Kenneth Aitchison, The Institute of Field Archaeologists
Melanie Giles, The University of Manchester

Employability and Curriculum Design

Introduction

How can university departments enhance the employability of their graduates in archaeology? What do employers want from those graduates, how can university departments ensure that their graduates have the best opportunities and how can this enable archaeology to be a truly meritocratic profession?

This guide, aimed at both teachers and learners, seeks to explore the debate in the role of higher educational institutions (HEIs) in preparing people for professional life: the tension between delivery of discipline specific knowledge and skills, and broader development of critical and analytical skills, precariously balanced against the demand from employers for field-ready archaeologists.

This tension has become known as the ‘education vs training’ debate, and the Higher Education Academy (HEA) (and its predecessor, the Learning and Teaching Support Network (LTSN)) has been active in supporting engagement with this key issue. Following on from a session at the Theoretical Archaeology Group (TAG) conference in 2003—a dedicated volume on Archaeological Pedagogies was edited by Thomas Dowson (2004). The debate was then broadened through the TAG plenary session in 2005. About 250 archaeologists from all sectors—private, public and academic—participated, and demonstrated even further the plurality of views on how this issue can be taken forward, but with an overwhelming agreement of the debate’s significance in archaeology today. This guide hopes to demonstrate how the two agendas can work together, beginning to bridge the ‘education vs training’ divide.
Exploring employability: different perspectives

Archaeological employers:

- many believe that current undergraduate and postgraduate degree courses fall short of preparing graduates to work in archaeology: students not only lack practical field experience and technical expertise, but also the conceptual, analytical and interpretative skills required by employers
- many would also like to see graduates better prepared for the 21st century ‘world of work’; able to work independently and as part of a group, take responsibility for their own learning and development, conduct themselves ‘professionally’ and accept a more flexible and diverse career pathway

Archaeology lecturers:

- generally believe that the curriculum should deliver knowledge about the past and how it has been interpreted, within a sound theoretical and methodological framework, grounded in practical experience where possible
- many are positive about the advantages of linking teaching pedagogy with vocational learning experiences and assessments but there is concern that the ‘pedagogic landscape’ should not be shaped by the mentality and demands of corporate business
- whilst lecturers are keen to employ standards of ‘best practice’, the level of real-world based experience which can be provided is also limited by institutional resources and the other demands of the curriculum

Archaeology students:

- whilst only a small proportion will continue in archaeology as employees or research students, all students at least expect their degree to enhance their generic employment prospects
- students generally enjoy the diverse mix of conceptual and practical training provided by an archaeology degree but do not know how to articulate the employment skills they have learned, and translate this to employers

Trends in Archaeological Employment

Over the course of the 20th century, the numbers of people employed in archaeology have steadily increased from a starting point of almost no paid archaeologists at the beginning of the century. There have been particular periods of rapid expansion in the early 1970s and from the mid-1990s onwards, stimulated by external, political and economic influences.

The profession is currently considered to be growing, with further growth anticipated in the future (Aitchison and Edwards 2003, 31-2). The subsector that has grown the most rapidly has been the number of archaeologists working to provide advice - whether to planning authorities, national agencies or the private sector (in the form of consultants). Contrary to popular belief, now only a minority of professional archaeologists work in the area of undertaking fieldwork (49% - Aitchison and Edwards 2003, table 15).

Even so, all archaeological endeavour ultimately rests upon the production of primary data through fieldwork. The relative vigour of this sector indirectly affects employment in all other sub-sectors, such as the demand for finds or environmental specialists and for the numbers of people monitoring this work. Over the last decade, major transport infrastructure projects – Heathrow Terminal 5, the Channel Tunnel Rail Link and the Birmingham North Relief Road – have involved such significant numbers of archaeologists that there have been positive knock-on effects in terms of the demand for fieldworkers and others across the UK.

It must be noted, however, that the current (relatively) high numbers employed in field archaeology can be considered to be directly related to the economic health of the construction sector, which is particularly driven by the demand for housing. The greater the demand for new houses, the greater the number of planning applications being made, and so the greater number of archaeological investigations being required through the planning process. The current housing boom has been ongoing since the mid-1990s; the last time there was a significant downturn in house-building (early 1990s) there was a serious impact on the numbers being employed in archaeology, to the degree that archaeological staff were laid off by employers such as the Museum of London (Young & O’Sullivan 1991, Young 1992).

Context

Employability is a word that means different things to different writers and audiences.

To begin a top-down approach to the discussion of what employability is, the UK government’s skills agenda, as outlined in the White Paper Skills: Getting on in Business, Getting on at Work (DFES 2005) sets out goals, including the ways that:

Improving our national skills performance supports these [governmental] ambitions in a number of ways:

including:

Replacing the redundant notion of a ‘job for life’ with our new ambition of ‘employability for life’, thus helping people and communities meet the challenge of the global economy. (foreword, p.2).

With employability clearly placed centrally within governmental ambitions, from an HE perspective, the Higher Education Academy’s definition 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.4

On a subject-specific basis, the QAA Benchmark Statement for archaeology (2000) addressed the issue of employability of graduates indirectly, stating that:

The broad-based nature of the subject and of the skills it gives graduates provide a strong grounding for a wide range of career paths: the archaeology graduate is extremely well equipped with transferable skills from the mix of humanities and science training, engagement with theory and practice, and individual and team-based learning, together with the intellectual curiosity to continue learning, and the skills to benefit from challenging work environments.

Taking all of these into consideration, employability can then be considered in terms of achievements which contribute towards the graduate's attainment of employment.

Key definitions (after Yorke 2006) are:

• ‘Employability’ refers to a graduate’s achievements and their potential to obtain a ‘graduate job’, and should not be confused with the actual acquisition of a ‘graduate job’ (which is subject to influences in the environment, a major influence being the state of the economy).

Regarding this point, HESA(2004), reported in Halpin 2005) found that, six months after receiving their degrees, archaeology graduates were earning an average of £13,300 per annum, the lowest of the 61 subjects compared. It is important to realise that this was not a survey of earnings in professional archaeology, but of what archaeology graduates were earning at that point in their careers – which suggests many had not acquired graduate jobs at that time.

Employers generally see a graduate’s achievements related to the subject discipline as necessary but not sufficient for them to be recruited. In some employment contexts the actual subject discipline may be relatively unimportant. Achievements outside the boundaries of the discipline (such as the possession of so-called ‘soft skills’) are generally considered to be important in the recruitment of graduates.

Employability derives from complex learning, and is a concept of wider range than those of ‘core’ and ‘key’ skills.

The ‘transferability’ of skills is often too easily assumed.

Employability is not merely an attribute of the new graduate. It needs to be continuously refreshed throughout a person’s working life.

These definitions form the basis of the guidance presented throughout this document.

Reviewing Employability

There is a sharp contrast between the number of people working in archaeology and the number studying the subject. This is clearly significant when considering the employability of archaeology graduates. In 2002-03 there were an estimated 5,700 people in paid archaeological employment in the UK (Aitchison and Edwards 2003) but in 1999-00, 6,690 students were following (rather than starting that year) a UK university course in archaeology, whether at under- or postgraduate level (Ramsden and Brown 2002). Approximately 800-850 students graduate with a Bachelors degree in archaeology every year (Aitchison 2004, 206).

So there is an oversupply of would be entrants into archaeology. However Collis (2001) estimates that only 15% of new graduates seek employment in archaeology. It is clear that in all considerations of employability it is not only the requirements of those that are aiming to pursue a career in archaeological practice that should be considered.

Of those that do seek to make a career in archaeology, the issue of maximising employability is particularly important, given that “the ‘not for profit’ sector tends to receive a substantial number of applications [for employment] and tends therefore to be reactive in recruitment” (Layer 2004, 12). Given that employers must therefore be more selective, this places an even greater obligation upon the HEIs to enhance the employability of students who are likely to enter sectors like this. Whether all archaeological employers are truly within the “not for profit” sector or not is actually irrelevant, as this is where they are commonly perceived to be by those not currently working in the profession – including many students of the discipline.

In this section of the guide the central issue of the education vs training debate referred to in the introduction is returned to, exploring the sometimes conflicting views and requirements of employers and higher education institutions.

The employers’ view

In archaeology, Aitchison & Edwards 2003 identified that there is a high level of perceived employer dissatisfaction with new entrants to the profession, and some specifically blame the universities – some quotes from (anonymous) employers included:

I don’t employ new entrants because they are so poorly trained by the universities

Lack of field skills in fresh graduates. It amazes me people can get degrees in archaeology and have never drawn a section and have no idea where to start on a desk based study. Consistently disappointed by graduates

New entrants have unrealistic expectations of an archaeological career

But is this dissatisfaction really just a set of unrealistic expectations on the part of the employers?

Yorke writes about employer expectations in general:

The grumbles of employers about the quality of graduates have been longstanding … The dissatisfactions exist in relation to the transition between two kinds of culture, and may persist no matter how much higher education is prevailed upon to address the ‘employability agenda’ (Yorke 2006, 2).

There will always be a discrepancy between what the employer wants - a graduate perfectly attuned to their needs - and what higher education can reasonably provide - a graduate prepared to learn what the employer wants and to perform accordingly.

The best that can realistically be achieved may be for higher education to facilitate the development in students of the understandings, skills and attributes that will help them
make a success of their careers. There comes a point in the students’ lives when the have to make a step-change: higher education can take them so far, but then they have to deal with the challenges that employment throws up (ibid, 9). Perhaps employers should be seeking to welcome graduates into the workplace who are as employable as possible, able to continue learning and adapt to the working situation in which they find themselves.

Labour Market Intelligence

Sets of comparable labour market intelligence data for archaeology have been collected in two data gathering exercises, Aitchison (1999) for data gathered in 1997-98 and Aitchison & Edwards (2003) for 2002-03 data. There is an intention to continue to gather such data on a five-yearly cycle, with the next exercise planned for 2007-08. In the most recent survey, Aitchison & Edwards surveyed just under 1000 employers of archaeologists in the UK from all subsectors of the profession, gathering data about archaeological employment and training.

This survey found that archaeology is a 90% graduate profession. Furthermore, of working archaeologists aged in their 20s, 98% hold at least an undergraduate degree – strongly suggesting that a degree has effectively become a prerequisite for entry into the profession.

However, while the majority (56%) of organisations stated that they employ new entrants to the profession, employers generally felt that further training is required at the entry level, with 74% of organisations responding that new entrants have to receive ‘considerable’ or ‘very considerable’ amounts of training, as 53% of employers consider new entrants to the profession to be ‘poorly’ or ‘very poorly’ equipped with skills (Aitchison & Edwards 2003, table 77).

At the time of the study, two-thirds (67%) of responding employers felt that currently available courses only ‘poorly’ or ‘very poorly’ matched the requirements of the profession, with only 1% feeling that available courses met professional requirements ‘very well’.

There is clearly a considerable demand for competent, employable entrants to professional archaeology, and it is perceived that currently available courses do not meet the requirements for this training.

The higher education view

The debate over employability has brought into focus the tension between the objectives of the teaching profession and the needs and concerns of employers. Informed by government policy, universities are committed to enhancing the generic employability of graduates, through their successful completion of a degree or diploma. This does not mean however, that the primary goal of Higher Education should be the teaching of ‘transferable’ skills (Dowson 2005). Whilst the QAA Subject Benchmark Statement suggests that archaeology degrees provide an excellent background for a variety of work environments (2000), few graduates will take up a directly related career. Lecturers have therefore also questioned whether degrees should be overtly vocational, given this low take-up, compounded by restricted career opportunities. In addition, others have voiced their concern that pedagogy should not be directly driven by the requirements of employers or framed by the present economic and political environment. Hamilakis has called for an awareness of the contingency of demands from the
profession, to be set against the broader ethics of educational practice (2004). This next section reviews these competing viewpoints.

Higher Education Academy’s research into employability

The Higher Education Academy’s History, Classics and Archaeology Subject Centre has provided a number of fora in which these issues have been raised. The Education versus Training: debating issues of employability in archaeology at TAG 2003 voiced the concern that there was lack of dialogue between universities and archaeological employers, which resulted in mutual frustration (Aitchison 2003 and 2004). Employers were disappointed with graduates’ lack of knowledge about the developer-funded archaeological process, having expected them to gain field investigation and desk-based skills from their undergraduate degree. Meanwhile educationalists were fighting against a lack of resources, including limited input from professional colleagues, but they also had deeper concerns. In his contributions to both this and the TAG 2004 debate, Creating Tomorrow’s Archaeologists: Who Sets the Agenda, Hamilakis argued that education is subsequently seen as little more than an ‘instrumentalist procedure’, delivering specific knowledge, information and skills which are judged to be of current market value, and can be directly measured or assessed according to corporate business criteria (Hamilakis 2004, 289-90). Amongst others, Hamilakis was alarmed that teaching and learning pedagogy is being increasingly driven by ‘academic capitalism’ instead of being a ‘fluid, life-transforming process’, where space for reflection, critique and ethical judgement allows students to engage with the broad field of cultural politics (2004: 293). At a more mundane level, other lecturers were concerned that the inclusion of more practical training would be at the expense of other essential core areas of knowledge, to the detriment of postgraduate research (Johnson 2004).

Bodies such as the Archaeological Training Forum (ATF) have sought to bridge this divide by contributing actively to curriculum design and continuing professional development through lectures, workshops and surveys. The two-year foundation degree in Field Archaeology at Bournemouth University is deliberately designed to create ‘skills rich students ready for employment’ (Welham 2005). Responses from academics have been mixed: whilst some have responded positively to these initiatives, others have been indifferent or even sceptical. However, during the latter debate, Conkey encouraged archaeologists to accept that we cannot separate explicit ethical and theoretical issues in education from professional training and practice, since these are literally the fields in which the importance, role and ownership of the past is contested (2004). She advocated breaking down the barriers through collaborative workshops and projects, using Cultural Heritage Management in the USA as a model.

An HE Academy Project which has explored the potential of such initiatives is The Role of Fieldwork in Teaching and Learning Archaeology (Brennan et al 2004), a survey which was focused on staff and student expectations. Its preliminary results suggested that the desire for an archaeological career amongst students is much higher than expected, given the small proportion who actually enter professional practice. Both staff and students were positive about an increase in fieldwork provision, and students felt that its major benefits were that it helped contextualise taught courses, put theory into practice and increased an appreciation and understanding of the archaeological process. In addition, students also acknowledged that it increased motivation and helped develop team-working, time and task management and social skills. Although a small number felt that such practical work did not contribute to the rest of their course, other students noted that these broader skills were beneficial, regardless of whether or not they intended entering a career in archaeology. Complementing this study, the Teamwork and Archaeology (Guide for Teaching and Learning in Archaeology No.3) advocated the development of group work as a component of assessment, not simply as a means of enhancing transferable skills (such as inter-personal relations and social dynamics), but as a way of explicitly improving students’ ability to reflect on their experience, as a means of improving their performance: vital steps in the ‘learning cycle’ (Kolb 1984).

Experiences of academic colleagues

As part of the research for this Guide, selected lecturers at the universities of Manchester*, York* and Leicester*, were asked for their opinion on the issue of incorporating employability in the archaeology curriculum. They expressed two contrasting viewpoints. The first was that it was not necessarily part of their role to prepare graduates for employment: they felt that more in-depth professional training should instead be provided by employers or institutions. Lecturers noted that vocational training, especially work in special groups, could be difficult to mark (cf Dowson 2005). They also felt that fieldwork-based assessments favoured students who were focused in their studies and used their initiative but pressurised those who were less well-organised.

However, others believed that vocational course elements helped create a strong sense of group identity and active research culture amongst students and staff. It enabled them to teach in diverse ways, in a mutual process of learning. They were also able to evaluate the integration of intellectual, practical and communicative skills, alongside the ability to take responsibility, act professionally and safely, and carry out work to high standards. Team-based activities also help develop peer-assisted learning. In addition, traits such as initiative and leadership (which may have been suppressed in formal teaching environments) came to the fore in the field. Some noted that these observations were crucial for the writing of student references and grant applications at a later stage. In addition, they helped students contextualise the nature of archaeological employment, and visualise career pathways (Welham forthcoming).

Lecturers also noted that innovative assessment and teaching methods were not just good for enhancing employability: they helped develop subject-specific knowledge and improved students’ understanding of both analytical and interpretative processes in archaeology. Alongside the more vocational elements of the course, reflective components also provided lecturers with richer feedback (see ‘Bridging the Divide’, below). As a result, they gained insights into the experience of learning delivered by the course, rather than just measuring whether it has ‘successfully’ delivered its outcomes. In turn, this enabled lecturers to review and develop their own teaching methods. Notably, even where fieldwork practice was embedded in the curriculum as a stipulation of successful graduation, most lecturers still expected students to gain significant amounts of independent experience before they could expect to gain paid employment. However, many noted that as financial pressures upon students increase, it will be increasingly difficult to achieve this additional experience, compounding the problems of the ‘learning cycle’ (Kolb 1984).
Examples of good practice have been selected from three universities who have sought to embed employability within their curriculum at undergraduate level: Manchester, York and Bournemouth.

Vocational Skills core courses are taught at all three levels of the undergraduate degree programme in Archaeology at the University of Manchester.

- Year 1: introduces students to the process of archaeological fieldwork, from the location of unknown sites to their exploration through survey and excavation, and the post-excavation process - assessment is via written theoretical, case-study based assignments and a Portfolio comprising Buildings Survey, Geophysical survey, simplified Desk-based Assessment, Ceramic Analysis/Illustration and successfully completed SMR entry sheets

- Year 2: explores the concept of the field and critically examines the role of fieldwork in the production of archaeological knowledge, situating it within the inter-disciplinary context of the social sciences - assessment includes a group presentation on fieldwork design, individual critiques of excavation monographs and fieldwork evaluations

- Year 3: examines the legislative structure and institutional organisation of British Archaeology, alongside principles of professional practice - assessment is via a Desktop Project Design, a Project Tender and Public Information Board

Field Archaeology is taught throughout the final term of Year 1, at the University of York, through the interdisciplinary Wolds Research Project: framed by a research agenda, students work on period-based projects led by lecturers, experimental officers and postgraduate students

- classroom based lectures and seminars are complemented by six 3-day fieldwork weeks, in which students carry out topographical and geophysical survey, excavation, on-site recording, environmental sampling, buildings and graveyard surveys, with fieldtrips on alternate days; this is complemented by three weeks of post-excavation analysis, data processing and interpretation

- formative assessment is via a reflexive Field Notebook or Journal, which supports a summative Portfolio of fieldwork exercises

- in addition, students contribute interpretative panels to a Public Exhibition in the final week of term, to which other students and the local community are invited to attend

Applied Archaeology is taught within the Field Archaeology foundation degree at Bournemouth University. Combining training in fieldwork alongside the development of transferable skills, the module centres around elements of self-directed and peer-assisted learning through the use of team-based, self-directed practical exercises

- group based activities develop an understanding of the dynamics of working within teams

- assessment includes evaluation through both team and self-reflective dialogues, to enable students to take ownership of their progress

- role-play helps contextualise learning in real-world based scenarios

- professional archaeologist-led activities are complemented by visits to commercial organisations, to introduce students to the character and structure of employment in the discipline, methods and standards of professional practice, and to stimulate critical debate

Masters level courses - practical and non-vocational

One way in which the issue of employability is being addressed is through the development of postgraduate MA/MSc or Diploma programmes. When the AFF conducted its survey of archaeological Roles and Skills, it drew a broad distinction between three vocational areas (2001):

- Field Investigation and Research Services

- Historic Environment Advice and Information Services

- Museum and Visitor User Services

Many postgraduate programmes are deliberately tailored to develop the skills needed in one of these fields, such as Fieldwork Practice, Heritage Management or Museums Studies. Programmes in Landscape or Maritime Archaeology, Archaeological Prospection or Survey, Osteoarchaeology, Palaeopathology and Forensics, Environmental Archaeology and Material Culture Analysis, offer specific technical training. Others are less vocational, and adopt a more period-specific or thematic approach, such as MAs in European Prehistory, Roman, Medieval, Historic and Industrial Archaeology.

All of these programmes aim to develop the critical and analytical research skills of a student, alongside in-depth training in a particular sub-discipline. Most will provide a foundation either for further postgraduate research or for employment at an enhanced level within the profession. As the government aim to widen participation takes effect and degrees become more commonplace, an MA/MSc provides a distinct competitive advantage. However, despite flexible learning pathways, these degrees have a significant financial cost to the student, who may be reluctant to leave existing employment. Alternative CPD opportunities are therefore being embedded in many institutions, guided by the development of National Occupational Standards and Qualifications in Archaeological Practice, organised through the auspices of the IFA, as discussed below under occupational standards.

Bridging the Divide: developing teaching, learning and assessment methods

The research outlined so far suggests that if lecturers are to embed employability into the curriculum, they have to be convinced that there are good pedagogical reasons for doing so. Instead of being driven by the need to produce employable archaeologists, they should be directed towards the development of critical and reflective minds. ‘Learning in Practice’ outlines the pedagogical argument for employability, and through a series of case studies, demonstrates its importance and potential.
Lecturing in archaeology has changed over the past twenty years, moving away from the role of an authoritative specialist who imparts their knowledge, to someone who facilitates the learning of others through a critical engagement with the past. This is a subtle but important step, since it places greater importance on student-centred, active learning (Jackson 2000). Students learn most effectively when they are engaged in the whole cycle of planning and implementing what they have learned, reflecting on the outcomes and transforming their behaviour as a result (Kolb 1984). They also engage positively with this process if they can see how it is relevant to their own lives. Both of these observations demand innovative teaching and assessment methods, alongside the setting of clear aims and outcomes, and provision of feedback (Trigwell 2001).

As archaeologists, we not only believe the past is intrinsically interesting in its own right, but also because it confronts and challenges contemporary norms, and reveals alternative ways of living in the world and experiences of being human (cf Dowson 2000). Our identity is partly constructed from the past, and archaeology has the potential to reveal ways in which people have selectively used it to construct particular narratives about themselves. At its best, teaching in archaeology raises key issues of memory and censorship, and explicitly addresses stewardship towards, and ownership of the past. In countries such as the United States and Australia, where colonists, immigrants and indigenous peoples’ rights have to be balanced and negotiated, education cannot therefore take place in a vacuum. Conkey’s exhortation to teach through partnership initiatives arises from this context (2004); citizens as well as cultural resource managers need to engage with these issues on a day-to-day basis. Rather than being driven by corporate business motives, the potential of bringing real-world scenarios into the classroom therefore lies in raising awareness of the institutions and systems within which archaeologists work, alongside their power relations and politics. Such teaching can be emancipating: preparing graduates to debate, contest and transform these fields of practice.

By actively engaging students in these issues, in the classroom and the field, real-world based or orientated teaching moves beyond the mere acquisition of knowledge (‘surface learning’) to comprehending the significance of the subject, making sense of the concepts presented and fitting them within a ‘bigger picture’ (‘deep learning’) (Marton and Säljö 1984). Deep learning involves high-level cognitive skills: the ability to distinguish between competing ideas, critically analysing, evaluating and assessing them, in order to construct new understandings (Bloom 1956). It also involves students taking greater responsibility for their own learning, becoming self-directed and motivated, and able to reflect on their own practice (Knowles 1978). Whilst an awareness of contemporary professional practice and techniques is desirable, these skills of initiative, personal responsibility and intellectual curiosity are the attributes which archaeological employers consistently mentioned in a recent survey of graduate skills (Giles 2006). Incorporating employability into the curriculum need not therefore be at odds with the pedagogical aim of providing a life-transforming, experiential and emancipatory process (cf Hamilakis 2004, 289, 294).

Learning in practice (pedagogy for employability)

Widening participation and employability – addressing issues of diversity

Treating everyone the same replicates advantage and does not address change. (Layer 2004, 11)

Archaeology, like subjects such as medicine, architecture and accountancy, can become a white, middle-class dominated profession with limited socio-economic group engagement. Graduates who do not have family traditions of working in professions like these are less likely to seek to enter them (ibid.), and so the professionals in these sectors continue to be drawn from the same, narrow social strata. To increase levels of social inclusion is a challenge for both higher education and the archaeological profession.

While minority ethnic group participation in higher education is at a level above that of their representation in the community at large (in aggregate, not necessarily by every minority ethnic group) (HESA 2001), this has not taken place within archaeology. Atchison & Edwards (2003) reported that less than 1% of professional archaeologists working in the UK were of black or minority ethnic backgrounds, and Benjamin (2003) found that 2.05% of archaeology undergraduate students were of black or Asian origin. By contrast, that writer also found that 19.6% of archaeology postgraduates are black or Asian, but that the majority of these people were overseas students who were anticipating returning to their home countries on the completion of their degrees.

To engage would-be students from black and minority ethnic backgrounds with archaeology, and to encourage them to consider a career in the profession, needs active thinking, perhaps by calling “attention to the lesser-known and more culturally diverse aspects of British heritage that may have relevance to them and that may get them excited about a subject that has long been the domain of European audiences” (Benjamin 2003, 8).

Archaeology has also had very limited participation by disabled individuals, and in the past (across HE) the prime focus for disabled students has been on participation and learner support, rather than employability.

The HEFCE funded (supported by the HEAcademy) Inclusive, Accessible Archaeology project at the University of Reading is currently working to “increase awareness of disability issues in archaeology and improve the integration of disability in fieldwork teaching”. It has published a series of case-studies and is now piloting the production of a self-assessment tool kit to “increase students’ awareness of their acquisition of transferable skills and promote careers management skills” (project website, introduction).

Foundation degrees aim to widen participation and employability: Programmes are likely to include a greater proportion from lower socio-economic groups but this has yet to be verified for the pilot programmes. If the ambition for Foundation Degrees is even partially met it will change the nature of widening participation for employability (Layer 2004, 9-10).

The Foundation Degree in Field Archaeology at Bournemouth University is currently only in its second year, and so it is difficult to compare student cohorts with the Bachelors degrees at the same university (Kate Welham, pers. comm.), although the academic entry requirements are lower, and so more people have the potential to get access to that course.

To widen participation in archaeology while employability has to be embedded within courses in general, consideration has to be given to how it is approached for and by different groups and individuals; “a more generally diverse student population challenges the traditional notion of preparing a student to move into and through employment” (Layer 2004, 18-19).

HE Institutions should be seeking to demonstrate to people from diverse backgrounds that employment in archaeology could be possible for them. This might be achieved through involving role models, or producing and disseminating relevant video material showing diversity in archaeological workplaces - but this has to be accompanied by and grounded upon a process of making the discipline relevant. In doing this, the intention throughout must always be to inspire engagement, to broaden participation and to build a more socially inclusive and hence meritocratic profession.
Transforming work experience into learning

Work experience itself is not necessarily intrinsically beneficial. It is the learning that an individual derives from the experience that is important.

While a primary objective will be to allow students to build up work-experience portfolios, it is even more important to enable students to say what they have learned, provide illustrations and, if need be, commentary — so showing there has been effective reflection on a deep learning experience.

If learning opportunities are to be maximised in 'non-traditional' forms of work experience, then students need some kind of structure and support in order that they can reflect upon and articulate the learning.

The quality of work experience is greatly enhanced by:

• prior induction and briefing for all concerned (student, course convenor and host employer) before the experience begins
• facilitation of ongoing reflection by the student throughout the experience
• debriefing, reflection and identification of outcomes following the experience (primarily by the student, but also by the host employer and course convenor)

A critical, practical point is that the work experience must be accredited so that it is taken seriously by both the students and external viewers — such as future employers of those students. Non-accredited work will generally be seen to have involved reduced commitment from the students, whether or not this is in fact the case.

Assessment drives the understood curriculum, as:

• It tells students what the aims of the curriculum really are, because 'what matters' gets assessed;
• It tells them how to work, because it seems sensible to prefer ways that pay off in terms of good grades;
• It tells them when to work, because tasks that are not assessed give students implicit permission to work longer on their part-time jobs or to spend more time enjoying themselves.

(Yorke & Knight 2004a, 3)

Within archaeology this has been demonstrated by Brennan et al (2004), who analysed the experiences of undergraduate students on fieldwork projects. They found that these learning experiences, outside the conventional classroom environment, were valued significantly more by the students if their involvement was being assessed and contributed towards their progress within the degree programme.

Embedding employability within the curriculum

Skills-based learning cannot be boxed-off from the rest of the curriculum, since students develop through a range of curricular (and extra-curricular) activities.

There are a range of levels of curricula in which employability can be fostered, either explicitly or implicitly. There is no single model that will suit all institutions; rather, there is a spectrum of ways in which employability can be developed through curricula, which are not mutually exclusive and can overlap to greater or lesser degrees (models drawn from Yorke & Knight 2004).

• Employability through the whole curriculum, requiring a shared institutional ethic of commitment to employability
• Employability in the core curriculum, emphasising transferable skills
• Employability-related module(s) within the curriculum
• Work-based or work-related learning incorporated as one or more components within the curriculum, such as sandwich and placements; these have to be credit-bearing in order to be valued by the students
• Work-based or work-related learning in parallel with the curriculum

Anecdotally, there is evidence that students limit themselves to doing what is specified for the academic programme and often do not ‘read around’ the subject. Nonetheless, they are gaining valuable, transferable, life skills from extracurricular work.

It is also important to remember that not all students have entered higher education at the age of 18 — for older students, many of whom will study part-time, employability may take on a different perspective, as they may have previously experienced employment — and for them, they may wish to prioritise subject-specific understanding to complement what they have already learned about the world of employment.

Teaching skills awareness

In an interview or application, graduates often find it difficult to articulate the skills and experience they have gained which are relevant to a new job (Holmes 2000). This is because in reality, there are no such things as truly ‘transferable’ skills: skills are learned in relation to particular contexts, environments and tasks (Lave and Wenger 1991). Experiential or practice-based learning which employs real-world scenarios is therefore more effective because it enables students to match their learning experiences with professional roles.

It is therefore important that course design is explicit about its skills outcomes (D’Andrea 2003). Raising students’ awareness of those skills can be achieved by incorporating reflexivity into formative or summative assessment, such as a journal or diary, portfolio, self-assessment or oral interview, linked to the learning outcomes. If work placements are undertaken, employers can provide important external evaluations, which may form the subject of a debriefing with a tutor. Alternatively, students in their final years or at postgraduate level might be employed as supervisors, tutors or mentors, since learning is most effective when it involves an element of teaching (Biggs 1999).
Enterprise: educational thinking about entrepreneurship as ‘employability plus’

A culture of curiosity and creativity has been developed to cope with the demands of social and economic change to an increasingly knowledge-based economy, and ‘... entrepreneurship is one expression of that drive to create a knowledge society’ (Moreland 2006, 2).

Entrepreneurship is a special form of employability. It involves personal values (honesty, responsibility), risk-taking, the need for independence, success and achievement. It can lead both to innovation in employment and to self-employment.

This does not mean that consideration of routes to self-employment are unimportant – people can enter self-employment through a number of potential paths - as result of being unable to find employment; as a positive career choice, identifying opportunities; as a career strategy – a route to embrace portfolio working (Griggs 1997); or as the HEAcademy study on archaeology graduates is currently revealing, as a reaction to personal circumstance (often due to childcare issues, family/work balance, retirement etc) (Karina Croucher pers. comm.)

In 2002, average earnings for self-employed workers (in all areas of work, across the whole UK) were £121 higher per week than the average earnings for employees (Moreland 2004, 6).

Overall, 1% of all graduates immediately enter self-employment (HESA, referred to ibid.), but 45-48% of graduates are potentially interested in establishing their own business (ibid., quoting Student Enterprise Project 1994). So it must be accepted that whilst a significant minority of graduates would be willing to consider entrepreneurship as a route to employment, the number that will actually enter self-employment is very low. However the entrepreneurial skills that students can learn will further their opportunities upon graduation, whether in aiding routes within employment or to self-employment.

Business establishment and self-employment are key issues within the entrepreneurship agenda in higher education in the early 21st century, which itself is within a broader ‘enterprise’ agenda; this is not just about people becoming self-employed, but rather about fostering entrepreneurial and enterprising skills for whatever career path, i.e. the ability to be innovative, think creatively, use problem-solving skills, risk-taking, communication and persuasiveness, ability to deal with set-backs, and self-motivation. It is the entrepreneurial and enterprising skills that students can learn which will further their opportunities upon graduation, whether in aiding routes within employment or to self-employment.

The most important ways in which entrepreneurship is fostered are generic skill development and personal knowledge development (Hartshorn 2002, 156); technical issues such as small business awareness, business start-up and enterprise in the community are also important for those that are interested in establishing a business, but are less valid for the development and delivery of the broader skill set. The first two factors – the most important two - are addressed through a general concern for employability, and can be addressed through the curriculum. In order to deliver an entrepreneurial skill-set to students, HEIs should seek to deliver core or optional career development modules – moving from introductions to entrepreneurial concepts, through role-play exercises to helping students to brainstorm opportunities and discuss entrepreneurial ideas with existing entrepreneurs or business mentors.

Enterprise is an area where the involvement of external contributors can be key. Many HEIs will have business development or enterprise units (such as the White Rose Centre for Enterprise29 at the Universities of Sheffield, York and Leeds) who can advise on course content and delivery, however bringing in expertise from commercial archaeology can also be vital. Would-be entrepreneurs need to see palpable examples of successful archaeological enterprise, and introducing them to such individuals will also help to develop their overall understanding of the archaeological workplace. Awareness of how the business of archaeology actually works will be crucial in helping them to understand how the skills that they are learning will actually contribute to their employability and help them in formulating career trajectory plans.
Reflection and employability

It is crucial that work-related learning incorporates a reflective element so that the student can fully consider the relevance of that learning to workplace roles, so strengthening the learning experience. Reflection is a key stage in the learning cycle (Kolb 1984), particularly important when learning professional or complex activities (Schön 1983, 1987); it is “...often a process of reorganizing knowledge and emotional orientations in order to achieve further insights” (Moon 2004, 4).

Managing to reflect on a learning experience then is an achievement which not only helps a student to become employed, but is also an attribute which will help them in their employment, as employers value “...willingness to learn, self-motivation, self-evaluation, self-management - those both underpin and are underpinned by what we understand as reflective activity” (Moon 2004, 2).

Most of the requirements employers have for their workforce will involve meaningful, deep learning; that which has been developed by reflection as being professional does not simply accord with expert knowledge of espoused theory, but with a reflective orientation to professional situations with an emphasis on reflection and learning from experience.

It is crucial that work-related learning incorporates a reflective element so that the student can fully consider the relevance of that learning to workplace roles, so strengthening that form of learning.

Two key tools for embedding the reflective stage of learning within curricula:

- Personal Development Planning - encourages and establishes reflection, as it aims to enable students to monitor, build upon and reflect upon personal development (NCIHE 1997)
- Learning journals or reflective diaries - accessible means to document and support reflective learning, recording the achievements that can be measured against the Personal Development Plan

Advice and Guidance

Advice on designing the curriculum for course convenors and tutors

Embedding employability effectively into the curriculum depends on strong alignment in course design, relating both methods of teaching and forms of assessment clearly and directly to learning outcomes. It also depends on making teaching and learning partnerships within the course transparent. For example, when work placements or other practical experience is involved, it is vital that the host employer or tutor is aware of what this vocational element of the course is designed to achieve, what they can expect from the student and what is expected of them. Guest lecturers or external course participants pose a different series of issues, which this next section will also address.

One model for ensuring employability is addressed and established within course content has been demonstrated by the Bournemouth University Foundation Degree in Field Archaeology, where an Industrial Advisory Panel have been involved in assisting and advising the course design team. This panel is made up of representatives of public and private sector archaeological employers and the Institute of Field Archaeologists as the professional association.

Assessment

Formative and summative assessment both play a vital role in encouraging employability (Yorke and Knight 2004). The course convenor should ensure that there is ‘constructive alignment’ between learning outcomes and these assessment methods (Biggs 2003). For example, if team-working and the enhancement of social skills is an important objective, group-work should be incorporated into both learning sessions and final presentations. Dowson outlines different ways in which grades can be assigned to group-work, ranging from awarding marks for both individual components and finished group projects, to encouraging groups to assign grades on the basis of each individual’s contribution (2005). Alternatively, if communication skills are being enhanced, assessments might include a range of written and oral assignments, including assessed seminars, poster presentations or the development of a trail guide or visitor leaflet. Written, numerical and representational skills can all be assessed through a portfolio of short reports, plans or surveys, and this provides an impressive addition to the traditional CV. Alternatively, a journal or reflective diary conveys a candidate’s ability to link theory with practice, learn from past experience and take responsibility for their future development. These can be more demanding in terms of preparation time by the student and feedback from the tutor, but they also permit the candidate to engage in critical debate on the role and importance of archaeology, in relation to their own experience.

Contact time is an issue here. Whilst small groups are ideal for more personalised tuition, the pressures of larger student cohorts make this difficult. Innovative delivery through DVD and virtual learning materials, alongside self-directed learning, provide ways of reducing contact time whilst enhancing student responsibility for their own learning (Welham forthcoming).

Real-world based assignments are particularly attractive to employers. At a basic level, the School of Archaeology at the University of Leicester runs a module in Professional Skills for its BA/BSc degree, which includes the preparation of a CV and letter of application for a job, as well as a proposal and costing for a public archaeology project. The MA in Archaeological Field Practice at the University of Manchester includes assignments such as a desk-based assessment (incorporating archival research and field visits), and a post-excavation design (including the management of the archive and dissemination of results).
Meanwhile, the BSc in Forensic and Archaeological Science at the University of Bradford assesses its students through an outdoor fatal stabbing simulation: accompanied by Scenes of Crimes Officers from West Yorkshire Police and university staff, students work in groups to record the crime scene, recover evidence and successfully remove the body. In all of these assessments, learning outcomes are directly related to developing conceptual and practical competencies, alongside critical and interpretative skills. Whilst these assessments are tailored for archaeology, their real-world basis is attractive to all employers, and allows students to articulate the skills they have learned by showing how they can be successfully related in a professional scenario.

**Work placements**

Work placements can vary from a few weeks to a year (as provided on the 4-year BSc/BA sandwich courses at the Department of Archaeological Sciences, University of Bradford). Many students will undertake fieldwork placements with their university tutors, but the practical stipulations of most archaeology degrees will require students to gain other work experience during the course of their study. Since many independent excavations and field projects now charge for such placements, this is placing an additional burden upon students already facing financial pressure. Working with local units, projects or institutions can help save maintenance costs whilst establishing an important network of professional contacts for future work. The nature of ‘fieldwork’ can vary greatly, and might include work in museums, visitor centres, and on public archaeology projects, as well as assisting with post-excavation. This not only enhances understanding of a particular site or project, but broadens awareness of all stages of the archaeological research process.

Ideally, such placements should involve a learning agreement between the educational institution, the student and the placement host. This should stipulate the intended aims of the work experience and identify the specific tasks which the student will undertake, as well as the outcomes which the host can expect. It should also include a formal statement on Health & Safety and insurance, including any appropriate risk assessments. Whilst shorter periods of work experience might be evaluated through a student report, longer work placements (especially at postgraduate level) need to be more formally assessed. There should be a clear mechanism for monitoring the student, as well as a final assessment by the host, of the student’s performance, contribution and development. Although perceived to be onerous, this could again be achieved through telephone interview or a pro forma report, and is vital for external feedback on the employability of the candidate. Such assessments not only feed into personal or continuing professional development plans (PDPs, CPDs) but can also form the basis for applications following graduation.

**Other practical experience**

All practical experience has merit in terms of employment skills. Most students now use part-time employment to supplement their income, through which they will have already demonstrated the ability to work as a member of a team whilst taking personal responsibility for their own role, turn on up time, dress appropriately and conduct themselves professionally. They may have responsibilities such as money-handling or the mentoring of new employees, and will have adhered to Health & Safety legislation and employer’s codes of practice. Basic qualifications such as driving or first aid are also relevant. The diverse graduate community now consists of mature students who also bring life-skills gained from permanent employment, family responsibilities and volunteer work. In addition to fieldwork and work placements, other useful experience can be gained from volunteering on Open Days, participating in Conference Organisation, or archaeological outreach work amongst the community. All of these experiences enrich a CV and demonstrate aptitudes and interests which may not otherwise be evident from the degree qualification. However, this must go hand-in-hand with providing students with the tools and ability to reflect on these skills, and communicate them to a potential employer.

**Guest lecturers: content and teaching**

Teaching students about employability inevitably means drawing on the profession, either as contributors to course design or as guest lecturers. It is an important way in which students are exposed to others in their research culture, and benefit from their knowledge and experience. Preferably, these participants will be members of institutions with an established track record in contributing to education at graduate level, and will have received appropriate individual training. Again, it is important that the objectives of the course are made transparent, and that teaching standards (related to the degree year being addressed) and pedagogy (such as active, student-centred learning) are discussed in advance of the session. Remember that many professionals will be accustomed to the more traditional format of an hour-long lecture, which runs the risk of simply delivering knowledge or opinion, rather than stimulating debate and critique. The role of the course convenor as both facilitator and mediator is vital here. Case-study led presentations, with time for Q&A debates or structured-reading seminars will enable students to engage more fully with the issues raised and make the maximum use of the guest speaker’s time and expertise. Remember, unless they have had appropriate training, it is usually against University regulations to employ guest speakers to mark assessed work, though they may give informal, formative feedback on student contributions.
Advice for tutors and internal lecturers

When participating in a course explicitly involving elements of employability, it is important to gain a good understanding of any innovative teaching and assessment methods. Ideally, the module or programme outline will relate these explicitly to sound pedagogical concepts. It is important to obtain background material and detailed information on other teaching sessions, to see how individual contributions fit into the wider course aims. Real-world based case studies, scenarios and role-plays should be used where possible, selected to stimulate debate: this might include examples where there are different interest groups or competing/conflicting interpretations over the past. When dealing with assessment, students should be primed well in advance on the learning outcomes to be evaluated, and the criteria on which the work will be marked. Portfolios for example, may not be graded but rather descriptively assessed above a threshold of adequacy: those failing to meet these minimum standards might be encouraged to resubmit evidence rather than being failed outright (Yorke and Knight 2004). The course should include some element of written or verbal self-reflection. When work placements are used tutors should not underestimate the amount of time it will take to organise and monitor these. Three-way learning contracts (between tutor, student and host) will help establish good working relationships: remember to make explicit both the form of assessment and feedback which is expected.

Advice for students

In the twenty-first century, students are increasingly expected to take responsibility for their learning, constructing understanding from their own experiences of the world (Biggs 2003). As a result, students need to become critical, lifelong learners, committed to their own professional development and career progression. This can sound very daunting at the beginning of a degree! However, throughout their studies, they will gain relevant experiences which will evidence the kind of attributes employers want to see. The key challenge is to develop student confidence in promoting themselves and articulating their skills, using examples from both university life and broader roles and interests.

Undergraduates

Employers will be selecting from a range of candidates, most of whom will possess a degree. They need to be convinced graduates possess the necessary competence for the job but also need to be impressed by some unique qualities or distinguishing skills and experience. This might be drawn from fieldwork the student has undertaken, their dissertation topic, part-time or volunteer work, or even a hobby - anything relevant which makes the candidate more memorable to the panel. It is important that this information not only stands out on a CV but can also be articulated in a face-to-face interview. When applying for a job in archaeology, graduates should not underestimate the importance of their passion for the subject, their commitment to continue to learn and to contribute towards the development of the discipline itself. Many other employers will also find archaeology fascinating but they need to see how such a degree has helped develop the skills they are looking for. In addition, to impress a potential employer, candidates should seek to demonstrate a realistic grasp of the career pathway they have chosen and knowledge of the business or institution they wish to join.

Students’ confidence in articulating their skills can be developed through the use of a PDP (Personal Development Plan), which helps organise their experience and makes explicit the skills they have learned. Learning journals also help students reflect on what they have learned and which attributes have been developed through their course (Moon 2004). In addition, a Portfolio is a visually impressive indication of achievements and future potential: even if this does not form an official part of assessment, students can be encouraged to construct one from individual assignments, selecting examples that are pertinent to the job they are applying for.
Postgraduates

Students who go on to an MA/MSc, Diploma or PhD usually do so as a means of gaining additional training both in research skills and archaeological techniques. Whilst the higher qualification represents an advantage over new graduates, they must be able to articulate to an employer why they selected a particular programme, what additional experience and expertise they have gained as a result, and how this qualification is relevant to the job they are applying for. Tutoring and mentorship provide good examples of additional skills, but candidates might also want to flag up non-archaeological work experience, to demonstrate their broader potential employability.

Employers will expect more of postgraduates, both in terms of their written applications and performance at interview; they may even have to undertake a fieldwork or laboratory proficiency test. Tutors can help prepare students for this using scenarios or role-play. It is important to stress that employers do not expect you to know everything or be able to use the latest equipment without training; they are looking for an ability to engage confidently in the hands-on aspects of the work, reflect on results and learn from the experience. They will also expect postgraduates to be critical thinkers, who are able and interested in situating their work within broader intellectual discourses in the discipline. This is where the ‘deep learning’ (see section 4.1) accomplished through the postgraduate programme, is of particular relevance. Again, it is crucial that students practice articulating their personal and professional qualities, experiences and goals, in a written and verbal setting.

Advice for students on work placements

Where taught courses incorporate work placement elements, these bring great opportunities for students to reap added benefits.

One initial benefit of placement working is that it helps students orientate themselves within archaeology – developing a greater understanding of how different organisations work and interact with each other, and giving the student an even better idea of the particular areas they might like to work in and organisations to work for.

Welham (forthcoming) found that involving employers with the student learning experience helps students to contextualise the nature of archaeological employment and helped them ‘visualise what it was they might ultimately end up doing’.

Being part of a real workplace is a very distinct experience from classroom or practical learning within the university framework. As well as learning and applying vocational skills on a daily basis, students will also be immersed in a (possibly completely new) context where different interpersonal skills and self-management capabilities become even more important.

It is crucial that an understanding of the new demands of the workplace are taken on board rapidly – issues like working to new types of time deadlines and dealing with different resources are crucial aspects of getting on at work – and it is the people that can demonstrate how they best cope with such issues that are often valued by would-be employers even more than those that show archaeological competence.

The students discussed by Welham (forthcoming) also noted the integration of the techniques they were studying with the end goal of employment, and valued the employer’s interest in them as potential future employees.

It is very important to remember that the host organisation, and the contacts that are made there, might be that future employer, whether in the short-, medium- or long-term future. Establishing a network of professional contacts, both within the organisation and through other organisations that the employer might deal with is also a very positive and valuable aspect of the placement experience.
Occupational Standards, Vocational Qualifications and Evidence-Based Learning

National Occupational Standards (NOS) are benchmarks of performance, defining a person’s competence in carrying out particular tasks in their working lives. They are therefore concerned with what individuals can do rather than simply with what they know, although underpinning knowledge is a recognised element of competence (Aitchison 2004). They are extremely valuable tools that can be used to make archaeological teaching and learning truly vocationally relevant.

NOS have been developed for many areas of employment, and those in archaeological practice were developed through an extensive, iterative process by professional archaeologists from a wide range of working backgrounds. This process involved the development of standards after exploring all the roles undertaken by archaeologists in all sectors in their working lives. This process has ensured both that the standards are vocationally relevant and given them the credibility of peer-review.

In total, 168 separate elements of the NOS were identified and described during the process (Carter & Robertson 2002), which significantly recognised that the majority of skills that archaeologists need at work are not archaeology-specific. The skills needed by archaeologists are often generic, interpersonal or organisational – which are then applied in an archaeological workplace situation. These are the skills that make individuals employable.

Each NOS element is a performance benchmark – it sets out what a particular competence is, what context it is used in, what underpinning knowledge is required to apply it, and, crucially, what has to be done by an individual to demonstrate that they have this skill in terms of evidence requirements and rules.

This evidence can be gathered in the workplace or the classroom – allowing individuals to demonstrate their competence to current or potential future employers. This means that there are also tools that can be used to develop vocationally relevant training material – used to identify skills that can be taught and the evidence that students will have to produce to validate their acquisition of the skill. One way in which they will be applied will be through Qualifications in Archaeological Practice. These will be introduced by the Institute of Field Archaeologists, will be founded entirely upon the NOS, and will be a novel mechanism for archaeologists to validate their skills. These will be high level (levels 3, 4 and 5) qualifications, which will allow practitioners to accredit their prior learning as well as validating new achievements.

Initially, the Qualifications will be aimed at people already working in archaeology, but there is great potential for components of the new Professional Qualifications to be incorporated into, or taught alongside, existing or new academic qualifications.

The Qualifications are not the only route that the NOS can and will be applied in archaeological education and training. There is great potential for aligning HE course content with the requirements of the NOS, so ensuring the vocational relevance of these courses - as has been achieved by several institutions, such as the University of Birmingham’s MA in Practical Archaeology (Roger White, pers. comm.).

They can be a straightforward tool for e-assessment, as they provide objective benchmarks to measure performance against, and they also provide a further quality control mechanism for validating individual performance rather than courses.

The National Occupational Standards in Archaeological Practice, and their application, are discussed in more detail in Aitchison 2002. They are freely available online at the Training Online Resource Centre for Archaeology (TORC) Website.
Conclusion

This Guide has outlined the concept of employability, discussed pedagogical and professional reasons for embedding it in the curriculum, and offered advice for tutors, students and employers using case studies drawn from current HE good practice. It has also flagged up objections to the concept and highlighted problems arising from innovative assessments. However, the main argument presented here is that learning to think critically about the past cannot be separated from an understanding of professional practice, since all archaeologists have an ethical obligation to engage with the issues that arise from the investigation, interpretation and use of the past. Moreover, the case studies and feedback used in this Guide suggest that real-world based or vocational-orientated teaching can develop deeper learning and greater reflexivity amongst students, whatever their career choice. In any discipline, it has the potential to deepen subject-specific knowledge and develop students into independent, critical thinkers. However, within archaeology, it has the additional potential to produce employees who can engage knowledgeably and critically with the existing legislative, institutional and economic framework of archaeology, with the aim of transforming future practice. The benefits of embedding employability into the curriculum are not simply individual: they are also collective and social, enhancing both the discipline and the many different communities with which it works.

Dr Melanie Giles is a lecturer in archaeology at the University of Manchester. Her specialism is the Iron Age of northern Europe, and she is Programme Director for the MA in Archaeological Field Practice.

melanie.giles@manchester.ac.uk

Kenneth Aitchison is Head of Professional Development at the Institute of Field Archaeologists, with responsibility for maintaining IFA’s standards and guidance and for developing training policies and projects. He sits on the Archaeology Training Forum and the Cultural Heritage Skills Advisory Panel. Previously he worked as an archaeological consultant and contractor.

kenneth.aitchison@archaeologists.net
Endnotes

1 http://www.hca.heacademy.ac.uk/archaeology/

2 Education versus Training: debating issues of employability in archaeology
http://www.hca.heacademy.ac.uk/archaeology/confprocs/tag2003/

3 Creating Tomorrow’s Archaeologists: Who Sets the Agenda?
http://www.hca.heacademy.ac.uk/archaeology/confprocs/tag2004/

4 http://www.framearch.co.uk/projects/T5/index.html

5 http://www.wesselexarch.co.uk/projects/kent/contrl/contrl.html

6 http://www.birmingham.gov.uk/GenerateContent?CONTENT_ITEM_ID=3224&CONTENT_ITEM_TYPE=0&MENU_ID=11478&EXPAND=1485

7 Skills: Getting on in Business, Getting on at Work
http://www.dfes.gov.uk/publications/skillsgettingon/

8 http://www.heacademy.ac.uk/869.htm

9 http://www.qaa.ac.uk/academicinfrastructure/benchmark/honours/archaeology.asp

10 Education versus Training: debating issues of employability in archaeology
http://www.hca.heacademy.ac.uk/archaeology/confprocs/tag2003/

11 Creating Tomorrow’s Archaeologists: Who Sets the Agenda?
http://www.hca.heacademy.ac.uk/archaeology/confprocs/tag2004/

12 http://www.britarch.ac.uk/training/atf.html

13 http://courses.bournemouth.ac.uk/3details.asp?programmeCode=FDFA

14 The Role of Fieldwork in Teaching and Learning Archaeology

15 Teamwork and Archaeology (Guide for Teaching and Learning in Archaeology No.3)
http://www.hca.heacademy.ac.uk/resources/guides/archaeology/teamwork.pdf

16 http://www.arts.manchester.ac.uk/subjectareas/archaeology/

17 http://www.york.ac.uk/depts/arch/

18 http://www.le.ac.uk/archaeology/

19 http://www.arts.manchester.ac.uk/subjectareas/archaeology/

20 http://www.york.ac.uk/depts/arch/

21 http://www.bournemouth.ac.uk/conservation/AHE.html

22 http://www.york.ac.uk/depts/arch/Wolds/intro.html

23 Foundation Degree in Field Archaeology
www.bournemouth.ac.uk/conservation/steps/FdSc.html

24 Roles and Skills
http://www.britarch.ac.uk/training/future.html

25 http://www.archaeologists.net/modules/tinycontent/index.php?id=1

26 http://www.hca.heacademy.ac.uk/access-archaeology/inclusive_accessible/

27 http://www.hca.heacademy.ac.uk/access-archaeology/inclusive_accessible/case_studies/index.php

28 http://www.bournemouth.ac.uk/conservation/steps/FdSc.html

29 http://www.wrce.org.uk/
http://www.leeds.ac.uk/educol/ncihe/

Foundation Degree in Field Archaeology
www.bournemouth.ac.uk/conservation/steps/FdSc.html

http://www.arts.manchester.ac.uk/subjectareas/archaeology/postgraduatestudy/maarchaeologicalfieldpractice/

http://www.brad.ac.uk/acad/archsci/depart/ugrad/for_arch_sci/

http://www.bradford.ac.uk/acad/archsci/adm_ug.php

http://www.iaa.bham.ac.uk/arch/ppractical.htm

http://www.torc.org.uk/nos/index.asp
Bibliography


http://www.re-skill.org.uk/papers/reframe.html (Accessed 17/08/04)


Layer, G. 2004. Widening participation and employability. LTSN Learning and Employability Series 2 (5) 
http://www.heacademy.ac.uk/embedded_object.asp?id=20065&prompt=yes&filename=EMP02 (Accessed 31/05/2006)


Moon, J. 2004. Reflection and Employability. LTSN Learning and Employability Series 2 (4) 
http://www.heacademy.ac.uk/resources.asp?process=full_record&section=generic&id=338 (Accessed 31/05/2006)

Moreland, N. 2006. Entrepreneurship and higher education: an employability perspective. LTSN Learning and Employability series 2 (6) 
http://www.heacademy.ac.uk/resources.asp?process=full_record&section=generic&id=342 (Accessed 31/05/2006)

http://www.leeds.ac.uk/educol/ncihe/ (Accessed 31/05/2006)


Welham, K. forthcoming. Enhancing Employability. Learning and Teaching of Key Archaeological Field Skills. On Reflection 11 
http://www.recordingachievement.org (Accessed 31/05/2006)

Yorke, M. 2006. Employability in Higher Education: what it is – what it is not. LTSN Learning & Employability Series 2 (1) 

http://www.heacademy.ac.uk/resources.asp?process=full_record&section=generic&id=337 (Accessed 31/05/2006)

