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Pedagogy and Practice: The Provision and Assessment of Archaeological Fieldwork Training in UK Higher Education

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Abstract

With significant job losses across the UK Heritage sector resulting from the recent economic crisis and subsequent austerity measures, and UK Higher Education on the brink of effective privatisation, the teaching of applied archaeological techniques and its relationship to graduate employability has never been more keenly scrutinised. In February and March 2011 the author collected data relating to the provision and assessment of fieldwork from all 44 UK institutions then offering archaeology (or closely related) degree programmes. Results indicated that there were 4,718 undergraduate students (approximately 1,591 per year group) on those programmes, being taught by a total of 708.61 (FTE) academic and support staff. An average of 66.47% of staff in each department were actively engaged in archaeological fieldwork. Results also demonstrated the diversity of approaches to assessed fieldwork training across the sector, with over a quarter reporting either no fixed policy, or no requirement. Of the rest, the greatest numbers required four or six weeks. Thirty two percent of HEIs reported that their fieldwork was mostly UK-based with some overseas projects, while 30% predominantly worked in their home region. In terms of assessment, 41% of respondents assessed their students in the field – giving either an overall mark or individual marks for each task – supported by assessed written work, predominantly in the form of site diaries.

Key words

Fieldwork Training; Applied Archaeology; Higher Education; UK

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Introduction

The discipline of archaeology is defined by its principal methodology in a way that is true of perhaps no other. Since it emerged as a practical, physical expression of antiquarian interest in the early 19th century, archaeology has been primarily identified through its applied techniques. Sir Richard Colt Hoare introduced the first volume of *Ancient Wiltshire* with the phrase “We speak from facts, not theory” (Hoare 1810) in reference to the approach to excavation and recording being pioneered by William Cunnington. This was in stark contrast to the largely literary and etymological researches of antiquarians of the day. A hundred years later and, although the processes themselves had been refined by subsequent generations of archaeologists, fieldwork remained at the heart of the discipline. Sir Leonard Woolley, in distinguishing between archaeology and ‘casual’ excavation, wrote that

In its essence Field Archaeology is the application of scientific method to the excavation of ancient objects, and it is based on the theory that the historical value of an object depends not so much on the nature of the object itself as on its associations, which only scientific excavation can detect. (Woolley 1937:16)

He also emphasised the destructiveness of excavation (Woolley 1937:35), a warning repeated by Sir Mortimer Wheeler in his classic textbook *Archaeology from the Earth*.

At the best, excavation is destruction; and destruction unmitigated by all the resources of contemporary knowledge and accumulated experience cannot be too rigorously impugned.

(Wheeler 1954:15)

This emphasis on the centrality of fieldwork to the discipline, and the critical importance of training and “learning from the experience of [our] predecessors” (Kenyon 1952: 54) appears time and again

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in the best known British introductory texts of the 20th century (Piggot 1959; Webster 1963; Barker 1977). This emphasis is also to be found in the UK Quality Assurance Agency (QAA) for Higher Education's most recent *Subject Benchmark Statement* for Archaeology, which states, with very little change in wording from the 2007 document, that:

Archaeology within Higher Education firmly aligns itself with a liberal view of education and learning, while recognising the vocational application of the subject's knowledge base and skills. Understanding the interplay between theories and methods, central to any archaeology programme, is achieved by involving students directly in the recovery and analysis of primary material via involvement in departmental or other approved research projects.

(QAA 2014: 8)

Given all of the above, it is perhaps surprising that there remains a significant degree of variability in the teaching of archaeology at UK Higher Education Institutions (HEIs), in terms of the delivery and extent of training in field skills. In February and March 2011 the author carried out the first complete survey of the various approaches to fieldwork provision and assessment across the UK Higher Education sector, receiving detailed responses from all 44 institutions offering archaeology degree programmes.

Background

This research took place against a backdrop of significant job losses in British commercial archaeology, and an expectation that competition for advertised vacancies would be fiercer than ever before. In that marketplace more scrutiny is being placed upon the ways in which HEIs prepare their students for a career in archaeology, through the provision and assessment of training in applied archaeological techniques. This issue has been compounded by the Coalition Government's decision, in 2010, to massively reduce public financial support for Higher Education - a decision which saw the publicly-funded teaching budget cut by 80% overall, and cut completely for arts and humanities

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subjects. This huge shortfall in funding has had to be filled through unprecedented increases in tuition fees in England from 2012 (devolved Higher Education funding in Scotland, Wales and Northern Ireland means that the situation across the UK is varied). The vast majority of English HEIs offering archaeology opted to charge the maximum allowable tuition fees of £9,000 a year from September 2012, while others followed suit in subsequent years. However, until recently, the Higher Education Funding Council's support of subjects like archaeology (so called 'Band C' subjects such as geography and psychology with increased running costs by virtue of including fieldwork and/ or laboratory work) has reflected the additional associated costs. With many institutions now charging a flat fee across all their programmes, regardless of running costs, it seems likely that the focus of university managers will fall on areas where 'efficiency savings' can be made, with a very real threat to the integrity of those humanities subjects with a strong practical component (Sinclair 2010) and there have already been some notable casualties. These relatively recent changes to the way in which HE is funded in England have, therefore, had the twin, opposing effects of bringing graduate employability to the fore in student recruitment and reducing the funds that departments have available to support increased levels of fieldwork training.

Alongside these recent developments, resulting from the economic crisis and the austerity measures implemented by the Conservative-led coalition, is the longer term concern that graduate archaeologists are not universally equipped with the appropriate skills sets to make the transition into commercial, developer-funded archaeology. This was identified at least 14 years ago at a Young Archaeologists' Conference in Southampton.

few, if any, of the [degree] courses were really seen, by those on them, as providing the necessary background for archaeological employment. One major factor in this was argued to be the perceived conflict between an archaeology degree as a general academic education and as an archaeological training. Put crudely, some archaeology degrees have little

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*or no value for a student rash enough to want to follow a career in
archaeology in Britain* (Joyce et al 1987: v)

Since then of course employment in the commercial sector has become an almost entirely graduate-entry career, and the growth in that sector between the implementation of PPG16 in 1990 and the onset of the recent economic crisis has supported greater numbers of archaeologists than ever before. Even with the recent job losses it is, as a sector, still the single largest employer of graduate archaeologists. The Institute for Archaeologists’ (IfA) *Archaeology Labour Market Intelligence: Profiling the Profession 2007-08* (Aitchison and Edwards 2008) reported 4036 archaeologists employed in the commercial sector (and a total of 6865 across all sectors). The IfA and the Federation of Archaeological Managers and Employers (FAME) subsequently produced nine quarterly reports of job losses in archaeology covering the period from October 2008 to April 2011. A final report, covering the six months from April to October 2011, was produced by Landward Research Ltd for IfA/ FAME by which time a small, sustained recovery (i.e. over and above the summer increases in staffing) was evident. Data in *Profiling the Profession 2007-08* (Aitchison and Edwards 2008) and *Job Losses in Archaeology – October 2010, January 2011* (Aitchison 2011) provided the best indication of the state of the profession at the time of the survey, and is therefore referred to here as part of the contemporary picture. These surveys provide a startling picture of the scale and pace of job losses (Table 1; Figure 1) that reduced the size of the workforce by 21% between August 2007 and January 2011.

Aug 2007	Oct 2008	Jan 2009	Apr 2009	Jul 2009	Oct 2009	Jan 2010	Apr 2010	Jul 2010	Oct 2010	Jan 2011
4036	3906	3561	3323	3472	3526	3270	3404	3669	3333	3189

Table 1: Numbers employed in commercial archaeology (Aitchison 2011: 6)

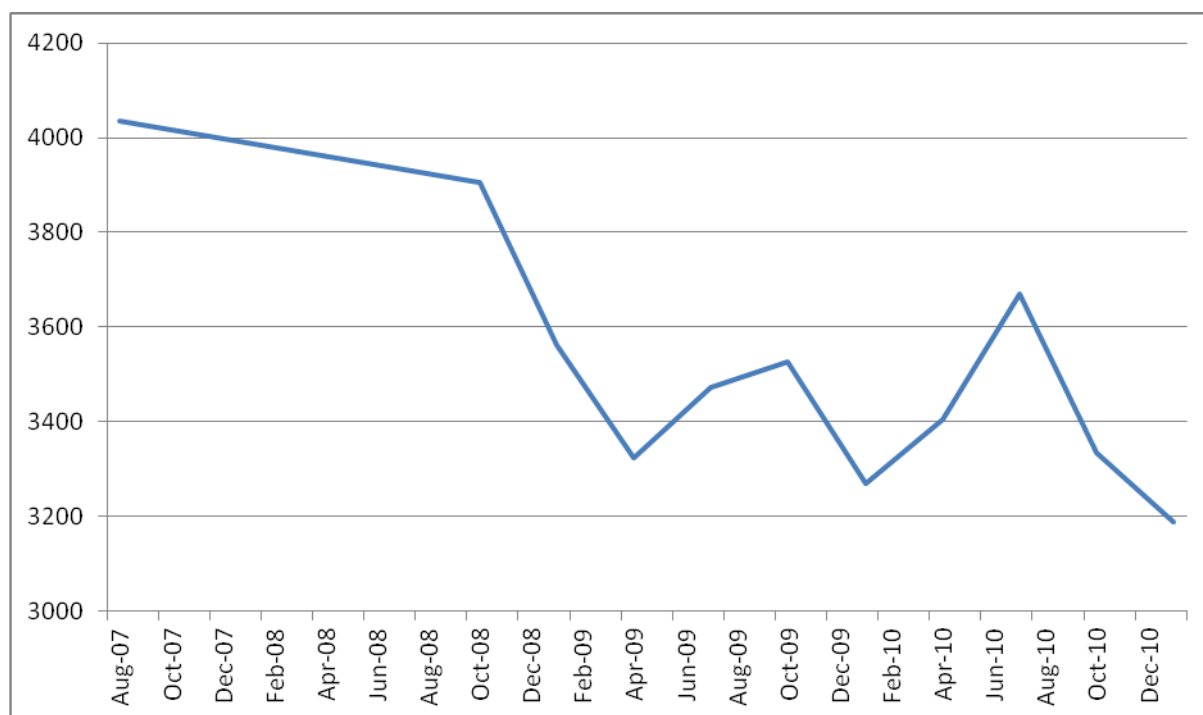


Figure 1: The rate of job losses in commercial archaeology (from Aitchison 2011)

With the loss of jobs inevitably comes a loss of skills from the sector, and this has exacerbated a growing concern amongst employers regarding skills gaps. In *Profiling the Profession 2007-08*, 19% of employers reported skills gaps relating to “contributing to intrusive investigations (evaluation, excavation) as team members or diggers” (Aitchison and Edwards 2008: 153). The only areas that were more exposed were “artefact research” (39%) and “desk-based historic environment research” (36%), both of which might be considered to be specialisms the training for which lay beyond the remit of a standard degree programme, probably in the form of postgraduate degrees or ‘on the job’ training. In the *Job Losses in Archaeology – October 2010, January 2011* report (Aitchison 2011), employers were asked to identify which skills areas were being particularly affected by the redundancies. “Contributing to intrusive investigations” (28%), and “Conducting (leading or directing) intrusive investigations” (26%), were the top two responses by a significant margin, undoubtedly

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reflecting the increasing scarcity of large excavation projects making it harder to retain the large number of staff (often in their 20s and on short, fixed term contracts) employed purely in those roles.

Previous research on fieldwork training

Undoubtedly the most significant UK study on this topic has been *Investigating the role of fieldwork in teaching and learning archaeology* (Croucher et al 2008) for which 434 students and 103 staff were interviewed in the summers of 2004 and 2005. The respondents represented 25 UK HEIs, plus nine Further and Continuing Education institutions, four non-UK HEIs and four non-student volunteers (Croucher *et al* 2008: 10). This was the first research to offer a national perspective on fieldwork provision and its pedagogic importance to archaeology. The key conclusions of the report can be summarised by a selection of the section headings used, as follows:

- Students wanted more archaeological fieldwork during their degree programmes
- The value that fieldwork added to the undergraduate degree experience was almost entirely positive
- Fieldwork may be profitable in attracting student numbers
- Assessment is a contributory factor to positive fieldwork experiences
- A high number of students expressed a wish to continue into a career in archaeology
- Students believe that universities should be providing at least some foundation for a career in archaeology
- There are a large number of transferable skills gained through fieldwork

(Croucher *et al* 2008: 51-3)

Other recent research that looks specifically at the teaching of fieldwork includes work on the value of field schools in providing an ‘authentic’ learning experience for future professionals (Perry 2004); research on student self-evaluation in fieldwork, and the potential role of critical appraisal by students of their own performance in the field (Thorpe 2004); a study considering the importance of the

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hierarchy, structure and organisation of a training excavation in terms of delivering appropriate teaching and learning outcomes (Everill 2007); and a discussion of the ways in which the focus of fieldwork can be altered to better support the learning of generic skills (Brookes 2008). There was, however, no recent data on fieldwork requirements within degree programmes, the assessment types employed or the extent to which student participation was funded. The need to obtain this data was noted in meetings of the Standing Committee for Archaeology (SCFA) in 2007 and 2008 (Anthony Sinclair, pers. comm.). This research has, therefore, not only provided this much needed data, but it has done so on the eve of the greatest ever change to Higher Education provision in the UK. This timing is crucial in providing a snapshot of the state of archaeology within HE at the end of a ‘golden age’ (Sinclair 2010). It is intended that this survey be repeated at regular intervals in order to map changes as the sector negotiates significant new challenges.

Methodology

A contact list was produced from a search on the UK’s University and College Admissions Service (UCAS) website. UCAS listed a total of 49 institutions offering archaeology for admission in September 2011. Amongst these institutions were those offering Forensic science programmes that included an element of anthropology. However, on further investigation a number of these were not found to include substantial amounts of archaeological study or fieldwork, and as such were not included on the contact list. The UCAS listing also included some Universities that, while not offering a full Archaeology degree, did offer a related degree including a significant amount of archaeology, and these were included on the project contact list. Individual points of contact were added to the database from a search of departmental websites, looking specifically for those identified as Fieldwork Officers, Heads of Undergraduate Teaching, or similar posts.

The basic questionnaire was developed with the intention that it be quick and easy to complete. However, institutions were encouraged to provide more detailed answers, further information and/ or

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supporting documentation if they had time. The questionnaires, along with a covering letter, were sent out on 10th February 2011 to the 44 institutions and after following up on non-responses all target institutions had supplied data by 14th March 2011. This data was entered onto a Microsoft Access database upon which queries were run.

RESULTS

The nature of responses was wide ranging, from those which were extremely detailed through to those which answered the key questions but did not expand or provide any further information. While the questionnaire asked institutions to provide data on student and staff numbers not all respondents were able to provide this information. Six institutions were unable to provide student numbers, although of these only one offered an archaeology degree programme, with the remainder teaching broadly related subjects with no fieldwork requirement.

The HEIs represent a diverse cross-section of the sector, ranging from small independent universities and HE colleges, through to large collegiate universities. Seventeen (38.6%) of the universities belonged to the Russell Group, while eight (18.2%) belong to the 1994 Group. Eleven (25%) of the universities were independent, and the rest belonged to smaller alliances.

Student numbers

The responses were collated in the database, and queries run on undergraduate student numbers by ‘Single Honours Archaeology’, ‘Joint honours Archaeology’ and other, ‘archaeology-related subject’ to produce approximate student numbers by year group and total. Thirty-six percent of HEIs indicated that they had fewer than 31 students per year; 16% had between 31 and 50 students per year; 23% reported between 51 and 100 students per year; 9% have more than 100 students per year. Non-responses accounted for 16% (Table 2).

1-30 students per year	16
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31 to 50 students per year	7
51 to 100 students per year	10
More than 100 students per year	4
Non-responses	7

Table 2: Institution size indicated by archaeology (or related subject) students per year

As stated above only one institution that taught an archaeology degree programme with an assessed fieldwork component failed to provide numerical data for their students. Despite this fact it should be recognised that a number of departments provided estimated numbers and therefore the figure of **4718** undergraduate students (all years) on archaeology or related programmes is not exact. Taking into account the fact that certain institutions offer four year courses (and using precise year group figures where they were supplied) the responses indicate that there were approximately **1591** undergraduate students per year group studying archaeology or a closely related subject in the UK. This provides some indication of the current number of graduates seeking employment or further study each year.

Phillips and Gilchrist (2005) conducted a survey of 35 HEIs, 20 of which responded. Of those, only 18 provided student numbers and consequently their data appear to represent around 50% of the actual number of archaeology undergraduate students (Table 3). The Higher Education Statistics Agency (HESA) has provided figures for those studying archaeology since the mid 1990s, and this data has been reported for Universities UK by Ramsden since 2001 (Ramsden 2010: 3), and for the archaeological sector by Aitchison and Edwards (2008). However, the categorisation of archaeology in the original HESA data is not straightforward and therefore the figures are not completely reliable (Aitchison and Edwards 2008: 45). Initially the subject was reported as “Archaeology”, under the category of “Historical and philosophical studies”, and as “Archaeology as a physical science” listed

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under the category of “Physical Science”. Since 2002/3 the latter was changed to “Forensic and archaeological science” presumably, therefore, including a number of students for whom archaeology was not a significant area of study. Comparison with the results of this recent survey (Table 3) appears to indicate that a strikingly small number of undergraduates, considered by their own departments to be primarily studying archaeology or a closely related degree, fall within the “Physical Science” category.

Figure 2 shows the trends in student recruitment using HESA figures for archaeology within the category of “Historical and philosophical studies”. These figures demonstrate a substantial increase in student numbers in the academic year 2002/3. Contrary to popular opinion, this does not appear to be linked to the inclusion of forensic sciences as that seems to have only impacted on the “Physical Science” category. It is possible that some other change in the way data was collected or reported is responsible for this increase.

Type of Degree	Total students per year	Total students, all years	HESA figures 09-10 Archaeology within “Historical and philosophical studies”	HESA figures 09-10 Forensic and archaeological science within “Physical Science”	Phillips and Gilchrist (2005)
Single Honours Degree	947	2828	-	-	1453

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Joint Honours Degree	460	1318	-	-	675
Related subject Degree	184	572	-	-	181
Total u/g Students	1591	4718	4410	8535	2309

Table 4: Student numbers, compared with HESA figures for 09-10

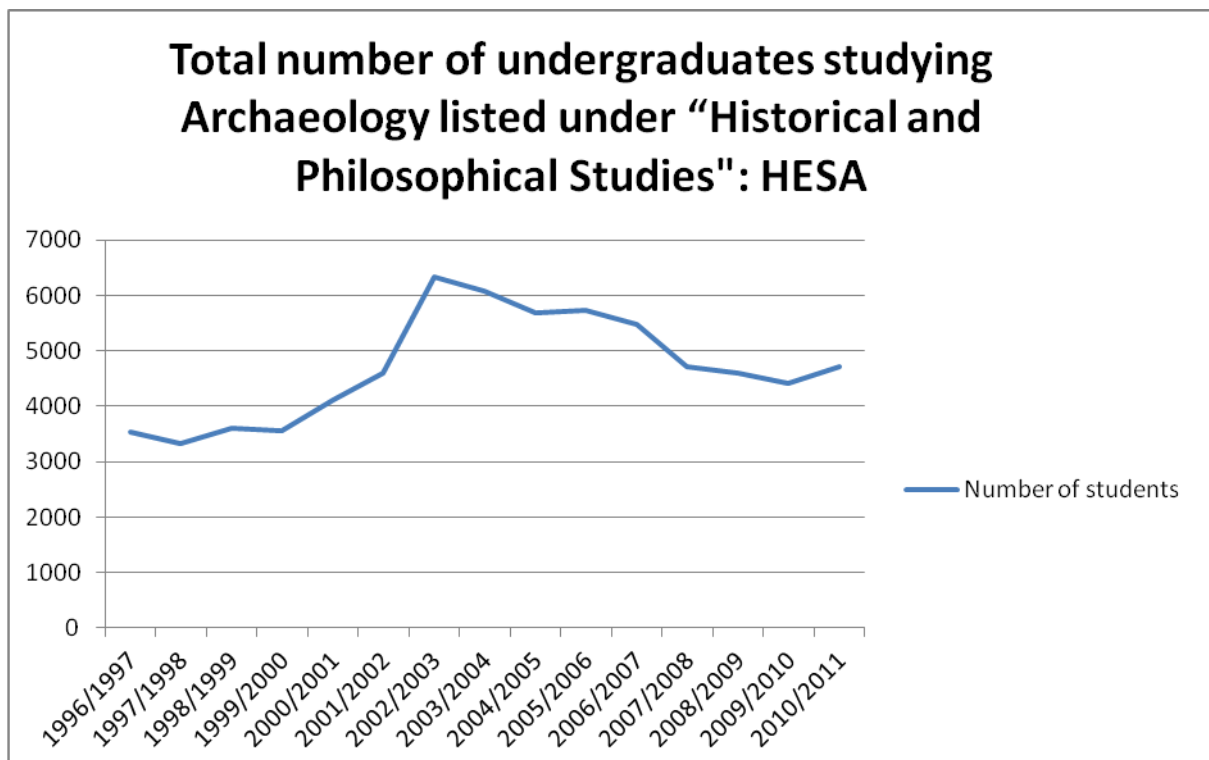


Figure 2: Student recruitment trends (HESA, plus results of this survey for 2010/11)

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Staff

Respondents were asked to identify numbers of academic and support staff in terms of ‘Full-Time Equivalence’ (FTE). Aitchison and Edwards (2008) give an estimated number of individual archaeological staff working at Universities as 1009, scaled up from a confirmed, but partial figure of 437. The FTE figures provided by respondents to this survey (708.61 academic and support staff, see Table 4) would appear to broadly support Aitchison and Edwards’ figure, and suggests that there are a substantial number of part-time staff teaching (or supporting the teaching of) archaeology at HE level – perhaps as many as a third of the total number of staff.

Type of staff	Number of staff (FTE)
Academic Staff	552.5
Support Staff	156.11
Total Staff	708.61

Table 4: Academic and Support Staff in HE Archaeology (FTE)

The questionnaire also asked for an indication of what percentage of staff were actively engaged in fieldwork (Table 5). Excluding the responses from departments who felt this was not applicable (largely those who did not have a fieldwork requirement on programmes which were predominantly not archaeologically focused) the average across the UK HE sector is 66.47% of staff actively engaged in fieldwork.

Percentage of staff involved in fieldwork	Number of responses
Not Applicable	6
1-20%	3

21-40%	6
41-60%	6
61-80%	12
81-100%	11

Table 5: Archaeology staff involvement in fieldwork

Another interesting perspective on staff involvement in fieldwork is provided by looking at those responses in relation to the size of the institution. Fourteen of the HEIs in this survey reported less than 10 academic staff. Of these, only two reported less than 50% of staff involved in fieldwork projects; five reported between 51% and 80%; and six reported that more than 80% of their staff were actively engaged in fieldwork.

Seventeen HEIs had between 10 and 20 academic staff. Of these, eight had 50% or less involved in fieldwork; four reported between 51% and 80% involved in fieldwork; and five reported more than 81%.

Eight HEIs had 21 members of academic staff or more. Of these institutions, only two had less than 50% of staff involved in fieldwork, six had between 51% and 80% involved in fieldwork projects and none had more than 81% involved in fieldwork.

The implication of these results seems to be that there is a core of staff engaged in fieldwork in every department, and numerically speaking this might be a similar number regardless of institution size. However, within smaller departments fieldwork perhaps underpins a greater percentage of the teaching focus, while larger departments are able to invest in other areas of teaching/ research that are not dependent on active engagement with fieldwork.

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Fieldwork provision

The survey asked participants about their fieldwork policy in relation to the best location for the teaching and learning of applied techniques (Table 6). Eighteen percent felt that dedicated training excavations were most appropriate; 7% favoured research projects with a managed training component; 5% believed that simply participating on staff research projects was sufficient. However 50% of the HEIs surveyed felt that the most effective vehicle was to utilise a combination of all those approaches. Twenty percent had no fixed policy in this regard.

<i>“We believe our students’ learning of applied techniques is best supported:”</i>	
On a dedicated training excavation, incorporating a variety of tasks	8
On research projects with a planned/ managed training element	3
Through participation on staff research projects	2
A combination of the above	22
No fixed policy	9

Table 6: Fieldwork Policy

Participants were also asked about the provision of fieldwork within their department, and were able to tick more than one box on the questionnaire. Of the 44 HEIs, 34% offered a principal department fieldwork project. However, 18% of all respondents also answered secondarily that they offered a variety of projects to choose from, and 14% indicated a tertiary option: that they offered places on projects that are managed/ led externally. This range of answers appears in most cases to result from differing requirements and provision across year groups. A total of 45% offer a variety of in-house projects with 18% of all HEIs describing a secondary option of externally managed/ led projects. Five

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percent of the 44 institutions responded that they simply offered places on externally managed/ led projects, and 2% expect their students to organise their own participation on external projects. The smallest institutions (i.e. the 7% with 10 students per year or less) were completely dependent on external partners, or projects managed externally. While this is probably a result of existing budgetary constraints, it seems likely that institutions of all sizes will increasingly utilise external partners/ projects in the future in order to deliver cost-effective training opportunities, often including an element of ‘industry experience’.

Fieldwork requirements

Respondents were asked to provide basic information relating to fieldwork requirements for their undergraduate programmes, and whether this differed across year groups and/ or programmes. Responses were grouped by year group where possible (Table 7), or as an overall figure for the total amount of fieldwork required to be undertaken at some point during the degree (Table 8). The results in these tables are the maxima, in cases where several degree programmes had different requirements. However, these figures are exclusive of instances where applied techniques were identified as being taught as part of weekly sessions within modules. This is, of course, common practice, but for the purposes of this research the primary focus was on fieldwork training that took place within a specific project over a prolonged, continuous period.

One of the striking aspects of these figures is that 27% of HEIs reported either no fixed policy on assessed fieldwork, or no requirement. Of those that reported a fieldwork requirement by year, the majority indicated that this was four weeks in the summer between 1st year and 2nd year and/ or 2nd year and 3rd year, closely followed by three weeks over the same periods. A smaller, but significant number also now require undergraduates to undertake a block of one or two weeks fieldwork (often a training excavation) during the 1st year. One respondent observed that “*since we introduced the one week training dig prior to going on the research field projects, the standard of the student contribution and experience [on the summer excavation] has improved.*” In terms of total fieldwork requirements

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over the course of an entire degree programme, this varies from 0 – 11 weeks, however the greatest numbers require four or six weeks. Though often supported by individual practical sessions within other modules, this is clearly not sufficient to prepare an undergraduate for archaeological employment.

	First Year – during academic year	Second Year – summer between 1st and 2nd Year	Third Year – summer between 2nd and 3rd Year
1 week	9%	2%	
2 weeks	5%	7%	5%
3 weeks		9%	9%
4 weeks		14%	11%
5 weeks		2%	2%
6 weeks		2%	
No yearly requirement specified	30%		
No fixed policy/ No fieldwork requirement	27%		

Table 7: Yearly fieldwork requirements in weeks

Total number of weeks	Responses
No fixed policy/ No fieldwork requirement	27%
2 weeks	5%
3 weeks	7%
4 weeks	18%
5 weeks	5%
6 weeks	18%
7 weeks	2%
8 weeks	7%
10 weeks	7%
11 weeks	2%

Table 8: Total fieldwork requirement over the course of a degree

Location of fieldwork

HEIs were asked about the location of their fieldwork and from the responses it is possible to draw a number of conclusions, possibly reflecting different approaches based on institutional size and resources. Of the four available options a narrow majority (32%) answered that their fieldwork took place predominantly in the UK, with some international projects. This was closely followed by those who answered that their fieldwork took place within their local region (30%). Only 11% answered that their fieldwork was restricted to the UK, with the same percentage working entirely abroad (Figure 3). No answer was received from 16% of HEIs – this includes those who felt the question was not applicable to them.

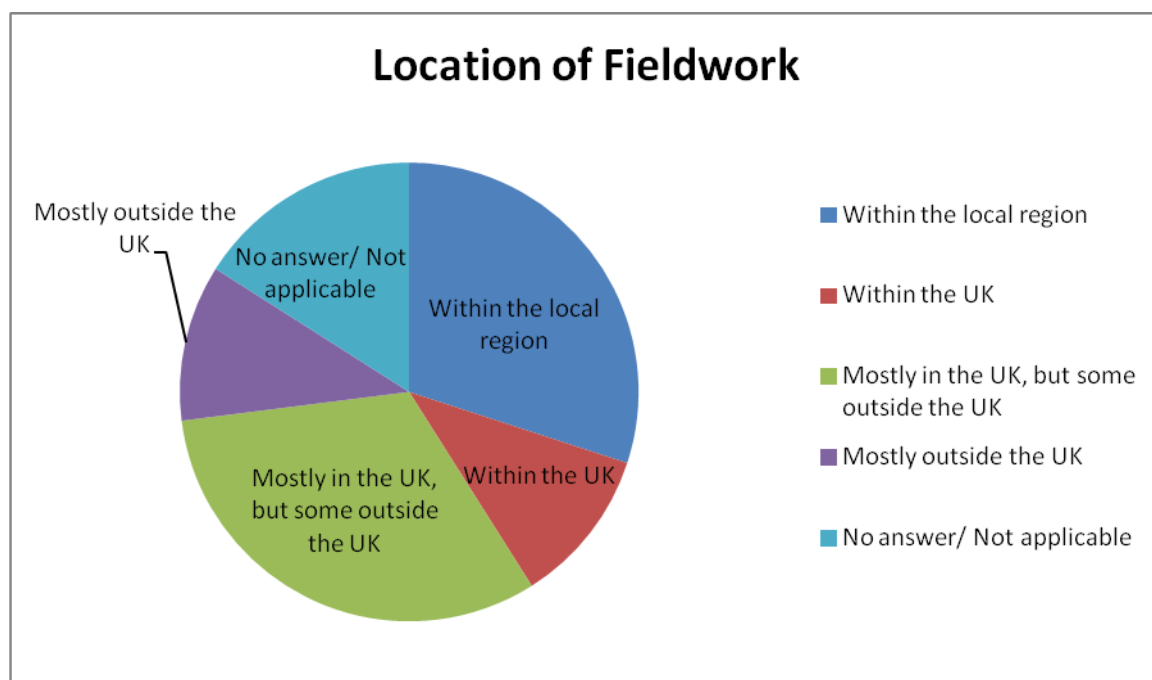


Figure 3: Location of fieldwork

Perhaps unsurprisingly it seems from the responses that larger departments, in terms of staff and students numbers, are better able to resource fieldwork beyond the local region, and broadly speaking the largest departments are able to offer more fieldwork outside the UK than the small departments with less than 10 (FTE) members of academic staff.

Funding of fieldwork

Institutional financial support of fieldwork was an important consideration of the survey. However, given the sensitive nature of the data requested it was made clear that respondents who were concerned about it should leave this blank rather than simply not return the questionnaire. Where this information was provided it has provided an interesting insight.

HEIs were asked how much funding they provided to support student fieldwork, both in terms of the extent to which it was funded (fully, partially, not at all), and the amount available per student. Of

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those who answered the first question, 58% partly funded their students' fieldwork and 26% fully funded it (Table 9; Figure 4).

To what extent do you fund student fieldwork?	Number of Institutions
The department fully funds student participation	10
The department partly funds student participation	22
The department offers no financial support	6
No Answer	6

Table 9: The extent of financial support for student fieldwork

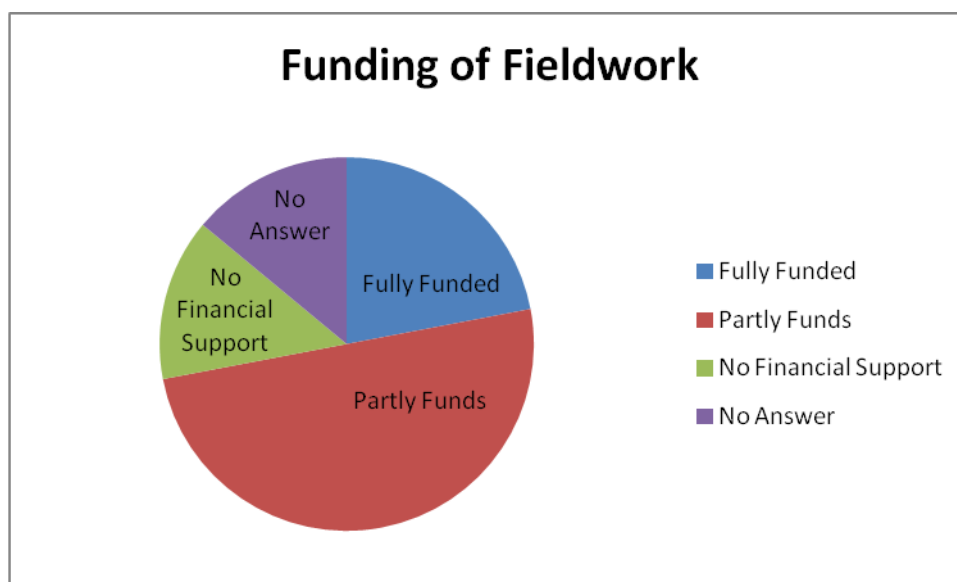


Figure 4: The extent of financial support for student fieldwork

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When asked how much was spent supporting student fieldwork over the course of a degree, 35 institutions gave a figure from within a range of options (Table 10; Figure 5). The greatest number of those (29%) spend between £100-£300 per student; 20% spend between £300-£500; 14% spend up to £100; and 14% spend more than £500. While 20% spend nothing at all supporting student fieldwork, this does include some institutions at which no assessed fieldwork takes place.

Institutional support of assessed fieldwork was also analysed using student numbers as an indication of institution size (Table 11). The general trend appears, unsurprisingly, to be that larger departments spend more supporting student fieldwork, however smaller departments produced the greatest variety of responses, from nothing right through to £500 or more per student. This seems most likely to be a result of combining results from institutions with small departments and modest budgets, and those at which a

Spend per student	Number of institutions
Nothing	7
Up to £100	5
£100-£300	10
£300-£500	7
More than £500	5
Unsure	1
Declined to Answer	9

Table 10: Spend per student on assessed fieldwork

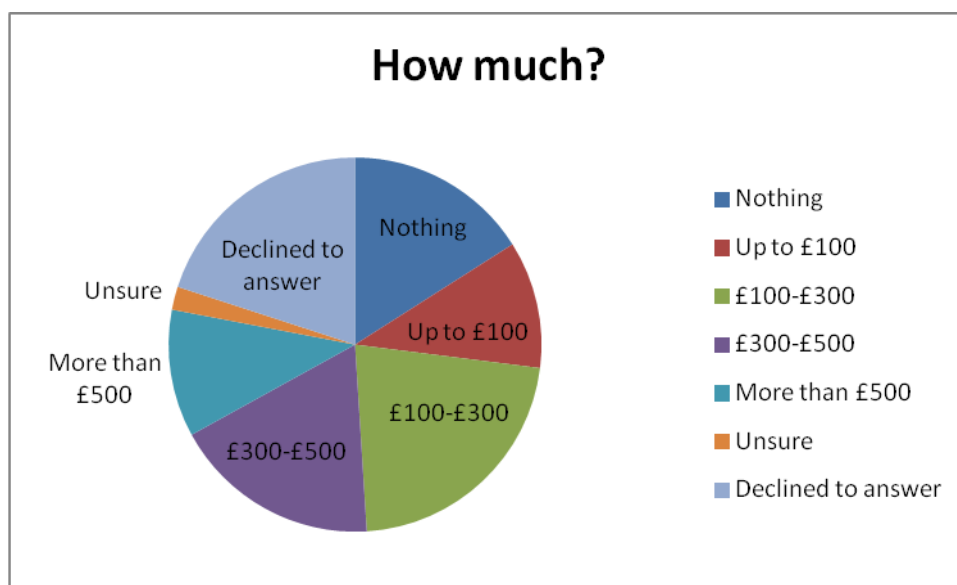


Figure 5: Spend per student on assessed fieldwork

small archaeology department is not representative of the institution as a whole. It should also be noted that the respondent who reported by far the greatest financial support, well in excess of £500 per student, was the seventh smallest in terms of student numbers at an institution that had a fieldwork requirement. Furthermore it also seems to be the case that the upper medium-sized departments (51-100 students per year) are often able to spend more per head than the largest institutions.

Another indicator was provided by analysing institutional financial support in relation to the location of fieldwork (Table 12). Of the respondents who provided this information, the same number of HEIs reported that their fieldwork was UK-based as reported that it was mostly international (14% of total cohort each). A similar number worked regionally as provided a mix of UK-based and international projects (27% and 36% respectively of total cohort). However, the extent of financial support was markedly greater at institutions with a more significant international element.

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Per Year Group	No funding	£1-£100	£100-£300	£300-£500	£500+
Up to 30 students	27% (4)	20% (3)	13% (2)	27% (4)	13% (2)
31-50 students		40% (2)	20% (1)	40% (2)	
51-100 students	18% (2)		36% (4)	18% (2)	27% (3)
100+ students			75% (3)	25% (1)	

Table 11: Spend per student by size of institution

Fieldwork location	No funding	£1-£100	£100-£300	£300-£500	£500+
Local region	33% (4)	25% (3)	17% (2)	17% (2)	8% (1)
UK	50% (3)	17% (1)		33% (2)	
Mostly UK, some international	13% (2)	6% (1)	38% (6)	31% (5)	13% (2)
Mostly international			33% (2)	33% (2)	33% (2)

Table 12: Spend per student by location of fieldwork

Assessment Practice

Respondents were asked if/ how fieldwork was assessed at their institution. They were offered a number of methods to choose from, and the option to tick more than one box. They were also encouraged to provide more detail in a 'free text' area on the reverse of the questionnaire, and to

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append any relevant module documentation or student handbooks relating to the fieldwork component.

Of the 44 HEIs, 41 answered this question, with a number ticking more than one box (Table 13). Of the primary answers, 16% of all HEIs replied that the question was not applicable, or that no formal assessment of fieldwork took place. Twenty seven percent stated that students are assessed in the field and given an overall mark, while 18% assess students in the field and give marks/ feedback for each task. Twenty three percent reported that students were solely assessed by written work relating to their fieldwork, and in four cases (9% of all HEIs) students were not assessed in the field, but their attendance was signed off. Secondary responses demonstrate that 41% of HEIs supported assessment in the field (either detailed or overall) with the production of assessed work relating to the fieldwork – commonly including site diaries/ reflective journals (see below).

Assessment practice	
No response	3
No assessment of fieldwork	7
Not assessed in the field. Attendance signed off	4
Solely assessed on written work	10
Assessed in the field and given overall mark	12
Assessed in the field and given marks/ feedback for each task	8
<i>Assessment in the field supported by assessed written work</i>	18

Table 13: Assessment of fieldwork

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It is interesting, and perhaps a little surprising, to note that 25% of HEIs offering archaeology, or a closely-related degree programme, do not assess fieldwork undertaken as part of that course, with a further 23% assessing the student solely on written work. It is encouraging, however, to observe that 41% of institutions assess students’ performance in the field, and also require them to produce written work for assessment.

Assessment Type

Keyword analysis of the 38 ‘free text’ responses regarding assessment provides useful additional data (Figure 6) The most frequent occurrences (20 each) were mentions of on-site attitude; supervisor’s/ director’s reports; and post-excavation write-ups of fieldwork as contributing to students’ fieldwork marks. These were followed by 14 HEIs reporting that students were expected to keep a field diary while on site, and seven expecting students to keep a fieldwork portfolio of their skills and experience. Surprisingly three institutions require their students to sit written exams based on their fieldwork experiences. Four described monitoring the attendance of the students on site.

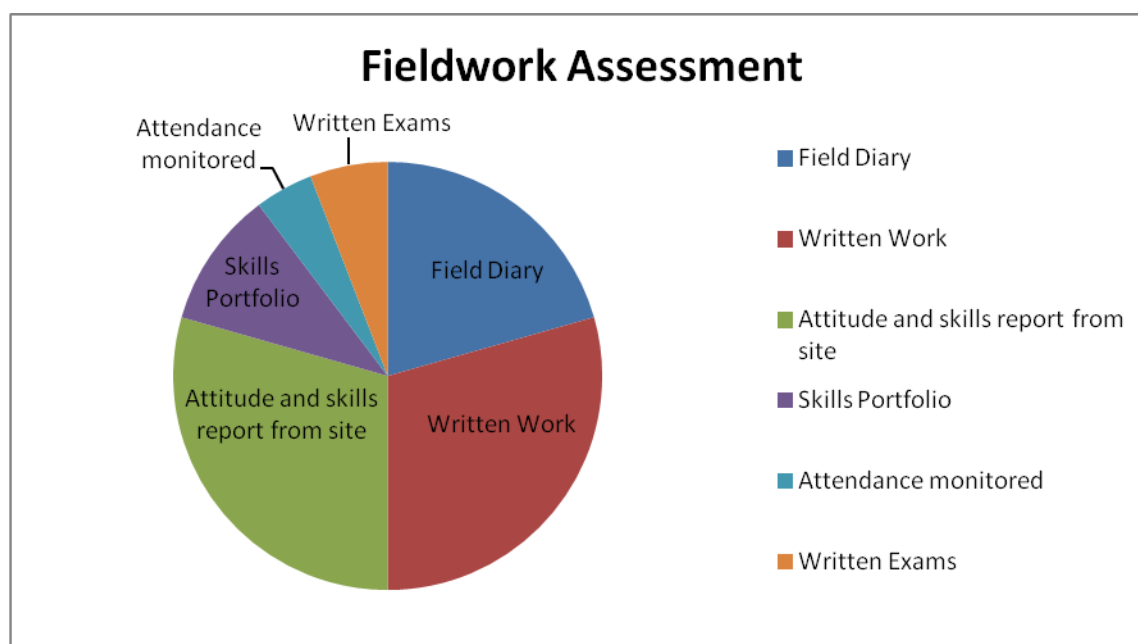


Figure 6: Descriptions of assessment types

Many of the forms of assessment mentioned above were reported with little further detail. However, from the institutions that did provide more information a much more detailed picture emerges. The majority of written work required seems to include accounts of the students' field experience, in which they are expected to discuss specific archaeological features; how they feel they contributed to the project; and analysis of the knowledge they had gained about the site. The students are often expected to explain methodologies and the importance of their work within the wider context. Other forms of written work relating to fieldwork are desk-based assessments produced during the second or third year.

Fieldwork portfolios were often a composite of a variety of assessment types, including site reports, student and staff feedback forms, diaries, photographs, drawings and written work.

Where Field Diaries are undertaken, they are generally of a similar nature. The student is required to complete a daily record of the work undertaken including finds; a brief analysis/ interpretation; drawings/ sketches; and photos of any features discovered or significant finds. They often include some mention of the daily conditions on site. The purpose of the field diaries is often student self-evaluation, but also an effective way of demonstrating student knowledge, understanding and skills development. Field Diaries usually figure alongside post-excavation written work; director's report; or marks given for attendance, attitude and skills development.

Directors'/ supervisors' reports seem to be a more general assessment of the students' skills development, attitude and conduct during the excavation. The majority of institutions described this form of assessment as a marks sheet upon which all the potential tasks were ticked off as they were undertaken by each student. Some of the marking sheets provided matrices on different levels of student interaction, team work skills and general attitude to work, as well as general fieldwork skills.

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The two forms of assessment least used were simple attendance monitoring, and written exams, both of which were far less popular than the other forms of assessment – perhaps for obvious reasons.

The written tests or exams existed in two forms, as described by respondents. The first was a form of test taken by the undergraduates while in the field. This seemed to include testing students’ knowledge of the site and their skills. The other form was classroom-based, with tests on health and safety, recording methods etc. One institution referred to this as a “Classroom quiz”, whereas another had an open exam for students on stratigraphy, health and safety, and sampling.

While written work was predominant amongst methods for assessing fieldwork, a significant number of institutions seem to undertake some sort of field-based evaluation and assessment of students. When assessment criteria are analysed by student numbers the indication is that the more students in the department, the less task-specific the assessment becomes, almost certainly reflecting concerns over staff time being devoted to it. Interestingly this trend – away from task-specific assessment – is also visible in departments undertaking fieldwork mostly overseas.

Conclusion

The provision and assessment of archaeological fieldwork in Higher Education has long been a focus for discussion across the discipline. Previous research has demonstrated that students want more fieldwork during their degree programme (Croucher *et al* 2008), and that employers want graduates to have greater levels of fieldwork experience and competency (Aitchison and Edwards 2008). As long as entry into professional archaeology (be it developer-funded, curatorial, academic or any other route) remains through Higher Education, there is clearly a responsibility placed on HEIs to enhance the employability of their graduates and deliver appropriate levels of training and preparation for those students who want a career in professional archaeology. There are those who argue that fieldwork

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(specifically excavation) should not be at the core of the applied techniques taught at universities, and that to place it there ignores the vast range of other skills and techniques employed by archaeologists. However, regardless of the precise career path pursued by graduates an understanding of the process of excavation – often utilising non-invasive techniques to determine strategy, and through which material culture; biological; geological; and stratigraphic evidence is obtained - is surely essential. Excavation need not be taught to the exclusion of others skills, but it can and should be taught effectively. There are others who argue that a university education should be focusing on so-called ‘transferable’ rather than vocational/ disciplinary skills yet, while the weight of numbers is in favour of those students who will not pursue a career in archaeology, all the evidence is that research/ training excavations are excellent for developing teamwork, confidence and decision-making in undergraduates. Perhaps of most concern, however, are those senior leaders of the discipline who argue that there is not a problem with regard to fieldwork training: this is just how it has always been and it works okay; commercial and academic archaeology are so similar the transition for new employees is effortless; and training opportunities for new entrants to the profession are plentiful. At best these views are a misreading of the situation on the ground from which those commenting are so far removed that they are not able to see the whole picture. At worst they represent the condescending views of an out-of-touch patriarchy that is frankly not much interested in the issue because it no longer impacts greatly on them. We can, and should, always be striving to do better. That is not to say that Higher Education should necessarily produce a finished article, but that the level of fieldwork training should at least be sufficient to provide a degree of competency upon which archaeological employers can, as in other professions, complete the training process. It is obvious that this cannot be achieved in a few short weeks, and that a significant number of degree programmes therefore cannot deliver competency in field skills for these students with their current field skills training provision. The budgetary constraints of recent years look likely to be compounded by even more dramatic financial concerns within HE, all of which is certain to throw the spotlight increasingly onto the perceived expense of fieldwork training. In this context there are two principal directions this debate can move in: other educational routes for entry into professional archaeology

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need to be found and developed; or HEIs need to develop more flexible, creative strategies for delivering the appropriate level of practical training needed for students who are seeking a career in field archaeology.

This survey has demonstrated the diversity of practice within HE in terms of the provision and assessment of fieldwork training. While it seems that institutions cannot be separated cleanly into those with or without an emphasis on applied techniques, the extremes of those positions can be clearly identified. The centre ground is occupied by institutions offering broadly comparable experience, and in many cases it may simply be the number of staff actively engaged in fieldwork that give individual departments a greater or lesser focus on applied techniques.

The fieldwork/ applied techniques component of archaeology degree programmes is almost universally identified as essential to the teaching of the subject, however it seems increasingly likely that employers will turn to other indicators of proficiency in the field. Several years ago this might have been the Archaeology NVQ developed by the IfA, but the take-up of this has not been sufficiently great to develop any significant momentum. A recent innovation developed by David Connolly of BAJR, the 'Archaeology Skills Passport' (<http://www.archaeologyskills.co.uk>), provides the mechanism for recording competency in key skills that the NVQ offered, but without the substantial costs, and the early indications are that commercial organisations are very supportive. If the professional take-up of the Archaeology Skills Passport is as widespread as seems likely, one way forward is for universities to incorporate it into their fieldwork training, providing continuity into professional practice that begins during undergraduate studies and provides employers with an effective measure of skills learned. However failure to adequately consider the delivery of the training itself might result in Higher Education being circumvented in the recruitment of entry-level site staff. While there may be much to recommend this there is a danger inherent in universities failing to remain relevant to archaeological training, in that it will result in two or more tiers of staff, with the predictable implications for career progression, pay and conditions of employment. It is also important to consider the role of fieldwork training for future academics, many of whom do not gain significant amounts of additional experience during their studies.

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For archaeology to be sustainable within HEIs the sector needs to address the concerns of employers and students. Clearly, however, traditional approaches to the teaching of applied techniques have cost implications that will be increasingly difficult to support. A number of HEIs appear to have developed close working relationships with external commercial organisations that reduce the costs of providing training, while giving their students valuable ‘real world’ vocational experience. As a sector, Higher Education needs to revitalise its relationship with archaeological employers, and seek collaborative solutions that provide greater opportunities for fieldwork experience and training.

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