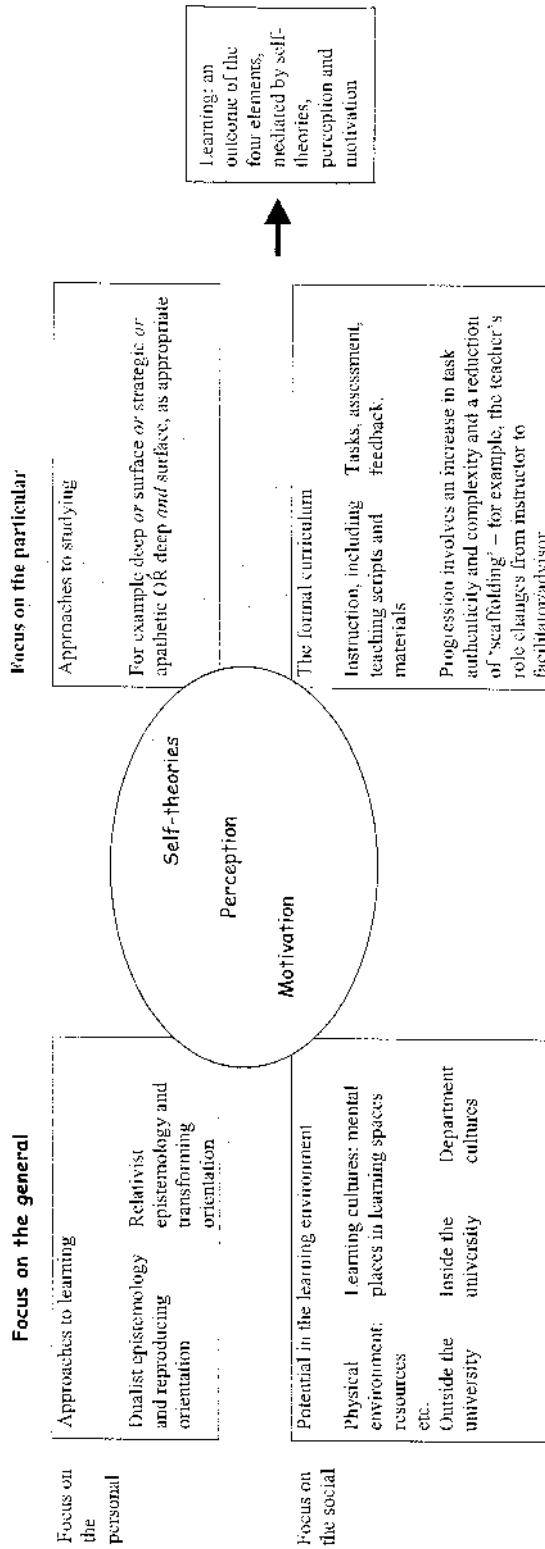


FIG. 2.

is a case for programme-wide audits of the tasks students do, not least to see that there is some sense in which the tasks are fit for the purpose of promoting valued learning outcomes that have a fit with employability.

3. To return to the general: a good learning environment, broadly conceived, contains plenty of opportunities for students to mix, work together on problems, network electronically and construct meanings from a good range of resources. In poorer environments there may be, for example, a mismatch between physical resources and valued learning outcomes, or academic staff may sponsor cultures that are at variance with those needed to foster complex learning and employability. However, there is not a *direct* chain of connections between learning environments and student activities. In Goodyear's words, '... we should recognize that we cannot influence directly the learner's cognitive activity ... the best we can do is help set up some organizational forms or structures that learner has freedom to reconfigure or customize their learnplace' (2002, p. 66). Nevertheless, connections can be made between, say, libraries full of heavy text books and what students will tend to learn. As befits what is surely a professional and creative activity, learning design will need to be understood as a probabilistic and fuzzy activity and not the sharper and surer practice of rational curriculum planning (Ganesan *et al.*, 2002).
4. Instruction, task sequences and assessment processes should be aligned so that the curriculum-in-use is recognisably kin to the espoused curriculum. When they are not, the operational curriculum fits the 'garbage can' model, being just an accumulation of conflicting beliefs, practices and priorities. If students find it hard to discern a programme learning culture, curriculum coherence or plenty of opportunities for developing valued social practices, it is not surprising if they default to the coping strategies that have worked elsewhere. These strategies will often emphasise the collection and reproduction of information and algorithms, and not sense-making. Individual teachers and their modules may sparkle in 'garbage can' or 'free-for-all' curricula, but ultimately contribute little to the complex learning that employability and good learning both need. In the UK the Quality Assurance Agency has pushed HEIs to write specifications for their programmes, which has generally prompted departments to think about the match between pedagogic practices and programme aims. In Skills *plus* work with departments we have found that curriculum auditing is a good way to get discussion about this coherence. The process is simple. Each course tutor records the teaching, learning and assessment methods in use. They are tallied on programme grids, which quickly show imbalances. This pattern stimulates discussion about whether programme-wide pedagogic practices are fit for the purpose of promoting programme goals, which have been framed in response to the employability policy.

These four elements are mediated by a number of psychological processes, of which three are at the centre of Figure 2. They affect the ways in which they the four elements cohere or interfere with one another. The implication is that these four elements only have subjective meanings which are changingly-constructed in flux

with self-theories, motivation and perceptions. To illustrate: a student may believe that learning is *generally* about sense-making (see point 1, above). Although the environment (3) and the curriculum (4) might favour this approach to the task, he or she might not perceive it as a sense-making task, even if teachers intended it to be one. Alternatively, students might treat a complex task as a routine task because they do not have enough confidence in their personal efficacy to risk treating it as a sense-making task. Again, they might fillet the textbook because that stops the task interfering too seriously with more interesting activities. In such ways, this nexus of self-theories, perceptions and motivations links the other four elements, and helps shape the outcome of any particular engagement.

There are two points here that teachers (and senior managers) need to understand well if they are to design good learning environments. One is the need to displace lay views of these concepts with well-theorised ones. Take motivation as an example. Ryan & La Guardia (1999) argue that much of the literature on motivation is really about control, about getting people to do things they do not value, not about valuing and developing the autonomy of intrinsic motivation. They point to the world of difference between extrinsic strategies of ‘motivating’ learners with rewards and sanctions and, as Brophy says in the same volume, explaining ‘... carefully to students precisely why this particular task is important, meaningful, relevant and valuable to them’ (Brophy, 1999, p. 11). This links understanding and motivation, and identifies motivation as something primarily stimulated by learning cultures and architectures, and only secondarily stimulated by learning tasks. It is a view that motivation, like self-theories and perception is embedded in learning cultures, which are built up across the whole programme. ‘In reality’, argues Brophy (1999, p. 34), ‘people generate intrinsic motivation. It is not somehow built into topics or tasks (although potentially exploitable affordances [opportunities] are)’. So, the question ought not to be, ‘How can we make students do these tasks?’, but ‘How can we devise learning environments which afford students plenty of opportunities for successful learning that they will, in the main, come to value and lay convincing claim to?’

Biggs (1999) has introduced to higher education the notion of an ‘aligned’ (others might prefer ‘coherent’) curriculum. In this paper, we are conscious of three kinds of alignment. One is the alignment between teaching, learning and assessment that Biggs discusses. A second is coherence between the four elements in Figure 2, such as the importance of aligning good beliefs about learning with study practices or of aligning the formal curriculum with the departmental culture. A third is the coherence of self-theories, motivations and perceptions with the other four elements, and the opportunities that they are intended to contain. Ours is a view of curriculum and environmental design as coherent integration of a range of features and characteristics (some manifest, some hidden), such as the messages carried by the learning culture, the resources that come readily to hand, the learning tasks and the affective quality of places.

5. Conclusion

Our case is that complex learning has to be promoted across a whole undergraduate

programme if students are to make good, well-evidenced claims to employability. This makes new calls on teachers. It ought not to challenge teachers' attachments to their specialist subjects, but it does suggest that teachers will be expected to teach their subjects in ways that are consistent with the curricular intentions of the designed programme learning environment. Some will find that they go on to become designers of programmes and learning environments that combine a concern for good learning with the development of student employability. We have presented this as a worthwhile, but complex task which requires creativity and good educational understandings.

As higher education systems around the world are pressed to increase their effectiveness in various ways, it becomes more important to enhance the quality of learning and teaching. HEIs respond by developing and implementing learning and teaching strategies. There are now some signs that educational development (conceived on a broader scale than hitherto) is beginning to help with the next step, the design of institutional and programme learning environments. In these ways student employability may be fostered.

However, this concern to enhance employability expects more of students. We have hinted that they will need to learn how to represent themselves in the discourses of employability. Our analysis of employability and its development assumes 'knowing' students, which means we need learning cultures that help them to know what they are learning and why, and that help them to know how to develop the claims to achievement that make them more employable. This is a final task for teachers, to design promising learning environments and then help students to discover what they afford, what might be learnt, how and why.

Ours is a much more ambitious agenda than many approaches to employability, but we have argued, more powerful because it infuses whole programmes and is congruent with academics' concern with good learning.

NOTE

- [1] We judge 'social practices' to have more secure philosophical and psychological foundations than 'skills'. Using fresh terminology breaks with unfortunate assumptions about easy transfer, which have been attached to skills through phrases such as 'transferable skills' and 'generic skills', and disrupts assumptions that skills can be affordably, reliably and validly assessed. On the contrary, transfer is difficult and complex learning can only be reliably and validly assessed at considerable cost.

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