Embedding employability into the curriculum

Mantz Yorke

Peter T Knight
Learning and Employability Series 1 and 2

The Learning and Employability series is primarily intended for staff in higher education institutions who are considering the enhancement of student employability. The publications will also be of interest to colleagues new to the area as well as those who are already engaged in developing employability and who wish to broaden their understanding of the topic.

In response to demand we have updated and reissued a number of titles from the first series of Learning and Employability, originally published by the Learning and Teaching Support Network (LTSN) and the Enhancing Student Employability Co-ordination Team (ESECT). We welcome suggestions for new titles in the series: email employability@heacademy.ac.uk.

Titles currently available are:

SERIES 1
- Employability and higher education: what it is – what it is not (Mantz Yorke)
- Employability: judging and communicating achievements (Peter Knight and Mantz Yorke)
- Embedding employability into the curriculum (Mantz Yorke and Peter Knight)
- Entrepreneurship and higher education: an employability perspective (Neil Moreland)
- Employability and work-based learning (Brenda Little and ESECT Colleagues)
- Pedagogy for employability (The Pedagogy for Employability Group)

SERIES 2
- Work-related learning in higher education (Neil Moreland)
- Employability for research postgraduates (Janet Metcalfe)
- Employability and part-time students (Brenda Little)
- Ethics and employability (Simon Robinson)

The series editor is Professor Mantz Yorke.

The Employability Research and Publications Advisory Board reviews all Higher Education Academy Employability publications, and comprises Professor Peter Knight (Open University), Professor Lee Harvey (Sheffield Hallam University), Professor Stephen McNair (Surrey University), Dr Brenda Little (CHERI), Professor Kate Purcell (University of the West of England), Mike Hill (Graduate Prospects) and Val Butcher from the Higher Education Academy.

Copy-editing has been undertaken by Dr Donald Millar (formerly of the University of Leeds) and Peter Thomas.

The Learning and Employability series will continue to be extended by the Higher Education Academy and will reflect changing challenges and priorities in the relationship between higher education and the many work opportunities likely to need – or benefit from – graduate or postgraduate abilities.

The views expressed in this series are those of the authors and not necessarily those of the Higher Education Academy.
## Contents

1. Introduction ................................................................. 2
2. Preview of the main points ................................................. 2
3. Employability pervades higher education, and has long done so 3
4. How might employability be captured in the curriculum? ....... 4
   4.1 The USEM account of employability .......................... 4
   4.2 Implications for the curriculum ................................. 4
   4.3 The significance of co- and extra-curricular activities ... 5
5. Aspects of employability .................................................. 7
   5.1 ‘Knowing that’ and ‘knowing how’ ............................ 7
6. Curriculum auditing: where are the aspects of employability developed? 9
7. Curriculum auditing: how are the aspects of employability developed? 11
   7.1 Considerate pedagogies ....................................... 11
   7.2 Considerate assessment ....................................... 11
   7.3 Consistent messages: academic and practical intelligence 11
8. Models for embedding employability ................................... 13
   8.1 Not ‘one size fits all’ ........................................... 13
   8.2 Employability through the whole curriculum ............... 13
   8.3 Employability in the core curriculum ....................... 13
   8.4 Work-based or work-related learning interspersed within the curriculum 13
   8.5 Employability-related modules within the curriculum ..... 13
   8.6 Work-based or work-related learning in parallel with the curriculum 13
9. Employability in a modular curriculum ............................. 18
   9.1 Modular programmes .......................................... 18
   9.2 The ‘Capability envelope’ .................................... 18
10. Personal development planning, progress files and portfolio production 21
11. Employability connects with a multiplicity of discourses ....... 21

References ................................................................. 23
Appendix 1 ................................................................. 26
1. Introduction

This Guide discusses a number of issues that need to be borne in mind when the desire is to embed (or embed more firmly) employability into a curriculum. It is therefore of particular relevance to colleagues who are designing new curricula or are considering how existing curricula might be ‘tuned’ in order to accentuate the potential of their programmes to develop students’ employability. Further, it should be helpful to those whose curricula are coming up for review under an institution’s (or some external body’s) quality assurance processes.

The complexity of employability and the variety that exists in curricula in UK higher education mean that no single, ideal, prescription for the embedding of employability can be provided. Embedding has to be undertaken with reference to the curricular context, and hence this Guide should be treated as offering a number of pertinent points which may be useful to those responsible for whole curricula – and, in particular, for curricular components – as they grapple with curricular challenges.

For the hard-pressed reader, the core features of this Guide are in Sections 4 to 8. Sections 9 and 10 address contemporary concerns.

2. Preview of the main points

• Higher education has a longstanding engagement with the national economy.

• Employability refers to the potential a graduate has for obtaining, and succeeding in, graduate-level positions. There is a need to recognise that the co- and extra-curricular achievements of students contribute to a graduate’s employability.

• Employability is taken to be a more complex construct than those of ‘core’ or ‘key’ skills. It connects with a range of discourses and has many facets which range from understanding of one or more subject disciplines to ‘soft skills’ (such as working effectively with others). It also encompasses both academic intelligence and ‘practical intelligence’.

• Employability and good learning are seen as being closely aligned and not as oppositional constructs. The USEM account of employability accentuates this alignment.

• Curriculum auditing offers a way of testing how and where employability-related learning is incorporated into curricula. It may also point to the need to rethink pedagogic and/or assessment practices.
Embedding employability into the curriculum

• Support for employability can be incorporated into curricula in a range of ways: there is no ‘one size fits all’ solution.

• Some aspects of employability take time to develop, suggesting that the focus needs to be on employability across a whole programme rather than on individual programme components (modules). The ‘Capability envelope’ is offered as one prompt to thinking about the way in which a programme-level focus might be achieved.

• Employability can be enhanced through personal development planning, but success will depend upon the extent to which students see a ‘pay-off’ for the effort that they put in.

3. Employability pervades higher education, and has long done so

From at least as far back as the Robbins Report, there has been an acknowledgement of the importance of UK higher education to the national economy. In recent years the connection has been made more prominently by government and by employers, and it provided an underpinning theme for the Dearing Report of 1997.

Higher education has, of course, been addressing issues relating to employability for a very long time indeed – even if its earliest efforts were focused on the employment needs of a few specialist segments of society, such as the Church, Medicine and Law. Very many programmes in higher education have been directly relevant to employment, with the former polytechnics and colleges sector in particular drawing upon a strong tradition in this respect. ‘Employability’, though a term not used until recently, has clearly been on the agenda of higher education for some considerable time.

Like others in this series, this Guide has adopted a working definition of employability:

a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy.

Other definitions are discussed in the introductory Guide, Employability in higher education: what it is – what it is not.

The key proposition underpinning this Guide is that there is a considerable degree of alignment between ‘education for employability’ and good student learning (and the teaching, assessment and curricula that go with it)^2. Two things then follow:
Embedding employability into the curriculum

- Much that has taken place in higher education over the years has supported the promotion of employability – and this is a continuing feature of the higher education landscape.
- There is a need to step back from day-to-day concerns to identify ways in which employability might be further enhanced without prejudicing the subject-specific dimension of learning.

Understood as a set of generic achievements, in many cases enriched with specific vocationally useful elements, ‘employability’ is not something static but something that a person can develop throughout life. Furthermore, older undergraduates – who are often found on part-time programmes – will already have developed many of those achievements that employers value, although they may not fully appreciate how much they have to offer.

4. How might employability be captured in the curriculum?

First, there is a need to tie down what employability is construed to be. Bennett et al. (2000) point out the terminological problems associated with ‘core’ and ‘generic’ skills, noting inter alia that what might be considered ‘core’ in one disciplinary area might be considered to be generic in another. They settled for using the term ‘core’ for discipline-specific skills, and ‘generic’ to represent ‘the so-called transferable skills that can support study in any discipline’ (ibid., p.23). Their choice of terms, therefore, differs from commonplace usage in higher education.

More important for this Guide is their identification of four management skills that can be applied across a range of contexts:

- management of self
- management of others
- management of information
- management of task.

Linked with this is their model of course provision, in which ‘generic’ skills interlock with disciplinary content, disciplinary skills, workplace awareness and workplace experience’. Their approach to skills development, whilst useful, is focused strongly upon the person’s performance: the individual psychological conditions that underpin a person’s performance are given little emphasis.
4.1 The USEM account of employability

In the Skills plus project, employability was seen as being influenced by four broad and inter-related components:

- Understanding.
- Skills. (The term is used here because of its significance in political and employment circles, but there is a real danger of its being given a simplistic and unhelpful interpretation. A term such as ‘skilful practice’ is probably more appropriate.)
- Efficacy beliefs, students’ self-theories and personal qualities. Of critical importance is the extent to which students feel that they might ‘be able to make a difference’ – not every time, but in a probabilistic way.
- Metacognition, encompassing self-awareness regarding the student’s learning, and the capacity to reflect on, in and for action.

**Figure 1.** The USEM account of employability. The main influences are shown here, with the pervasiveness of ‘E’ (see text, *passim*) being highlighted.

Understanding (as a term, preferred to ‘knowledge’ because of its implication of depth) is, of course, a key outcome of higher education and needs no further justification here.
Embedding employability into the curriculum

‘Skills’ here is taken to mean ‘skilled practices’ or ‘skilful practice’ with the implication that this hinges on awareness of, and responsiveness to, the context – in contrast to narrowly-conceived notions of skills such as appeared at the lower end of the NVQ framework, or in some usages of so-called ‘key skills’.

As for efficacy beliefs (the element of the model that differentiates USEM from the approach adopted by Bennett et al. (2000)), Dweck’s (1999) work points to the advantages of a student having malleable, rather than fixed, self-theories (or beliefs about the self – for example, that a person’s intelligence is fixed for all time or, alternatively, is mutable). Malleable self-theories go with a disposition to see tasks as opportunities for learning rather than as performance-oriented opportunities to demonstrate competence (or avoid showing incompetence). There are correlations between deep learning and a personal commitment to the pursuit of learning goals, and between surface learning and an orientation towards performance. Hence, the self-theories that students – and their teachers – hold are likely to influence learning, with those tending to malleable self-theories being likely to have more belief in their ability to be effective when faced with novel challenges.

There are four combinations of
• teacher or student
  with
• fixed or malleable self-theories
  each of which may produce different effects – a theme that is developed in Yorke and Knight (2004).

The significance of metacognition is increasingly being recognised because of research related to student learning that has developed apace over the last quarter century and which has become an essential underpinning in institutional programmes for the development of teaching in higher education. In this Guide, metacognition is seen as subsuming elements of ‘learning how to learn’; of reflection in, on and for practice; and a capacity for self-regulation.

4.2 Implications for the curriculum

Good curriculum designs will continue to help learners to construct understandings of the subject matter and maintain the more recent interest in developing a number of skilful practices, or ‘skills’. However, they will also show care for the development of positive efficacy beliefs, metacognition and other complex achievements that employers value. Although there is not a great deal of research evidence that is directly relevant to the concern to enhance employability, four secure conclusions from social and cognitive psychology are as follows:
Embedding employability into the curriculum

• Development takes time – months and years.
• Development takes practice.
• Students need to hear, repeatedly, what it is intended that they learn in order to understand what that means, to know ways of judging what they have achieved, and to see how to improve.
• Ideally, this would mean programme-level planning having priority over planning at the level of the module.

4.3 The significance of co- and extra-curricular activities

We know that a number of the achievements that employers value are stimulated by a whole variety of activities and engagements in life and work generally. Although higher education institutions are not able to reach directly into students’ extra-curricular activities, they can, through co-curricular activities such as career development, help students to recognise the significance of those activities and represent to best effect achievements that can be supported with evidence from extra-curricular activities.

5. Aspects of employability

Whilst the USEM model is useful as a way of thinking about how employability might be enhanced, it is too coarse-grained for analytical work on curricula. In the Skills plus project, a listing of 39 aspects of employability was therefore developed to assist participating departments in their examination of their curricula from the point of view of employability (Exhibit 1, see p.8). As in all lists of this sort, there are gaps and overlaps of meaning, and some of the categories may not be particularly relevant in specific circumstances. Exhibit 1 is offered not as a prescription, but as something that might be adapted or drawn upon in the light of the local context.

A health warning, though: it is tempting to try to refine the categories in the direction of higher precision and lower ambiguity, but the benefits of doing this might well be outweighed by the costs in terms of effort. For most curricular purposes, a relatively rough and ready categorisation is likely to prove adequate. The companion Guide, Employability: judging and communicating achievements, addresses some of the implications of ‘fuzzy’ statements of learning intentions.
Embedding employability into the curriculum

Exhibit 1. Aspects of employability, with elaborative comments. The acquisition of disciplinary understanding and skills is assumed: note that their application is listed as item 30.

A. PERSONAL QUALITIES
1. Malleable self-theory: belief that attributes [eg intelligence] are not fixed and can be developed.
2. Self-awareness: awareness of own strengths and weaknesses, aims and values.
3. Self-confidence: confidence in dealing with the challenges that employment and life throw up.
4. Independence: ability to work without supervision.
5. Emotional intelligence: sensitivity to others’ emotions and the effects that they can have.
6. Adaptability: ability to respond positively to changing circumstances and new challenges.
7. Stress tolerance: ability to retain effectiveness under pressure.
8. Initiative: ability to take action unprompted.
9. Willingness to learn: commitment to ongoing learning to meet the needs of employment and life.
10. Reflectiveness: the disposition to reflect evaluatively on the performance of oneself and others.

B. CORE SKILLS
11. Reading effectiveness: the recognition and retention of key points.
12. Numeracy: ability to use numbers at an appropriate level of accuracy.
13. Information retrieval: ability to access different sources.
14. Language skills: possession of more than a single language.
15. Self-management: ability to work in an efficient and structured manner.
16. Critical analysis: ability to ‘deconstruct’ a problem or situation.
17. Creativity: ability to be original or inventive and to apply lateral thinking.
18. Listening: focused attention in which key points are recognised.
19. Written communication: clear reports, letters etc written specifically for the reader.
20. Oral presentations: clear and confident presentation of information to a group [also 21, 35].
21. Explaining: orally and in writing [see also 20, 35].
22. Global awareness: in terms of both cultures and economics.

C. PROCESS SKILLS
23. Computer literacy: ability to use a range of software.
24. Commercial awareness: operating with an understanding of business issues and priorities.
25. Political sensitivity: appreciates how organisations actually work and acts accordingly.
26. Ability to work cross-culturally: both within and beyond the UK.
27. Ethical sensitivity: appreciates ethical aspects of employment and acts accordingly.
28. Prioritising: ability to rank tasks according to importance.
29. Planning: setting of achievable goals and structuring action.
30. Applying subject understanding: use of disciplinary understanding from the HE programme.
31. Acting morally: has a moral code and acts accordingly.
32. Coping with complexity: ability to handle ambiguous and complex situations.
33. Problem solving: selection and use of appropriate methods to find solutions.
34. Influencing: convincing others of the validity of one’s point of view.
35. Arguing for and/or justifying a point of view or a course of action [see also 20, 21, 34].
36. Resolving conflict: both intra-personally and in relationships with others.
37. Decision making: choice of the best option from a range of alternatives.
38. Negotiating: discussion to achieve mutually satisfactory resolution of contentious issues.
39. Team work: can work constructively with others on a common task.
5.1 ‘Knowing that’ and ‘knowing how’

The list of aspects in Exhibit 1 subsumes both ‘knowing that’ and ‘knowing how’ (Ryle, 1949). The former maps most obviously on to content – the latter on to process. In curricular terms, the implication is that attention needs to be given not only to the content to be learned, but also to the process(es) through which that learning takes place. A similar observation can be made in respect of the various subject benchmark statements prepared under the aegis of the QAA.

6. Curriculum auditing: where are the aspects of employability developed?

Curriculum auditing offers a way of testing how and where employability-related learning is incorporated into curricula – and where there might be gaps. The development of module-based curricula has often drawn attention away from the programme as a whole, with the module often being the focal unit of analysis in validation/approval procedures.

This is understandable in terms of flexibility, since students in modular schemes will choose pathways of various configurations (e.g. joint, major/minor, combined) in which there is an additional opportunity to select a proportion of modules from outside the pathway. Whilst advantageous when seen from the perspective of student choice, curricular flexibility has a downside in that it is more difficult to take a whole-programme view of what is on offer, and hence to see how the enhancement of a student’s employability might optimally be encouraged.

It is a commonplace to find module specifications stated in terms of expected learning outcomes. However, module specifications are often overloaded with expectations, and it is doubtful whether – in such circumstances – many of these expectations can realistically be addressed within the module’s span.

In auditing curricula, it is probably more sensible to concentrate attention on the ‘core’ of a study-pathway than to attempt to incorporate students’ idiosyncratic choices. Routes and pathways are composed of typical sets of modules which should exhibit coherence and progression, and it is on these that curriculum auditing might most profitably focus. It is reasonable to ask what a module contributes to student employability but wise to recognise that many outcomes derive from the set of modules that comprises the programme.
Taking the ‘core’ modules, the following questions offer a starting-point for a curriculum audit:

- Should this [particular aspect of employability] appear in the module?
- Does it appear?
- If present, does it cohere, developmentally, with its appearance in earlier and/or later modules?
- Is there duplication with its appearance in other, perhaps contemporaneous, modules?
- Is its appearance a ‘good fit’ with the appearance of other aspects of employability in the curriculum?
- Does the ‘core’ offer a student the opportunity to combine aspects of his or her learning to deal with complex and perhaps unfamiliar problems? (And does the ‘flow’ of learning opportunities facilitate this?)

The prescribed assessment demands constitute a key to answering questions such as these. For example, work on the Skills plus project turned up examples of overuse of particular methods of assessment to the detriment of exposing students to the need to demonstrate a wide range of skilled practice, and of final-year projects that assumed – erroneously – that students would earlier have been required to demonstrate some essential skills. The difference between assessment that is primarily formative and that which is summative is important: broadly, the former should be creating conditions that assist students to succeed with the latter. And, as noted in the companion Guide, Employability: judging and communicating achievements, a number of aspects of employability are not amenable to valid and reliable measurement within the limits of available resources - so the audit process needs to be accompanied by a ‘reality check’, as far as assessment is concerned.

The construction of a matrix of modules and aspects of employability might be useful in the auditing process. The principle is illustrated below in Figure 2, with aspects taken from Section C of Exhibit 1. ‘Real life’ examples, albeit with different foci of attention, can be found in Knight (2002, pp.158-9, 153 and 175-7).

<table>
<thead>
<tr>
<th>ASPECT</th>
<th>MODULE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A1</td>
</tr>
<tr>
<td>Computer literacy</td>
<td></td>
</tr>
<tr>
<td>Political sensitivity</td>
<td></td>
</tr>
<tr>
<td>Team work</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2. An illustration of the kind of matrix that could be useful in curriculum auditing. A1 refers to module topic A at Level 1; A2 to the same topic at Level 2, etc.
7. Curriculum auditing: how are the aspects of employability developed?

An intention to enhance student employability, like an intention to accustom a student to the practices that characterise a subject area, rests upon the learning, teaching and assessment methods embedded in the wider curriculum structure.

Good learning and employability intentions need to be supported by learning, teaching and assessment approaches that are consistent with curricular intentions. Biggs (2003) uses the term ‘constructive alignment’ to convey the importance of coherence in curriculum design. His conception of alignment starts with learners who construct their own understandings from their experiences of the world. He argues that the pedagogical approach needs to engage students positively in their learning, and should discourage a relatively passive approach that is likely to lead to surface, rather than deep, learning. Teachers should be considerate of learners by creating modules that can creatively complement one another.

Constructive alignment requires attention in some detail to the nature of the learning activities that the students will experience. Narrowing down from the level of design to that of implementation, the following questions pertain:

• Are there scheduled – in individual modules – learning activities that capture the aspect(s) of employability that the modules are claimed to develop?
• Do the tasks set for students to do outside scheduled ‘contact’ sessions engage them with the modules’ learning intentions? If they do, what signals are being given to the students that this is the case?

7.1 Considerate pedagogies

The governmental policy on widening participation draws increased attention to pedagogy, since students who might not otherwise have entered higher education may well be faced with bridging a larger cultural and pedagogical gap than those for whom entry would typically be taken as the ‘natural course of events’. Students with lower levels of ‘cultural capital’ are likely to need increased levels of pedagogic attention if they are to achieve their full potential, and they may require more than a semester to come to terms with the academic demands made upon them.

Of course, what benefits them should benefit ‘traditional’ students as well. The underlying point is not simply that a range of teaching and learning practices is necessary to support the range of intentions described in Exhibit 1; these practices need to be introduced considerately, allowing students to come to terms with practices that may be unfamiliar, ambiguous and even disturbing.
7.2 Considerate assessment

A similar point applies to assessment. Although assessment is the theme of a separate Guide in this series, the value of formative assessment, particularly in the first year of study, cannot be overstressed. Some curricular structures (and typically modular structures) have required students to undergo summative assessment after about three months of study. The less successful students, who will include many who have not yet acclimatised to academic expectations, may be placed at a disadvantage in their further studies because:

• The emphasis on summative assessment has detracted from the provision of formative assessment
• Summative assessments are accompanied by limited (in extreme instances, no) feedback that is useful for further learning
• Such students may be subject to ‘failing and trailing’, and carrying additional curricular burdens as a result, just at the time when the need is for pedagogic support.

When the first year of full-time study in UK higher education is, in effect, merely a qualifying year for the subsequent study that determines the class of the student’s honours degree, an emphasis on early summative assessment seems indefensible on pedagogic grounds. It is noticeable that, in recent years, some institutions have ‘loosened’ their modular schemes so as to make the first semester predominantly, if not wholly, formative in character.

The suggestion is that a curriculum for employability will have assessment arrangements that differ from those often found in mainstream academic programmes.

7.3 Consistent messages: academic and practical intelligence

Students whose self-theories are apparently fixed may, given appropriate ‘messages’, be encouraged to revise them in the direction of malleability. Revision is more likely when students are presented with a consistent affirmation that the sort of intelligence that is valued in the workplace differs from the supposedly-fixed intelligence which is widely believed to determine success or failure.

Interviews with 97 newly recruited graduates and 117 of their more experienced workplace colleagues indicated that practical problem-working and contributory skilled practices were often components of success in employment. This problem-working often involved multidimensional problems whose boundaries and solutions were ill-defined. Successes were attributed to what Sternberg (1997) calls ‘practical intelligence’ (in
contrast with the ‘academic intelligence’ needed to solve academic problems and puzzles, which correlates quite strongly with IQ).

The generic trajectories of academic and practical intelligence differ quite markedly (Sternberg and Grigorenko, 2000), the former tending to decline from early adulthood whereas the latter tends to rise, though both may be affected adversely towards the end of a person’s life.11

Figure 3. A schematic comparison of trajectories for IQ (strongly correlated with academic intelligence) and practical intelligence. After Sternberg and Grigorenko (2000).

Educationally, the potential growth in practical intelligence implies that there is a lot to play for, even if a student has not distinguished him- or herself in terms of academic measures of performance, such as A-level results. As with self-theories, a lot will depend on the capacity of the teacher to coax the student into achieving to his or her full potential. The discussion thus returns to the issue of appropriate pedagogic methods, which is too complex for treatment here: traditional methods are (for a variety of reasons) unlikely to optimise student success, and new methods may be needed which involve reorganising the teaching-related resources available.12

8. Models for embedding employability

There is a range of levels of curricula in which employability is fostered, either explicitly or implicitly. These are well understood, but for completeness, a broad typology is included as
Appendix 1. In this section, attention is given to the ways in which employability might be embedded into curricula irrespective of the academic level.

8.1 Not ‘one size fits all’

One size does not fit all institutions, as far as employability is concerned. Contexts, student recruitment patterns, envisaged labour markets and traditions are four variables that influence the embedding of employability in curricula. Further, major change designed to create an ‘ideal’ employability-oriented curriculum may prove to have prohibitive collateral costs. Following the title of R A Butler’s memoirs, having an eye to ‘The art of the possible’ may be wise when contemplating significant curricular change. In a way, this is a restatement of Fullan’s (2001, p.69) dictum that ‘Educational change is technically simple and socially complex’: it is relatively easy to draw up a blueprint for change, but rather more difficult to make the blueprint an operational reality.

There is a spectrum of ways in which employability can be developed through curricula. The following represent ‘ideal types’ (in the Weberian sense) whose differentiation is not clean-cut – indeed, they smudge into each other:

- **Employability through the whole curriculum**
- **Employability in the core curriculum**
- **Work-based or work-related learning incorporated as one or more components within the curriculum**
- **Employability-related module(s) within the curriculum**
- **Work-based or work-related learning in parallel with the curriculum.**

While the first might have the greatest potential for enhancing employability because it makes it easiest to bring most programme elements into constructive alignment, in many cases less ambitious approaches (such as the last two) will be the most practical. They, too, can make a considerable contribution to students’ claims to be highly employable.

8.2 Employability through the whole curriculum

Perhaps the best-known example of this curriculum approach is that adopted at Alverno College in Milwaukee. Degrees from this relatively small women’s college reflect the college’s mission, which in 1997 included a commitment

… to assist women of all backgrounds to learn personally and professionally so that they will be productive in a continually changing work environment and be prepared to assume responsibilities supportive of a more beneficent society (Alverno College Office of Academic Affairs, 1997, quoted in Mentkowski and Associates, 2000, p.62)\(^\text{13}\)
Each student is required to demonstrate eight broad ‘abilities’ at progressively more complex levels in both general education and the specialist subject(s) that she has chosen. The abilities are as follows (Mentkowski and Associates, 2000, p.63).

- Communication (reading, writing, speaking, listening, visual, quantitative, and technological literacy)
- Analysis
- Problem solving
- Valuing in decision-making
- Social interaction
- Global perspectives
- Effective citizenship
- Aesthetic responsiveness

Students’ work is not graded but receives comment. Some students – no doubt brought up on grade points – found the absence of grades difficult at first, but appear to have generally come to terms with the assessment regime over time.14

Although ‘employability’ is not a term used in the US, the Alverno approach exhibits a similar conceptual underpinning to that of the ‘Capability’ approach (Stephenson, 1998) in which subject-based understanding is blended with skilful operational practices. Given Alverno’s concern with the development of individuals, it is surprising that the aspects of the self that were identified as important in the Skills plus project are given very little emphasis in Mentkowski and Associates’ account.

Doubts have been expressed as to whether the Alverno approach can be translated into larger, more diverse institutions (Gibbs, 1995), and institutions might not feel able to go wholly down that route for a variety of reasons, one of which could be the expectations of the professional and statutory bodies that accredit some higher education curricula.

However, there are examples in the UK of institutions that have sought to embed curricular approaches across a swathe of their undergraduate provision. For instance, the former University of North London adopted a capability approach across the institution (see Page, 1998), and the University of Luton sought similarly to integrate a set of ‘transferable’ skills (Atlay and Harris, 2000).

8.3 Employability in the core curriculum

It soon, however, became apparent to staff at the University of Luton that even the inclusion of ‘transferable’ skills in all modules might nevertheless allow students to avoid exposure to some skills (either accidentally or on purpose, depending on the modules selected). Those responsible for each programme were therefore asked to designate two existing core modules (one each at Levels 2 and 3) as vehicles for the formal
Embedding employability into the curriculum

development of the ‘transferable’ skills. If ‘transferable skills’ is read as a fuzzy proxy for employability, the Luton experience locates these aspects of employability in the core of core curricula.

The Skills plus project acknowledged the difficulty of trying to pin down aspects of employability across the whole of a student’s study programme, and proposed that curriculum auditing should focus on those modules that formed the core of the programme.

8.4 Work-based or work-related learning

interspersed within the curriculum

Work-based learning has for some time been promoted as a contributor to employability, initially in terms of sandwich degrees. The ‘thick sandwich’ typically involves a one-year placement, though there are other models that distribute the placement experience in ‘thinner’ slices. The experience is widely held to benefit the student (anecdotal evidence attests to greater self-confidence and awareness of the challenges faced in the world of work, and so on), but the accreditation of the learning from the placement period(s) has proved difficult. Reports on the student’s experience have counted for little in the final award, hence marginalising that experience. A few institutions have offered students, as an adjunct to sandwich degree awards, the opportunity to gain a Licentiate of the City and Guilds of London Institute in respect of work-based achievements that would otherwise not formally attract credit\(^{15}\), though the cost implications may discourage widespread uptake of mechanisms such as this.

Before the widespread adoption of modularity, it was the case that a student had to complete the period of work experience, often producing a report upon it which had to be accepted as satisfactory by both the workplace and the academic tutor involved. The advent of modular curricula created a minor problem, in that the (typically) 360 credit points needed for an honours degree related to the three years of study within the institution, and hence some rather awkward formulations were devised to incorporate the period of work experience into the assessment structure.

Many institutions formally accredit work-based learning as an integral part of their (non-sandwich) curricula – offering a module’s worth of credit, for example\(^{16}\) – and extend the opportunity to work-related learning (such as for the mentoring of more junior students, or engagement in student representative activity). There are examples of awards being made outside degree structures, one being the Work Experience Award developed as part of the JEWELS Project\(^{17}\), another being the York Award. This is a certificated programme of transferable skills training and experiential learning offered by the University of York in partnership with a number of public, private and voluntary sector organisations\(^{18}\). Outside
higher education institutions, the CRAC Insight Plus programme assists students to represent to best effect the enhanced employability deriving from paid employment. Work experience may become a passport to employability where employers use work placements as a central part of their graduate recruitment processes. Some employers will admit that they prefer to recruit from placement students since they have had a chance to weigh them up in the workplace and know much more about their suitability for a particular job than any degree transcript or assessment centre could tell them. However, the extension of work-based learning is not without problems: employer and academic schedules may not dovetail, and small- and medium-sized enterprises may be inhibited by the costs and time-commitment involved.

8.5 Employability-related modules within the curriculum

There seems to be a growing emphasis on the development of students’ skills at the beginning of their programmes of study, centring on freestanding ‘skills’ modules of varying kinds. There are perhaps two primary drivers:

• The educational argument that, if students can develop their personal autonomy in studying at the beginning of their studies, this will pay off later. Attached to this argument are considerations such as the ways in which students in post-16 education are often taught, and the implications for institutional resourcing (disproportionately allocating resources to first year students has been one response).

• The need to maximise retention. Retention has considerable implications for institutional income, and there is now the publication of retention performance indicators for all publicly-funded higher education institutions (which exerts its own leverage).

It is a moot point which of the two has influenced institutional practices to the greater extent.

Examples of skills-oriented modules at the beginning of study programmes can be found in Abramson and Jones (2001) and Booth (2001). In no case can skills development be ‘boxed off’ from the rest of the curriculum, since students develop through a range of curricular (and extra-curricular) engagements. Haigh and Kilmartin (1999), in providing an evaluation of the first-year Geography curriculum at Oxford Brookes University, describe the integration of ‘personal transferable skills’ within a pedagogic approach based on active learning, and in which there are no lectures. Included under this heading is freestanding curricular provision that supports career planning and jobsearch strategies. In many cases a preferred way of enhancing an institution’s contribution to student employability is to strengthen the careers service, although the impact will be muted if the service lacks a curriculum presence.
8.6 Work-based or work-related learning in parallel with the curriculum

In academe, there is a tendency to regard the part-time employment that students undertake in parallel with their studies as a necessary, but undesirable, commitment. There is anecdotal evidence from academics (now being supported by evidence from a UUK/HEFCE study of student debt, published by Universities UK under the title *Survey of higher education students’ attitudes to debt and term-time working*) that students often limit themselves to doing what is specified for their programme – being driven by the expected learning outcomes, for example – and do not read around the subject. There is some modest evidence that student performance is adversely affected by the need to undertake part-time employment (Barke et al., 2000): if anything, the assessments mentioned by Barke et al. may understate the effects of part-time employment if at the same time the focus on what was assessed had been narrowed.

It is possible to see students’ part-time employment as a learning opportunity rather than a threat. This employment could provide an experiential base for the academic study of employment-related disciplines, such as individual psychology, organisational sociology, management, finance, and so on. Some students, particularly those whose subject disciplines are less obviously employment-oriented, might welcome a joint honours programme involving subject X and what might be termed ‘employment-related studies’. A lifelong-learning perspective would encourage such students to extend their studies of subject X beyond the boundary of the first degree.

9. Employability in a modular curriculum

9.1 Modular programmes

Since the focus of this Guide is on first degree programmes, and many of those are modular in character, mention needs to be made of the advantages and disadvantages of modularity for the enhancement of employability.

The prime advantage of modular programmes is that they allow for some (but not usually total) flexibility in student choice of modules to be studied. The flexibility is quite limited where external constraints (such as the expectations of professional bodies) pertain, but may be greater where the limits tend to be those imposed – perhaps because of resource considerations – by the institution concerned. A second advantage that was claimed in the early days of modularisation is the possibility of using frameworks for credit accumulation and transfer to build up to a qualification by studying at more than one institution, or in...
Embedding employability into the curriculum

one institution over an extended period of time. In practice, cross-institutional credit transfer appears to have been little used – perhaps because of the lack of appropriate inter-institutional agreements and/or the fact that many students are restricted because of residence and travel considerations to a very limited range of institutions.

From the perspective of employability, a major problem faced by modular schemes is of accommodating ‘slow learning’ (Claxton, 1998) – the kind of learning that may take considerably longer than a module’s length to develop. The ability to deal with ticklish interpersonal situations, skill in tackling complex problems, and the development of powers of critical thinking are three examples where ‘slow learning’ is likely to occur. Slow learning is better assessed across a programme rather than at the end of a short modular slot. Hence a key challenge for modular schemes is to anticipate and forestall possible incoherence in the curriculum as it is experienced by the student: the resurgence of interest in programme specifications is a spur in this regard.

9.2 The ‘Capability envelope’

Despite the difficulties inherent in building employability-related learning opportunities into modular curricula, structures can be designed to enhance the chances of supporting employability. The ‘Capability envelope’ sketched in Figure 4 (Stephenson and Yorke, 1998; Stephenson, 2001) was designed to illustrate the feasibility of reallocating pedagogic resources to facilitate the development in students of a broad capability. A programme was conceived as having four components:

1. An exploration stage, in which the student is supported in planning, and gaining approval for, their programme of study;

2. A series of learning engagements appropriate to the approved programme;

3. A progress review stage running alongside (2), whose purposes include the support of reflective/metacognitive activity, the adjustment of plans in the light of experience, the creation of ‘learning logs’ or other records of attainment; and

4. A demonstration stage, in which the student is expected to integrate what has been learned via the prior stages, and to demonstrate what he/she can do as a result.
Embedding employability into the curriculum

Figure 4. The ‘Capability envelope’.

Such a programme would be particularly appropriate to an award gained by independent study, but would be adaptable to other study formats provided that components 1, 3 and 4 could be ‘wrapped round’ whatever was scheduled as component 2. In a modular scheme, there would be a greater number of study units involved, but the overall schema would be similar (Figure 5).

Figure 5. The ‘Capability envelope’ modified for a modular scheme.

The model can be adapted to suit a variety of curricula. For example, the equivalent of, say, a couple of modules towards the end of the second year of a three-year full-time programme could be designated as an ‘exploration stage’ leading to a negotiated programme for the final year. Alternatively, the approach could be operated as a longitudinal part-curriculum running alongside another part organised in a more traditional format.
10. Personal development planning, progress files and portfolio production

Recent developments in UK higher education have brought personal development planning (PDP) and progress files to the forefront of attention. PDP, the building of a progress file and the production of a portfolio have considerable potential to assist students in the development of their employability.

There is some evidence that students do not always appreciate what they have to offer a potential employer, and may sell themselves short as a result. Others might – without a curriculum process that required some self-analysis of strengths and weaknesses – simply not be faced with matters that, if tackled, would help their self-development.

The PADSHE (Personal and Academic Development for Students in Higher Education) project begun at the University of Nottingham and extended to the University of Newcastle has been prominent in promoting students’ personal and academic records. However, the widespread use of PDP and progress files across the sector raises pertinent questions of practicability. What incentive, for example, is there for a student – no doubt hard-pressed because of competing demands on his or her time – to engage in PDP activity or the construction of a progress file, unless there is some fairly tangible payoff? One kind of payoff is the preparation of a portfolio through which complex claims to employability may be represented but, without the stimulus of some connection with summative assessment, it is debatable whether PDP will be taken seriously unless students see it ‘counting’ to their awards. Likewise, teaching staff are quite likely to say that there is not the time to deal with it and its consequences for the assessment arena. One response to both of the challenges could be the ‘capability envelope’ which, if fully implemented, could incorporate PDP.

11. Employability connects with a multiplicity of discourses

Employability is, as presented here, a construct that goes well beyond the boundaries of ‘key skills’ and similar terms. It sits at the conjunction of a number of discourses that include the subject discipline(s) studied; both individual and social psychology; communication; organisational sociology; and perhaps elements of management and finance. For some employment contexts, the number of discourses could probably be further extended.

The notion of ‘capability’ (Stephenson, 1998) captured much of this breadth of perspective in its assertion of the desirability that a graduate should – in brief – become an effective operator in the world (whether in an employment or other social setting).
Embedding employability into the curriculum

The implication is of a curriculum and associated pedagogy that richly encompasses both the subject-specific and the generic. This could have considerable implications for programmes in which the traditional perspective has been – to adapt the words of Hamlet – ‘the discipline’s the thing’.

Various policy commitments (such as lifelong learning, widening participation, employability) are leading towards a reconceptualisation of the aims of first-cycle higher education towards a more generalised capability (and, in ‘zero sum’ curricular terms) to a diminution of emphasis on immediate learning of subject disciplinary material27. This is the academic version of the old saying: ‘Give someone a fish, and they’ll be fed for a day; give them the skills of fishing, and they’ll be fed for life.’ A lifelong learning perspective, coupled with the cliché that the half-life of knowledge keeps diminishing, imply more than ever the need for continuing efforts at updating, which can be recognised by post-experience qualifications of varying kinds.

If we have good emerging ideas about employability and the undergraduate curriculum, there is nevertheless a lot still to do on the enhancement of graduate employability during the working life.
References


Embedding employability into the curriculum


Embedding employability into the curriculum


Acknowledgement

Figures 4 and 5 derive from Stephenson and Yorke (1998), and are published with the kind permission of the authors and the publisher, Kogan Page.
Appendix I

A broad typology of curricular levels in UK higher education

There is a range of qualifications in UK higher education whose curricula incorporate employability.

Programmes leading to ‘intermediate’ qualifications

There has been a long tradition, particularly strong in the new universities and colleges of higher education, of vocationally-oriented Higher National Diplomas (and their part-time equivalents, the Higher National Certificates) and of professional courses of various kinds (for example, in accountancy and in human resource management). To these have been added Foundation Degrees, in which the involvement of employers has been accentuated. To some extent, Foundation Degrees and HNDs are competing for the same patch of curricular territory, and it remains to be seen whether one will become dominant. What seems certain in the UK is that the relative growth of applied or vocational higher education provision will be increased by government sponsorship of intermediate qualifications that emphasise learning related to the workplace and benefit from close linkages between employers and higher education institutions.

First degrees

At first degree level, employability is explicitly built into programmes across a wide spectrum of higher education (for example, medicine, veterinary science, dentistry, social work, teacher education, librarianship and information science). In some curricular areas (business studies, and a number of science-based subjects) there has evolved a tradition of sandwich degrees, in which the student undertakes one or more periods of placement in a work environment – the norm being for a single placement of one year, though other models exist. Employability is approached in a different way in bespoke first degrees whose origins can be found in employers’ need to develop their employees – these are sometimes termed ‘partnership degrees’ – in which learning instigated at the employer’s end is supported academically – and validated – by the partner institution.

More generally, it is now widely assumed that employability will figure, in some form or other, in the design of first degree programmes – expectations relating to employability can now be found in the subject benchmark statements published by the QAA, although there is variation in the extent to which various aspects of employability have been featured.

Yet there is a need to note the ambiguous position of part-time first degrees, as far as employability is concerned. For some, these will be stepping stones from current low-grade employment (or perhaps unemployment) to something more fulfilling; for others, they will be primarily a vehicle for professional development. For yet others, they may simply satisfy a desire for self-fulfilment. For the last group, employability may be an irrelevance.
Embedding employability into the curriculum

Higher degrees
In considering employability in higher education, sight should not be lost of higher degrees. Taught master’s and doctoral degrees often have a direct relevance to a person’s employment, sometimes as a precursor to employment, sometimes running concurrently with it (MScs, MBAs, DBAs and EdDs are examples here). Research degrees, too, may impact positively on a person’s employability - certainly, this is what many researchers hope.

Other types of curricula
For the sake of completeness, mention must be made of other types of curricula, but they are not considered further in this Guide.

• Short courses that are often designed to contribute to professional updating.
• ‘Corporate degrees’ based on workplace activity in large organisations, currently validated by a higher education institution with degree-awarding powers33.
Embedding employability into the curriculum

Notes

1 Outside the UK, ‘employability’ is neither widely used nor clearly distinguished from ‘getting a graduate job’.

2 A fuller statement of this position can be found in Tuning the undergraduate curriculum on the website of the Skills plus project: www.heacademy.ac.uk/documents/paper9.doc. Atkins (1999) and Booth (2001), amongst others, take a similar view.

3 See Bennett et al. (2000, p.26ff) for a fuller account.

4 See Cowan (1999) for an extended discussion of ‘active learning’ goes beyond stimulus/response is in some sense than, say, listen to a lecture. However, any learning that goes beyond stimulus/response is in some sense ‘active’.

5 It is common for the phrase ‘active learning’ to be used in context, and contrast with the position taken by Jessup (1991) in respect of NVQs.

6 If the person holds a malleable self-theory, then in the USEM model there should logically be feedback loops back to the E from the U, S and M (not shown in Figure 1).

7 The term ‘module’ is used generically here to cover components of programmes that might also be termed ‘study units’ or ‘courses’. The latter term is potentially ambiguous, since it can refer to components of programmes or to whole programmes.

8 Core modules may be identified by the programme team but they are also, in practice, identified by students who year in, year out, gather on certain modules and avoid others.

9 Core modules may be identified by the programme team but they are also, in practice, identified by students who year in, year out, gather on certain modules and avoid others.

10 These were conducted as part of the Skills plus project.

11 The two patterns are exaggerated for the purposes of illustration. In fact, the heights achieved by individuals will vary, as will the points in their lives at which trajectories markedly change their slope, and as will the steepness of the slopes themselves.

12 See, for example, Page (1998, p.40) and Haigh and Kilmartin (1999, p.196).

13 The Alverno College website www.alverno.edu now carries a mission statement in which employability is less explicit: ‘the College exists ‘to promote the personal and professional development of women’.

14 Mentkowski and Associates (2000) provide a research-based appraisal of Alverno’s work over a quarter of a century. The Alverno website www.alverno.edu offers a range of informative material.

15 See Jackson et al., 1998. The Licentiate was deemed equivalent to a National Vocational Qualification at Level 4.


17 dJEWELS is the acronym for Joint Systems to Enhance Work Experience Levels of Service and Satisfaction, a project run jointly by the Universities of Exeter and Plymouth. See Watton et al. (2002); www.jewels.org.uk/finalreport.htm and associated papers.

18 See www2.york.ac.uk/admin/ya/ for details.

19 Although evidence is emerging from a study conducted by the Centre for Higher Education Research and Information at the Open University that there is a negative effect of paid employment on employability as a graduate. The CHERI interpretation is that the paid employment acts to the detriment of engagement in other ‘employability-accentuating’ activities such as institutional societies.

20 For example. HEFCE (2001).

21 Available at http://bookshop.universitiesuk.ac.uk/downloads/studentdebt.pdf

22 The statement of expected learning outcomes cuts both ways. It benefits the students (and the assessors) in that it eliminates some of the guesswork regarding what is expected, but it could militate against a wider engagement with the subject(s).

23 This was not addressed in Barke and colleagues’ report.

24 This approach is further developed in Yorke (2003).

25 See, for instance, McLeman and Smith (1998), who ran a short programme which demonstrated to students from social science backgrounds that they had more to offer an employer than they had imagined. Also, pilot work on unemployed graduates that was conducted for the Skills plus project showed up some significant weaknesses in self-presentation which might have contributed to their failure to gain employment.

26 See www.nottingham.ac.uk/padshe and www.internetpars.ac.uk.

27 The trend has been evident in the UK since the inception of the Enterprise in Higher Education initiative launched in the late 1980s, though the effects on curricula have, by and large, gone relatively unremarked (Yorke, 1999).

28 A number of Foundation Degree programmes are being run in further education colleges, with validation being provided by higher education partners.

29 The term ‘co-operative education’ is used elsewhere, notably in the US and Ireland.

30 And higher degrees, for that matter.

31 For an analysis of the first 22 subject benchmark statements that illustrates the point, see Yorke (2002).

32 There is a similar ambiguity in respect of full-time first degrees, though the proportion of students undertaking them for the purposes of personal fulfilment is likely to be considerably smaller than for part-time programmes.

33 The signs are that the criteria for the granting of degree-awarding powers may shortly be relaxed, allowing other organisations to compete with higher education institutions (Baty, 2002).
Enhancing Student Employability

There are many definitions of what it is to be ‘employable’ and views on the processes that develop this attribute. The Learning and Employability Series offers a wide range of perspectives on the employability of graduates, based on the premise that, in higher education, ‘employability’ is about good learning.

One of many definitions of employability is:

‘A set of skills, knowledge and personal attributes that make an individual more likely to secure and be successful in their chosen occupation(s) to the benefit of themselves, the workforce, the community and the economy.’

ESECT was an initiative to support the higher education sector in its efforts to develop highly skilled, employable graduates who can contribute effectively to national prosperity in the 21st century.

ESECT consisted of individuals with extensive experience of employability issues. The team comprised representatives of stakeholder organisations including the National Union of Students (NUS), the Association of Graduate Recruiters (AGR), the Association of Graduate Careers Advisory Services (AGCAS), the Centre for Recording Achievement (CRA) and the Higher Education Academy. It drew on the expertise of key researchers and practitioners in the field including Professor Peter Knight, Professor Lee Harvey, Brenda Little and Professor Mantz Yorke.

ESECT was funded by the Higher Education Funding Council for England between October 2002 and February 2005.

The Higher Education Academy is progressing the work to enhance the employability of graduates developed in partnership with ESECT.

To find out more visit the Higher Education Academy Employability web pages:

www.heacademy.ac.uk/employability.htm
Higher education institutions are coming under increasing pressure to ensure their graduates have relevant employability skills. Institutions are also being encouraged to help students develop enterprise skills so that more graduates have the confidence and knowledge to set up businesses.

Senior managers and academics are looking for support at all levels to embed employability and enterprise into the higher education experience.

The Higher Education Academy is committed to helping institutions improve the employability and entrepreneurship of all students. The Academy has worked with a number of partners to provide a range of tools and resources in these areas.

The Higher Education Funding Council for England (HEFCE) funded the Enhancing Student Employability Co-ordination Team (ESECT) to help the sector engage with the employability policy. Its work began in September 2002 and finished at the end of February 2005.

ESECT dovetailed its plans with those of the Academy to provide a one-stop-shop on employability matters. The priority was to strengthen links with others committed to enhancing student employability.

Published by:
The Higher Education Academy
Innovation Way
York Science Park
Heslington
York YO10 5BR
United Kingdom

Tel: 01904 717500
Fax: 01904 717505
Email: enquiries@heacademy.ac.uk
www.heacademy.ac.uk

Embedding employability into the curriculum
Learning and Employability Series 1
ISBN: 1-905788-00-2
Price: £10.00
© The Higher Education Academy, April 2006

All rights reserved. Apart from any fair dealing for the purposes of research or private study, criticism or review, no part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any other form or by any other means, graphic, electronic, mechanical, photocopying, recording, taping or otherwise, without the prior permission in writing of the publishers.

To request copies in large print or in a different format, please contact the Higher Education Academy.