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# Employability: aligning the message, the medium and academic values

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## Abstract

For a long time, links have been made between higher education and economic activity. The relatively recent emphases on employability (in the UK) and graduate attributes (largely in Australia) can be construed as contemporary variations. This article describes some of the developmental work that has taken place in the UK but which has obvious relevance to other higher educational systems. Reticence to embrace employability in curricula may in part be due to the failure to present a convincing evidence-base: two initiatives in England have attempted with some success to rectify the weakness. The article concludes by outlining some of the challenges that face both institutions and the higher education sector if employability is to be taken seriously.

Keywords: Employability, Graduate Attributes, Capability, Curriculum

## Introduction

### The link between higher education and the economy is longstanding

The desirability relationship between undergraduate education and the national economy has been acknowledged in the UK since at least the Robbins Report (Committee on Higher Education, 1963). However, the other three aims of higher education that were expressed in that Report have proved more durable in the memory of higher education – in brief, advancing learning; promoting the general powers of the mind; and transmitting a common culture (no longer entirely appropriate in what has become a more multicultural society) and standards of citizenship. Ironically, the Report placed instruction in skills for the economy first in the list because it did not wish for this aim to be overlooked.

Over the years, there have been many government-inspired initiatives and reports urging higher education in the UK to make a stronger connection with the needs of employers. The theoretical basis for such a connection is probably human capital theory (Becker, 1975), though the pragmatic nature of policy-making regarding higher education in the UK renders this a speculation. There is now a world-wide acceptance of the need for nations to promote higher education of high quality in order to cope with the demands of knowledge-based economies.

A persistent difficulty in the UK has been the governmental focus on ‘skills’ of various kinds. Different adjectives (‘core’, ‘generic’, ‘transferable’, and many more) have been

used at different times to qualify the word, but the *ad hoc* nature of such terminology (exposed by Wolf, 2002) has been a besetting problem for the academic world which expects some sort of rationale for them. The word 'skills' is used loosely in policy-related documents (e.g. Leitch, 2006), seemingly more as a mantra than as anything more substantial.

In the late 1980s the Enterprise in Higher Education (EHE) initiative, which – tellingly – was sponsored by the Employment Department rather than the Department of Education and Science, offered quite substantial sums to institutions. It was understandable that institutions should bid for funding for relevant projects. Though opinions on the matter differ, it is probably fair to say that the intentions behind EHE – that higher education institutions would adopt a more employment-oriented approach to curricula – were to some extent subverted as academics 'translated' the instrumental intentions of the initiative into something rather softer and more aligned with traditional academic values.

At around the same time, The Royal Society of Arts, Manufactures and Commerce (an organisation that brought together employers and academics) sponsored a parallel initiative: Higher Education for Capability ('Capability', for short). Capability should, arguably, have been more attractive to academics than EHE was, since it was less overtly instrumental and relatively few could be expected to object to undergraduate education as preparing students (especially school leavers) to become what could be summarised as 'effective operators in the world' – be they working for an employer or contributing in other ways to society. Stephenson and Weil (1992, p.2) set out the intentions of Capability succinctly:

> Capable people have confidence in their ability to (1) take effective and appropriate action, (2) explain what they are about, (3) live and work effectively with others and (4) continue to learn from their experiences, both as individuals and in association with others, in a diverse and changing society.
>
> Capability is a necessary part of specialist expertise, not separate from it. Capable people not only know about their specialisms, they also have the confidence to apply their knowledge and skills within varied and changing situations and to continue to develop their specialist knowledge and skills long after they have left formal education.

One might however quibble with the last few words since they seem to pay insufficient attention to the idea of lifelong learning.

The later definition of graduate attributes put forward by Bowden, Hart, King, Trigwell and Watts (2000) adopts a similar line with respect to fulfilment in the social arena:

> Graduate attributes are the qualities, skills and understandings a university community agrees its students should develop during their time with the institution. These attributes include, but go beyond, the disciplinary expertise or technical knowledge that has traditionally formed the core of most university courses. They are qualities that also prepare graduates as agents for social good in an unknown future. (Bowden et al, 2000, Executive Summary, para 2)

However, Capability gained only a limited number of adherents, mainly in the UK but also in Australia where, for example, Southern Cross University promoted learner-managed learning in connection with Capability (see Hase, 1998). Whilst the general idea of Capability was not anathema to the academic world, no strong base of theory and empirical findings was adduced in its support. Hence many academics may have seen Capability as reflecting 'just another employers' wish-list' (it should be recalled that, contemporaneously with the launching of Capability, Margaret Thatcher was prime minister in the UK, to the discomfiture of many in the academic world because of her strong support for business and her mistrust of professions).

Although a number of prominent employers wrote, or were interviewed, for the Capability movement's eponymously-titled journal, a broad base of practical support from employers was not forthcoming. One might surmise that a pitch presented according to the lights of academe might have been felt by employers to be rather waffly and lacking a sharpness of focus. I remember taking to an employer a four-page proposal for an institution-employer linkage (pared as I thought to the bone) and being told it was about three pages too long. The aphorism about being divided by a common language came sharply to mind.

One hears from time to time politicians saying that, rather than a policy proposal being flawed, its non-acceptance is because of a failure in presentation. Be that as it may (and one can be forgiven for treating the politicians' argument with some scepticism), it seems that Capability did suffer from a weakness in presentation to the parties whom it most sought to influence[1]. It was a case of 'right message, wrong presentation'.

The same can be said of the work on graduate attributes that has taken place in Australia. Barrie (2007) made a couple of fair points when he observed that academics' understanding of generic attributes was very varied, and that they had not always appreciated the alignment that was possible between the generic attributes and traditional university values. Responses from 15 academics from a variety of subject disciplines led him to identify six different approaches to the acquisition of generic attributes which can for present purposes be collapsed into two categories focusing on teaching (as some sort of 'extra' to the existing curriculum, and as embedded in some way into the 'normal' teaching), and one focusing on the student as being actively engaged in the acquisition of graduate attributes. It is not the purpose here to debate the detail of Barrie's research (developed progressively in a series of papers: see Barrie, 2004; 2006; 2007): the point is that the research did not engage significantly with evidence that might have been adduced in support of promoting the development of graduate attributes.

## Aligning the medium and the message

The Skills *plus* project, which began in 2000, ran for two years and involved 17 varied departments in four universities in England (Knight & Yorke, 2004, p.12). The project took a different tack from earlier projects relating to the development of graduate attributes, in that it sought relevant research to undergird the approach to employability (the term used by policy-makers in the UK at the time) that it was developing: for an account of this work, see Knight and Yorke (2004).

The issue of presentation was addressed by pointing out the potential synergy between traditional academic views regarding learning and what was implied by employability.

[1] The weakness is still present in the most recent writing on capability (Cairns and Stephenson, 2009).

The evaluator of Skills *plus* fully appreciated this perspective:

> Academics opposed to what they would consider an overemphasis on the utilitarian mission of HE may be won over by a constant reminder that student learning is enhanced in … a scheme such as Skills *plus*: it is not simply a sacrifice of traditional disciplinary goals to satisfy the demands of eventual employers. […] Although there is the occasional reference to carefully selecting one's terms and the vocabulary associated with departmental initiatives (so as not to offend the academic 'purist'), academic department reports generally indicate that they have gone well beyond this initial debate. It is interesting to note that the gains stemming from involvement in the project apply in the traditional academic disciplines as well as in professional schools. That is, a history department as well as a nursing school can make sense out of Skills *plus*. (Wright, 2002, p.3.)

The approach to employability taken by Skills *plus* was influenced by Capability. The work on Skills *plus* was developed further by the Enhancing Student Employability Co-ordination Team [ESECT] which was funded by the Higher Education Funding Council for England with the intention of engaging higher education more widely with the notion of employability and its implications for curricula and pedagogy. ESECT described employability as:

> a set of achievements – skills, understandings and personal attributes – that makes graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy. (Yorke, 2006, p.8)

This wording reflected the rather instrumental expectations of the policy-makers, but the underlying thinking went beyond narrow conceptions of employability to see students' achievements in a wider, societal, perspective (the connection with Capability is evident). Care was taken to make the connection between employability and traditional conceptions of 'good learning'. Hence the ESECT approach was more attractive to academics than earlier governmental rhetoric about 'skills'.

The ESECT approach to employability was accompanied by a skeleton framework, given the acronym USEM, of four inter-related components:

**U**nderstanding;
**S**kilful practices in context (deliberately so labelled in order to avoid the undesirable connotations of 'skills', and to acknowledge the situatedness of practice and performance);
(self-)**E**fficacy and personal qualities; and
**M**etacognition.

A further attraction to academics was that USEM's skeleton constituted a facilitating framework rather than a prescription. It could be fleshed out according to the character of different subject disciplines, much as the overarching principles adopted by the European Union can be interpreted, according to the concept of 'subsidiarity', in the light of national interests. As the evaluator of the Skills *plus* project wrote:

> … the academic departments involved in the project have shown that there are many valid avenues to skills development for employability springing from a common starting point. Perhaps it is the essential richness of the diversity of valid approaches adopted at the departmental level which is to be celebrated … (Wright, 2002, p.2.)

Implicitly, academics were being asked 'How can your subject discipline respond to the implications of the four components?' rather than being provided with a checklist of 'skills' to be covered in curricula.

## Elaborating USEM

Understanding and skilful practices in academic contexts are widely-accepted components of higher education, and need no further elaboration here. Other aspects of the USEM account of employability do need to be unpacked in order to indicate why they are important.

### *Self-efficacy and personal qualities*

Higher education curricula have taken a rather performative turn in recent times, as is evidenced by aligned curricular designs which make explicit both what the student is expected to be able to achieve and the associated assessment criteria. The development of personal qualities (that serve graduates well in employment and life in general) has been backgrounded. Perhaps the most extreme example of backgrounding (though in further education – roughly the equivalent of TAFE in Australia) was in the implementation in England of the system of National Vocational Qualifications where the route through which the student achieved competence was regarded as irrelevant. Only the performance mattered.

In the USEM account of employability, the 'E' (self-efficacy and personal qualities) is deliberately shown as pervading all the other components. There are many psychological angles in play, encompassing motivation, agency, self-belief, emotional intelligence and so on: all these impact on student achievement in one way or another. Hence in an employability-oriented curriculum they need to be fostered.

### *Skilful practices in contexts other than the academic*

Graduate-level jobs imply the need to act as a professional worker, integrating 'knowing that' with 'knowing how' (Ryle, 1949), with the latter further implying – where it is appropriate – drawing on what has been learned in social contexts as well as individually, and also the tacit knowledge that is picked up collaterally. To be effective as an 'operator in the world', one needs to tune into and respond to the interpersonal, the political (small 'p'), and the custom and practice of 'how we do things around here'. There is a corollary, in that achievements are context-laden and can only be judged against the particular circumstances of the performance. Success, for a trainee teacher in a tough school, ought to be judged against a set of criteria that are given different emphases in comparison to where the student is in a less demanding environment. One size, as far as assessment is concerned, does not fit all.

Michael Eraut, who has studied the education of young professionals for many years, emphasises that breaking assessment demands into small components misses the essential integrativity of professional performance. Writing of medical education, but with much wider relevance, he observes:

> … treating [required competences] as separate bundles of knowledge and skills for assessment purposes fails to recognize that complex professional actions require more than several different areas of knowledge and skills. They all have to be integrated together in larger, more complex chunks of behaviour. Eraut (2004, p.804)

*Metacognition*

Following the pioneering article by Flavell (1979), metacognition has become a significant feature of the pedagogical landscape. It covers a range of aspects of the student's self-awareness regarding their learning, including: problem-solving; reflection on, in, and for practice; and self-regulation. Problem-solving is a feature of many programmes in higher education, and can be taken for granted here (save to note that some claimed problem-solving can be relatively closed, and be more like puzzle-solving). Reflection has gained traction in higher education because of the influence of Schön's advocacy of reflective practice by professionals (e.g. Schön, 1983). Professional jobs (graduate-level jobs in particular) require the incumbents to apply metacognition in various ways, and hence a strong case can be made that the teaching approach adopted should foster it.

## Generic attributes and disciplines

There is a fairly widely-held view that many attributes are 'generic' and applicable across all subject disciplines. In broad terms, there is a case that can be argued. The range of attributes that employers say they want (e.g. Harvey et al, 1997) and lists of desirable aspects of employability (e.g. Yorke & Knight, 2006) imply as much. The argument can be pressed too far, however, as in the discussion paper on standards prepared by the Australian Universities Quality Agency (AUQA, 2009, p.12) which put forward the idea that

> Introducing standardised and understood methods of assessing and grading these [generic] attributes, at the level of difficulty appropriate to the stage of the learning process, ensures that students better understand why they must learn particular things and also provides meaningful evidence to use as part of their future career activities.

It is when the suggestion is made that attributes are susceptible to standardisation that difficulties become apparent, since (as noted earlier) account has to be taken of the context within which the attributes are demonstrated. For example, 'critical analysis' will be manifested differently in the creative arts, business studies, sociology and engineering. Barrie (2009, p.1) is right on target when he observes:

> Australian universities have moved beyond understanding the outcomes of a university education as "discipline content + generic skills", indeed the dominant model of graduate attributes (as statements of the core outcomes of a university education) are that these are contextualized differently by the disciplines.

His point, of course, extends beyond the boundaries of Australia. Krause (2009, p.2) points to a problem that arises when the attempt is made to be all-encompassing:

> … the more general and generic standards descriptions become, the less useful they are for achieving the goals of 'greater confidence' and a 'clearer picture' of the meaning of final achievement grades.

In fact, there is some optimum (but difficult to define) level of utility with which learning outcomes or achievements can be specified: too broadly, and there is excessive room for interpretation; too narrowly, and the micro-management of detail obscures the bigger picture (Figure 1).

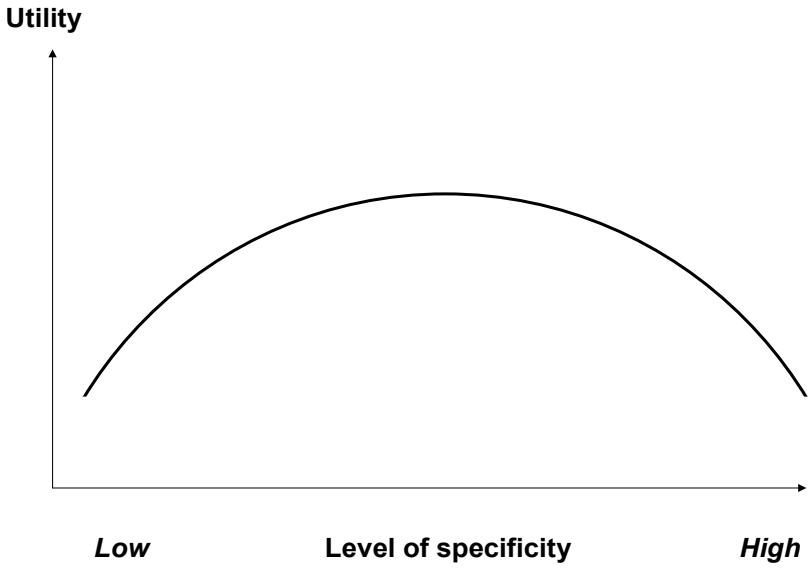


Figure 1. A schematic illustration of the optimal level of specificity in assessing outcomes.

Where the programme involves work-integrated or work-based learning, the performance has to be judged in the light of the situation in which the student is located, and the possibility of standardisation evaporates. Not surprisingly, a number of respondents to the document (e.g. Krause, 2009; Quin, 2009) demonstrated, in their comments on the infeasibility of standardising assessments, the powers of critical analysis.

## A pedagogy for employability

During the 1970s, responsibility for vocational education for technicians in the UK was taken over by the newly-created, but subsequently superseded, Technician Education Council (a parallel arrangement was also introduced for business). Programmes were unitised, but the cognitive level of individual units tended not to get much higher than 'application' in the Bloom (1956) taxonomy despite the aims for whole programmes implying higher levels. Hence there was a paradox: the whole had to be more than the sum of the parts. The paradox could be resolved only through pedagogic methods that involved higher level cognitive functioning even though the unit objectives (and the assessment demands) were clearly set much lower.

The promotion of graduate attributes or employability faces universities with the need to build them into curricula whilst at the same time not diluting academic content (indeed, whilst updating academic content). How can a litre be squeezed into a half-litre jar? Not by adding extra curricular sessions focusing specifically on employability or graduate attributes. Barrie (2009, p.2) points to the risks inherent in separating out graduate

attributes from disciplinary knowledge:

> To artificially separate what are referred to as generic skills … from discipline knowledge ignores the more integrated understanding universities have developed as graduate attributes and undermines the adoption of innovative teaching approaches designed to foster these graduate attributes.

The challenge might best be met by following the implications of a slogan that once was used by the telecoms company BT: *Work smarter not harder*. If graduate attributes and disciplinary expertise are to be integrated, then curriculum encounters should reflect this. So-called 'active learning' approaches coupled with group-working are a response to the requirement. However, they have implications beyond a simple rejigging of teaching and learning activities, since the issue of the optimal use of academics' and learners' time becomes important (and at a time of economic stress, especially important). Much higher education still relies on tried and trusted pedagogic methods such as lectures. The trust, however, is sometimes misplaced. Bligh (1998) has shown that lectures are not very effective as vehicles when achievements other than the acquisition of knowledge are at stake. The increasing availability of material on the world-wide web and (in more restricted form) in institutional virtual learning environments makes a heavy reliance on lectures anachronistic. (This is not to attack all lectures, but merely to propose that they are used with greater judiciousness.) Students can, as part of their curriculum, be set tasks that require them to collaborate in solving problems to which there is no readily-available solution, and/or where competing interests are involved. Climate change; economics; food production, distribution and consumption; developments in medicine; and biological survival are all examples of 'macro-challenges' within which others more amenable to the scale of student work can be found.

As one example of what can be done at the practical pedagogical level in respect of the last of these macro-challenge areas, Meyers, Whelan, McNulty and Ryan (2004, p.4) described some of the activities that required students on the course NRB270 to do rather more than rote-learn. They describe the setting of a stepped sequence of tasks:

> Why didn't long necked dinosaurs [faint] when they raised their heads, and conversely, why didn't their heads explode as they bent down to drink?
> Which animal would be best suited to a [specified] terra formed Martian environment: a kangaroo, sheep or a cow?
> Predict and describe how the environmental conditions on Earth's largest space station – [the fictional] Valhalla 1's - dome will maintain or influence the physiological, morphological, structural and functional attributes of plants. Based on these facts, you should explain and justify your selection of a plant(s) for trials in the domed environment.

Student feedback indicated that the course members had been stimulated and engaged by the tasks, to a greater extent than had been the case with the previous version of the course. One student wrote:

> It is such a change to be challenged to think outside the square, to … make connections … and apply my learning.. The rest of my subjects' [*sic*] just want me to rote learn. (Meyers et al, 2004, p.9)

The reporting of this initiative implies that the tasks were undertaken individually. There is no reason why such tasks could not be undertaken on a group basis – save for the consequences for assessment where there are difficulties in determining how much each individual contributes to the group effort. If institutions are serious about developing graduate attributes or employability (with their implications for interaction between students), then the challenges posed by assessment have to be addressed. The solutions traditionally used simply will not suffice – and the kind of standardisation proposed in the AUQA discussion paper will not be possible.

## Conclusion

### Not a trivial challenge

A commitment to the development of graduate attributes or employability implies, for many subject disciplines, a preparedness to rethink curriculum, pedagogy and assessment. (In some areas, the requirements of professional bodies – as in fields like healthcare and engineering – build in a substantial element of employability.) The severity of the challenge is greater for modular schemes because it is difficult to cater for those attributes that take longer than a component course to develop. Some graduate attributes are slow-growing crops, in contrast to cash crops that can be grown and harvested quickly (hardwood rather than bio-fuel feedstock).

The USEM approach has some potential for aiding the rethinking. If the intentions of USEM are used to frame thinking about what students are expected to achieve as a consequence of their programmes, than institutions and academic organisational units can give consideration to the practicalities of what needs to be done when, and how achievements should be assessed.

Perhaps the words used in respect of financial investment need to be borne in mind when thinking about investment in curricula oriented towards employability: past performance is no guarantee of future success.

## References


AUQA (2009). *Setting and monitoring academic standards for Australian higher education* (Discussion paper). Retrieved 2 December 2009 from www.auqa.edu.au/qualityenhancement/academicstandards/discussion-paper.pdf

Barrie, S.C. (2004). A research-based approach to generic graduate attributes policy. *Higher Education Research and Development*, *23* (3), 261-275.

Barrie, S.C. (2006). Understanding what we mean by generic attributes of graduates. *Higher Education 51* (2), 215-241.

Barrie, S.C. (2007). A conceptual framework for the teaching and learning of generic graduate attributes. *Studies in Higher Education 32* (4), 439-458.

Barrie, S.C. (2009). *Setting and monitoring academic standards for Australian higher education* (Memorandum to AUQA in response to the Discussion Paper). Retrieved 2 December 2009 from www.auqa.edu.au/qualityenhancement/academicstandards/responses/39.pdf

Becker, G.S. (1975). *Human Capital*. (Rev.ed.). Chicago: The University of Chicago Press.

Bligh, D. A. (1998). *What is the use of lectures?* Bristol: Intellect.

Bloom, B.S. (1956). *Taxonomy of educational objectives, Handbook 1: cognitive domain.* London: Longman.

Bowden, J., Hart, B., King, B., Trigwell, K. and Watts, O. (2000). *Generic capabilities of ATN university graduates.* Retrieved 30 November 2009 from www.clt.uts.edu.au/ATN.grad.cap.project.index.html

Cairns, L. and Stephenson, J. (2009). *Capable workplace learning*. Rotterdam: Sense Publishers

Committee on Higher Education (1963). *Higher Education* (Report of the Committee appointed by the Prime Minister under the chairmanship of Lord Robbins, 1961–1963). London: Her Majesty's Stationery Office.

Eraut, M.(2004). A wider perspective on assessment. *Medical Education 38* (8), 803-804.

Flavell, J.H. (1979). Metacognition and cognitive monitoring: A new area of cognitive developmental inquiry. *American Psychologist 34* (10), 906–911.

Harvey, L., Moon, S. and Geall, V. with Bower, R. (1997*). Graduates' work: organization change and students' attributes.* Birmingham: Centre for Research into Quality and Association of Graduate Recruiters.

Hase, S. (1998). Work-based learning for learning organizations. In J. Stephenson and M. Yorke (Eds.), *Capability and quality in higher education (*pp.69-76). London: Kogan Page.

Knight, P. and Yorke, M. (2004). *Learning, curriculum and employability in higher education.* London: RoutledgeFalmer.

Krause K.-L. (2009). Griffith University response to the Australian Universities Quality Agency Discussion Paper *Setting and monitoring academic standards for Australian higher education*. Retrieved 2 December 2009 from www.auqa.edu.au/qualityenhancement/academicstandards/responses/11.pdf

Leitch, S. (2006). *Prosperity for all in the global economy – world class skills* (Final Report of the Leitch Review of Skills). Norwich: Her Majesty's Stationery Office.

Meyers, N.M, Whelan, K.A., McNulty, D. and Ryan, Y. (2004). Enhancing the transition of first year science students – a strategic and systematic approach. *Proceedings of the 8th Pacific Rim Conference on the First Year in Higher Education: 'Dealing with Diversity'*. Retrieved 3 December 2009 from http://www.fyhe.com.au/past_papers/papers04.htm

Quin, R. (2009). Curtin University's response to *Setting and Monitoring Academic Standards for Australian Higher Education: a discussion paper*. Retrieved 2 December 2009 from www.auqa.edu.au/qualityenhancement/academicstandards/responses/18.pdf

Ryle, G. (1949). *The concept of mind*. London: Hutchinson.

Schön, D. (1983). *The reflective practitioner: how professionals think in action*. New York: Basic Books.

Stephenson, J. and Weil, S. (1992). *Quality in learning*. London: Kogan Page.

Wolf, A. (2002). *Does education matter? Myths about education and economic growth*. London: Penguin.

Wright, A. (2002). *Foundations for change* (Final Report of the Skills *plus* project's external evaluator). Retrieved 30 November 2009 from www.heacademy.ac.uk/resources/detail/ourwork/employability/employability23

Yorke, M. (2006). *Employability in higher education: what it is – what it is not*. York: The Higher Education Academy. Also retrieved 3 December 2009 from www.heacademy.ac.uk/assets/York/documents/ourwork/tla/employability/id116_employability_in_higher_education_336.pdf

Yorke, M. and Knight, P. (2006). *Embedding employability into the curriculum*. York: The Higher Education Academy. Also retrieved 2 December 2009 from www.heacademy.ac.uk/assets/York/documents/ourwork/employability/id460_embedding_employability_into_the_curriculum_338.pdf