



# Project to define professional functions and standards in archaeological practice

Final Report

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# Preface

This project has been commissioned by the Archaeology Training Forum<sup>1</sup> and funded through PSAG<sup>2</sup> and English Heritage. It has been project managed by the Cultural Heritage National Training Organisation (CHNTO) and the Institute of Field Archaeologists (IFA) and has been run by Alastair Robertson of Q-West Consultants (as the specialist standards consultant), and Dr Stephen Carter of Headland Archaeology Ltd (as archaeological specialist and liaison with the profession).

Additional technical and editorial support has been provided by Jessica Miller and Nicole Boivin from Cambridge Professional Development Ltd and Dr Marsha Levine from the McDonald Institute for Archaeological Research.

The original tender for the project was submitted in August 2000 and work was initiated in March 2001.

In the tender for this contract the intended outcomes were specified as follows:

Q-West were to prepare:

- a **functional map\*** of the sector
- an **occupational map\*** of the sector
- **National Occupational Standards\*** set within an overall framework
- support materials, including a graphical map or tabulation, possibly **plotting occupational standards against types and levels of skills\***, IFA membership grades and qualifications
- an evaluation of the **likely take up for vocational qualifications\***
- proposals for **vocational qualification frameworks\*** and an **assessment strategy\***
- **a report explaining aims, methods, reliability of data, and recommendations for future work**
- the **processes used in development** which will ensure increased involvement and interest from the sector

**Additionally** we offered to provide

- recommendations on **additional applications** to which the occupational standards can be put
- **learning specifications** for training course and syllabus design and curriculum review
- recommendations and **proposals for the design of training materials**
- recommendations for the **development and integration of digitally based open learning materials**
- ◆ recommendations for the **design of digitally based progress records and assessment materials**

Our report follows the sequence of these planned outcomes.

**Alastair Robertson**  
**Dr Stephen Carter**

1 May, 2002

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<sup>1</sup> See Annex 5

<sup>2</sup> Items above marked with a (\*) identify those components of the project funded by PSAG. English Heritage funded the residual components of the project including an indicative outline of assessment requirements for the occupational standards - to be considered by, and where appropriate incorporated by, the selected Awarding Body.



Some modules evidently equate to the underpinning competences required for those at the professional entry stage. Others reflect more advanced levels of competence and equate with the demands of CPD for those taking on more senior roles. From these observations and findings, a qualification design strategy has emerged which is further explored in this report.

The downside of these findings, is that the diversity of requirements, the relatively small size of the profession and its wide distribution across the UK, makes the delivery of assessment and certification arrangements a potentially very expensive enterprise. For a profession where median salaries are comparatively low, this is a problem. These issues have also been explored and proposals included as to how this might be addressed.

# The Report

## 1 The Functional map of Archaeology

The analysis of functions in Archaeology is presented as a separate report.

## 2 The Occupational map of Archaeology

The analysis of occupations and work functions in Archaeology is presented as a separate report.

## 3 National Occupational Standards in archaeological practice

Occupational Standards for Archaeological practice are presented in a separate file. The processes involved in their development and the issues that have emerged and the validation processes are reported below.

## 4 Plotting occupational standards against types and levels of skills

The research in this project has led us to conclude that there is no 'standard' skills mix which defines archaeological competence. Practitioners will often combine competences that relate to different domains and diverse levels of activity. Also, management structures do not necessarily follow the norms of other sectors.

To address this complexity, there have been a number of iterative exercises to develop 'Modules of Competence'; each defining a free-standing area of work activity and comprising a number of standards (grouped into Units). In various combinations, the modules are designed to reflect the occupational diversity which has been defined within the Occupational Map of the sector and provide a framework, on the one hand, for defining work roles in employment, and on the other, for defining the requirements for professional qualification and continuing professional development.

The modules defined represent the core of professional activities across the sector but are potentially extendible by drawing in standards materials from other sectors. The standards framework has, for the most part, excluded occupational standards which are purely administrative or are exclusively concerned with general management. It has also excluded standards which relate specifically to functions in museums and archives and to general education - though in reality, many archaeologists bridge these disciplines in their work activities.

The General Framework is presented as a matrix at **Annex 1**.

## 5 The likely take up for vocational qualifications

The Occupational Map defines who archaeologists are, how many there are and where they are employed. From this it is possible to derive some global figures for the potential market for awards. Of particular interest in this analysis is the large number of voluntary workers in the field. There is an evident opportunity to use specific modules as a basis for qualifying this group in key areas that relate to their activities.

The global estimates of numbers in the profession are not however an indicator of actual takeup of awards that might be developed. Qualifications as a 'hallmark of achievement' will only attract the interest of practitioners (or aspiring practitioners) if they:

- ◆ must be acquired to achieve progress or added responsibility; and/or
- ◆ facilitate entry to 'exclusive' organisations
- ◆ define capability and hence confer status.

Dealing with the latter first. The great majority of archaeologists are academically qualified<sup>4</sup>, often to higher degree levels. As a profession that is firmly rooted in the academic tradition, it is difficult to see what higher levels or types of qualification will create equal or alternative aspirational demand for example, to a PhD. One must therefore assume that there is not a natural market for awards that are alternatives to academic qualifications in terms of conferring higher status on the holder.

As the professional institution, IFA seeks to be inclusive of competent archaeologists. It is possible to relate the requirements for professional entry to standards of competence and IFA, through its grades of membership, could differentiate between the archaeologist who is a relatively inexperienced - the 'Practitioner' - and the 'Member' who is a 'road-tested', professional expert.

A number of professions now use National Occupational Standards as either the preferred or an alternative route to professional membership. Where this has been the case, the takeup of awards has risen sharply and in some cases exceeded the numbers going through traditional routes to professional qualification. Because of the Modular structure, it is often the preferred route for mature entrants who find the greater emphasis on work based learning and assessment a practical advantage over attendance on longer full-time courses.

A number of professions are now beginning to use National Occupational Standards to define CPD requirements. Often they are used as guidance rather than for assessment, but as more bodies move towards 'assessed' CPD as a condition of continuing registration (as in Accountancy), the takeup is increasing.

Dealing with externally imposed imperatives as drivers for occupational qualifications, there are several and they include:

**Regulatory imperatives** - in some areas of archaeological activity, in particular invasive investigations, it is possible that more formal requirements will be introduced. For example, major excavations may well be defined as falling within the CDM (Construction, Design & Management) Regulations that apply generally to the construction industry, in which case a 'properly qualified' Planning Supervisor will be required to take responsibility for the relevant health and safety requirements. While this role could be contracted out to a Chartered Surveyor, Engineer or Architect, it could be taken on by a field archaeologist that had qualified in the appropriate National Occupational Standards defined by this project (See Unit AJ9)

**Registration / Regulatory Bodies** - A number of professions are now covered by Registration Boards that confer a 'license to practice' or require evidence of competence in specific activity areas. Sometimes these are entirely separate from the professional bodies, in other cases they are an adjunct. In most cases these are introduced when there is a tangible public risk. While this may not apply to archaeology generally, there is particular concern over the issue of invasive, destructive investigations. The governments of the United Kingdom, Isle of Man and Channel Islands have ratified the *European convention on the protection of the archaeological heritage (revised)* (the 'Valletta Convention'), which includes a reference to invasive archaeological investigations only being undertaken by "qualified, specially authorised" persons. While in Northern Ireland archaeological excavation is licensed under the *Historic Monuments Act (Northern Ireland) 1971*, it is likely that this will be addressed elsewhere in the UK through the adoption of a voluntary Code of conduct, based upon the IFA's own Code. However, it is conceivable that regulations or a registration scheme might be introduced to ensure that all invasive investigations are under the supervision of a 'competent person'. This raises the question of what would constitute such a status. The National Occupational Standards for archaeological practice provide a basis for defining this, should Government and/or national heritage agencies decide that this would be a good thing.

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<sup>4</sup> Training in Professional Archaeology: a preliminary review (Chitty 1999).  
Archaeology Project

**Employment Requirements** - many sectors contain employers that have introduced their own requirements for entry and progression and in several sectors these are based on NVQ/SVQ requirements. To date, this has not happened at higher levels, except that many employers do insist on professional awards as a condition of employment. There is a virtuous circle here: Employers are more likely to insist on professional awards if they have the confidence that the awards properly assess occupational competence. Collaboration between the major national employers of archaeologists and IFA may be a route, on the one hand, to introducing a standards based qualification framework, and on the other, to increasing the membership of IFA. The employment drivers are not just related to initial entry. Grade progression conditioned by additional qualification can also be very important.

**Contracting requirements** - in the construction sector, for example, the industry is moving towards contracting arrangements that set minimum standards of qualification for personnel as a condition of tendering for work. The aim in this industry is to reduce 'cowboy' contractors. Because the primary regulators of archaeological investigations and related commissions for archaeological activities comes directly or indirectly from the public sector, it is within the powers of the national heritage agencies and local authorities to set criteria for contracted out works that include the qualifications of key personnel. In many ways, this would be one of the most significant drivers if the employers were seriously committed to raising practice standards. Cynically, and given the over-supply of archaeologists in the labour market, there are likely to be more than enough who are prepared to prove their practice competence to fill the gaps left by those who regard it as an affront!

## **6 Vocational qualification frameworks**

National Occupational Standards can be used in a variety of certification schemes. Where certification relates to a National and/or Scottish Vocational Qualification, there are specific requirements laid down for the body that makes the awards - the Awarding Body, for the specification of assessment requirements, for the design of an Assessment Strategy, for the competence of those carrying out the assessment and for certification and quality assurance arrangements. Where the National Occupational Standards are used in other types of certification scheme, it is for the certifying institution which sets these rules.

The material prepared for these standards is compatible with the requirements of NVQ/SVQ accreditation but can be modified to meet the needs of other qualifying organisations including Higher Education Institutions and Professional Bodies. These issues are discussed below.

The options for vocational qualification frameworks that are appropriate to incorporating these standards in qualifications are primarily:

- ◆ NVQs and SVQs
- ◆ Professional entry and CPD awards
- ◆ Higher education awards

### **NVQs and SVQs**

It remains an open question as to whether NVQs and SVQs will find a market within the profession. In the short and medium term, unless there is some external driver that makes this a requirement it is difficult to see from where demand will come. However, the occupational standards and Unit structure is compatible with the Requirements of QCA and SQA and a qualification structure based on these has been proposed.

Our analysis of occupations has concluded that the majority of activities fall broadly within levels 4 and 5 of the national Qualifications Framework (NQF) and it is possible to group the Units to fit with a range of roles which typify current employment. There are however constraints on developing full NVQ/SVQ awards:



**The Market for NVQ/SVQ awards** - with 4,500 or so employed archaeologists in the UK, the viability in commercial terms of an NVQ/SVQ framework is fragile. Experience from other sectors indicates that, where gross demand is below around 3,000 potential candidates, it is difficult to justify the development of a national assessment, certification and quality assurance system. When account is taken of the existing high level of academic qualification and the current absence of external drivers to promote competence based awards, the approach must be cautious. To this view must be added the observation that there is no available funding infrastructure in place at levels 4 and 5 and, as a poorly paid profession, individuals are unlikely to be able to fund themselves through a full NVQ/SVQ assessment process.

**Qualification Structures** - the three main models for forming NVQs/SVQs are:

- ◆ *A singular structure* - in which all candidates complete all Units
- ◆ *A core and routes structure* - in which there is a common core of Units that all candidates complete and then a series of routes, each of which has prescribed Units that relate to that route
- ◆ *A core and options structure* - in which there is a common core of Units that all candidates complete and then a series of Unit options from which a candidate selects a specified number.

There are other variants based on those above, but these are the main ones. Research has indicated that while there is a common core of knowledge associated with archaeology, there is only a limited common core of work activities or functions. This creates a problem in NVQ/SVQ design terms as an entirely "pick 'n' mix" structure has no precedent.

Given a much larger profession, an inclusive series of awards could be designed along the line of the alternatives described above, but this appears not to be an option.

Should the profession decide that there should be a more standardised (and prescriptive) structure to the profession, the National Occupational Standards can be fitted into a framework for achieving this. Such a framework might comprise a 'Core' of standards that fit all areas of archaeological practice to which is added a selected or pre-defined group of additional 'Units' that reflect the requirements of each specialism. Such a 'Core and Options' structure is commonly used in the design of NVQ and SVQ awards.

While, as our own and previous research has indicated, there is great diversity in the jobs that people carry out, there are some key archaeological work roles in which significant numbers are employed. Based on these, an NVQ/SVQ framework can be developed. These, we estimate, would cover more than half the employed profession. For most of the remainder, the acquisition of specific groups of Units would be appropriate. In the design of the framework for archaeological practice, we have defined these Unit groups as 'Modules'.

### **Professional entry and CPD awards**

The archaeology profession at present lacks a fully defined process of professional formation – i.e. an integrated approach to the intellectual development and practical training of archaeological practitioners. Many other professions have this with medicine, engineering and architecture as examples. In all cases, the profession works with the universities to devise a curriculum and examination process that, by the end of the process, delivers competent professionals. It is a process which combines the normal academic disciplines, conditioned in some places by requirements that relate to practice issues, experiential learning within and outside the academic institution and practical training in a real work environment. Assessment is both formative through the learning process and summative both at the end of the academic course and also at the point of professional entry.

Structurally, this is dealt with by work experience built into undergraduate programmes or as break years between first and higher degrees and normally concluded by one to three years of postgraduate practice before a final 'professional' examination. For work experience and practical training, there is normally a recording system (e.g. a log book), referenced against work areas and

students often maintain 'portfolios' of material exemplifying what they have done. There is also a close relationship between employers, the teaching institutions and the professional body involved in the process and a commitment from employers to provide 'mentor' support to trainees and from the teaching institutions and/or the professional body to provide external co-ordination and support. It only works if there is considerable voluntary input from employers and the profession and cost-effective support from the universities.

The costs of the system to employers are often mitigated by trainees' lower wage scales, pre-qualification. The net costs of training, co-ordination and assessment are usually shared between all three parties. In very few cases are there grants and subsidies available. Under national training arrangements, only 'Graduate Apprenticeships' provide a funding model - but these are rare. Wales has a scheme in place, the MSDA (Modern Skills Diploma for Adults) which technically may be applicable and a similar programme may be introduced in Scotland.

The Modular framework for Archaeology awards could fit with such a professional formation scheme. The standards defined are summative, rather than formative, but it is entirely possible to design a 'logbook' based on the competence requirements.

Not all the modules are relevant to professional entry - some clearly relate to post-entry experience and practice.

***How could this work in practice?*** - given the diversity of work roles in archaeology, there could not be a standard prescription of which modules would be required to meet professional entry or membership requirements. However there may be one or two that IFA may declare as basic. A strategy that could be used is by attributing each module a numerical weight based on complexity and centrality to professional practice. Candidates would then be required to select those modules which best fitted their work role and together gave them sufficient 'points'. A refinement of this strategy would be to break the modules into 'technical' and 'management' groups and require a certain number of points to gather for each.

A similar points based method could be applied to CPD achievement, although at present the IFA does not require assessed CPD.

If the recording system (the logbook), the portfolio and the assessment regime was based on the individual modules, then candidates might reasonably expect to gain (say) three to five modules as a professional Membership requirement. These issues are further explored later.

### ***Higher education awards***

The occupational standards could form the underpinning curriculum framework for higher education, postgraduate awards. This could apply to certificated continuing education programmes or to full postgraduate awards at Master's level.

It is unlikely that they would fit with undergraduate awards, though they may be of value in aspects of content.

An increasing number of Master's awards have a read across to National Occupational Standards at the level of associated knowledge. A number also are structured to facilitate work-based training and assessment.

As universities are autonomous awarding bodies in their own right, it is not possible to prescribe how they will deliver and assess programmes unless IFA develops a 'course approval' system. Without this, universities may choose assessment methods and criteria that suit their own requirements and constraints. However, guidance on a UK-wide Assessment Strategy (see 7 below) would be helpful in ensuring consistency should several Universities choose to go down this route.

From a pragmatic standpoint, it is only the universities that have the capacity to deliver the academic content relating to the standards framework and hence it is essential that they have a close involvement. They are also likely to have the potential to play a significant role in assessment and partnership arrangements with IFA and this may be a useful way forward in the future.

## 7 An Assessment Strategy for awards in Archaeological Practice

The contract for this development project included a requirement for an **Assessment Strategy**. QCA lays down guidelines for how these should be prepared in the context of NVQ accreditation. At **Annex 2** is a draft Assessment Strategy which is specifically designed within these guidelines.

If the accreditation body is other than QCA and SQA, then an assessment strategy may still be required and the NVQ/SVQ Assessment Strategy could form a useful basis for its preparation.

## 8 Key and Core Skills signposting of Archaeology Standards

The contract also includes the requirement for **Key and Core Skills signposting**. As part of the Government's drive to ensure that all new entrants to the labour market have adequate levels of literacy, numeracy, IT competence and other basic competences, they wish to see that all nationally accredited vocational qualifications include opportunities for Key Skills (covering England, Wales and Northern Ireland) and the Core Skills (covering Scotland) to be assessed. At **Annex 3** (published separately) are the results of the signposting exercise. This contains the lists of Key and Core Skills profiles against which the occupational standards were interrogated. Key and Core Skills are defined at 5 different levels, matched broadly to levels in the National Framework. While in broad terms Key and Core Skills are compatible, there are differences detail criteria and in scope:

### Core Skills (Scotland)

- ◆ Communication
- ◆ Numeracy
- ◆ IT
- ◆ Problem Solving
- ◆ Working with Others

### Key Skills (England Wales & Northern Ireland)

- Communication
- Application of Number
- IT
- Working With Others
- Improving Own Learning & Performance.
- Problem Solving

Within the framework of Archaeology Standards there are Units which could equate to NVQ/SVQ levels 3, 4 and 5. The majority fit broadly with level 4. While these provide a helpful guide to the likely key and Core Skills levels, it does not necessarily follow that within the individual standards there will always be an equivalence. In some higher level areas of competence, for example, IT skills may not be required or be at a level that the standard fits. Similarly, at some lower levels, the Problem Solving skills may be at a higher level than the standard generally.

The utility of Key and Core Skills Signposting is to define where, overall, there may be deficiencies in the specification and assessment of these basic and ubiquitous competences.

## **9 Accreditation and Validation issues**

### ***Approval of the Archaeology Standards as National Occupational Standards***

Occupational Standards become National Occupational Standards when they are approved by the Qualifications and Curriculum Authority (QCA) in conjunction with its counterparts in Scotland (SQA) and Wales (ACCAC). It has always been the intention for the standards developed within this project to be submitted for national approval.

National Occupational Standards must meet defined criteria which include having clearly specifications for performance in work related activities together with associated knowledge and understanding. There is a recognised format in which this information is laid out and this has been followed in the development of the project and in the presentation of the material.

### ***Validation of the Standards***

For PSAG approval the Standards must have been tested with practitioners and the framework must have the support of those representing employment interests.

The development process has engaged a wide range of practitioners both as authors and critics (see **Annex 4**). Through the development stages, practitioners representing all the main disciplines within archaeology were involved in the mapping of competences and in the iterative review of standards material. Material has also been continuously available on an open website for practitioners to access and comment on. In addition, special review workshops were held in Scotland, Wales and England for organisational and practitioner representatives.

It was intended that the materials would be field tested in the employment context and a work plan was prepared and invitations sent to more than 100 organisations - with a target of 18 participating organisations. This was unsuccessful and aborted for lack of takeup. This presented difficulties in obtaining necessary in-depth feedback. As a contingency action agreed with the project Steering Group, six Expert Reviewers were commissioned to look at the materials. The reviewers were selected by agreement with the Project Managers. While the reviewers all produced very helpful overviews of the material, few were able or prepared to comment in detail on the materials. The comments by the expert reviewers have subsequently been incorporated (in fact and in principle) and a wide-ranging editorial review has been carried out by two sub-editors in Cambridge, overseen by the Project Leader, and Dr Stephen Carter who has personally carried out a final editorial review.

Project materials, in various development stages have been available on an open and well publicised website for more than 1 year ([www.5sconsulting.com/archaeology](http://www.5sconsulting.com/archaeology)). Also, the proposals were presented to the Annual Conference for archaeologists in March 2002 at a half day workshop involving over 50 practitioners. Both have generated useful comment and interest.

In relation to similar development projects and the size of the profession, overall practitioner and institutional participation have been relatively high and the quality extremely good. However: it is a diverse profession; the suite of occupational standards generated is approaching three times the normal number for a small profession; and the profession itself is characterised by a large number of very small organisations, most of which have limited resources for engaging in depth in studies of this type.

It is the conclusion of the project team that we have used our best endeavours to engage the profession and consult as widely as possible and we have had reasonable success.

### ***Endorsement of changes to imported standards***

A significant part of the material is drawn from National Occupational Standards that have been fully validated in other occupations and professions and is entirely fit for purpose. This material has

been contextualised to archaeology and there remains the task of seeking the endorsement of the originating Standards Setting Bodies to the editorial changes. This will be done once the Archaeology Training Forum has accepted the suite of standards. Some material has been so substantially modified as to constitute 'new material' and therefore endorsement will not be sought.

### **Status of Knowledge Requirements, Assessment Requirements and Rules of Evidence.**

**Knowledge Requirements** - Within the standards, the knowledge requirements have been stated broadly rather than specifically. This is the normal convention with National Occupational Standards as it is recognised that specific pieces of legislation, for example, are regularly being updated. The knowledge specified should be sufficient for a competent assessor to judge what is required and a training provider to form an appropriate learning programme for teaching purposes.

**Skill requirements**<sup>5</sup> - These are not a requirement of NVQ/SVQ assessment specifications. However, they are included to provide guidance to training providers on what aspects of learned behaviour and technique it may be important to include in courses. Again, what is included is designed to be indicative rather than prescriptive.

**Assessment Requirements**\*- These have been prepared as indicative requirements for the awarding body to further refine, rather than as detailed specifications. The reason for this is twofold:

- ◆ Expert reviewers were not happy with the apparently very rigid specifications that appeared in early drafts. Their view was that it inferred a level of rigidity that was inappropriate to the professional level at which assessment would take place and also, in being very mechanistic, it would lead to a 'tick-box' form of assessment rather than one which was holistic.
- ◆ The assessment requirements as specified need to be looked at in the context of the assessment strategy and the form of award that will result from this project. In their present form they provide a basis for NVQ/SVQ assessment but QCA and SQA would probably require more specificity. In their present 'indicative' form they provide a basis for assessment more appropriate to the schemes employed by professional bodies and as this appears to be the most probable application, it is our view that they are best in this format.

**Rules of Evidence**\* - These have again been left in a skeletal format in this submission as the rules are entirely related to the degree of rigour which the selected Awarding Body wishes to apply to the evidence presented. In the consultation exercises it was evident that in many cases the rules applying to imported standards may present difficulty in an archaeological context. The reasons for this were various but of particular concern was the requirement for multiple demonstrations and project sources. It was pointed out that the scale and diversity of archaeological work meant that such standard rules were inappropriate and the judgement of the sufficiency of evidence was better left with the assessor.

## **10 The uses of occupational standards\***

National Occupational Standards have a variety of uses other than in qualifications. Past programmes have identified more than 80 potential applications. These can be grouped into their use in:

- ◆ **Recruitment and Selection** - the preparation of job and work role specifications
- ◆ **Job design and Evaluation** - developing the skills mix within a team to provide professional archaeological services and also as a method for auditing teams to establish here are sufficient skills to deliver programmes.

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<sup>5</sup> Items marked (\*) have been commissioned by English Heritage and are not part of the PSAG funded aspect of this project.

- ◆ **Assurance of product and service delivery** - where standards are certificated, being able to prove that individuals and teams have achieved the necessary standards to deliver the services promised.
- ◆ **Identifying individual and organisational training needs** - used as a framework for job and/or team appraisal, being able to identify where there is a need for training and development.
- ◆ **Structuring learning programmes** - the knowledge and skills specifications provide a framework for course design, whether academically or skills based.
- ◆ **Delivering and evaluating learning programmes** - the knowledge and skills specifications are a checklist against which training inputs can be judged and the evidence specifications and evidence rules set out the requirements for what evidence of learning must be provided.
- ◆ **Careers guidance and counselling** - by looking at what skills and aptitudes an individual has and matching these against the competences required of an archaeologist it is helpful to see where the match is close and opportunities might lie. Conversely, the framework helps individuals see what it is necessary to learn in order to pursue a career in archaeology.
- ◆ **Assessing achievement** - the overall standards framework provides a complete specification for a range of assessment schemes.
- ◆ **Development of publicly funded training programmes** - increasingly, funding bodies are requiring providers to demonstrate how training proposals deliver learning to specifications set by trades and professions. National occupational standards, in the UK, are the primary benchmark.
- ◆ **Management information** - knowing the 'inventory' of skills within an organisation is very important in personnel planning. It is a sound basis for recruitment planning and training investment plans.
- ◆ **Regulating professional activities** and providing criteria for entry to grades of professional membership - National occupational standards are widely used as a basis for setting up registration schemes where performance is central to the provision of specialist and safety critical services. They are also used as a framework (sometimes an alternative framework) both for membership entry, progression and CPD achievement.

This project has concentrated on the use of these standards in qualifications. However, they have been designed and structured to be partly or wholly applicable to these other uses.

To gain maximum utility from the standards, it is essential to be able to interrogate the material from a database format. The structure of the material enables this to be done, but this aspect of presentation is not included in this project. This will be addressed in a forthcoming ATF project.

## 11 Learning & Development\*

In our tender bid for this project we indicated that our development strategy would be geared to achieving compatibility with a variety of certification schemes which were likely to include:

- The requirements of relevant professional bodies for initial entry and continuing professional development
- The requirements of registration boards and national and international certification authorities

In both these areas, the certification of full occupational competence is likely to be involved, hence the assessment of both skills and knowledge will be required.

The modular structure of the occupational standards have thus been designed to enable:

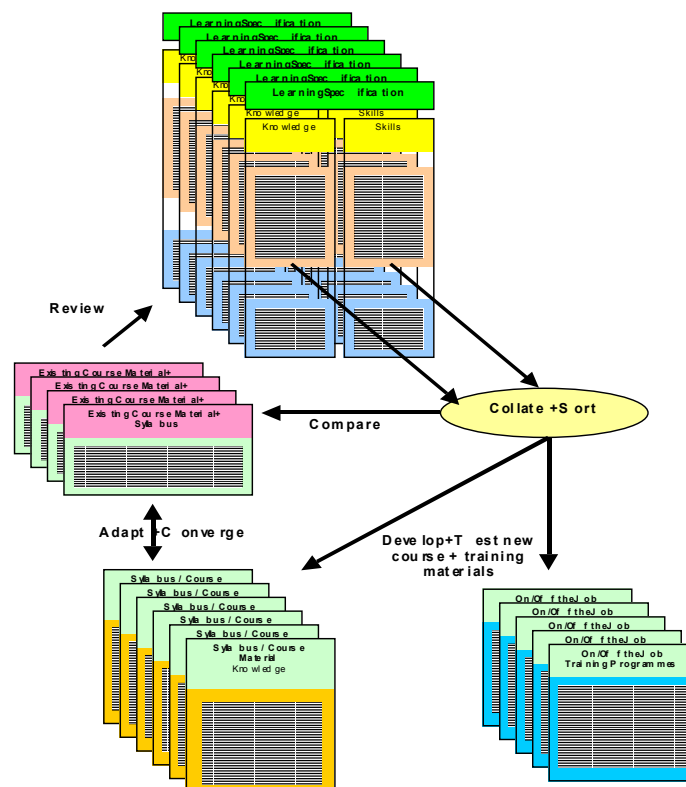
- Full occupational awards to be developed where these are required
- Specialist awards to be developed to reflect specific areas of capability
- Assessable CPD modules
- Modules to be developed to meet specific regulatory requirements

We also recognised that there may be a requirement for the separate assessment of cognitive abilities, independent of practical and technical skills assessment and for cross matching of existing awards to the new occupational standards. Our design strategy for the standards allows us easily to design ‘free-standing’ knowledge specifications and assessment requirements that, while fully compatible with the occupational standards, can be used in a stand-alone form as certificated awards. These we believe will have a significant utility in:

- Initial training and induction courses
- Up-grading training for established practitioners
- Open learning programmes associated with on-the-job skills development
- Benchmarking of academic awards

Generally, archaeological organisations are not well resourced and incomes are low relative to most other professions. It is therefore important that learning and assessment arrangements are cost effective and that high cost options are avoided, as they will severely limit take-up

The diagram below illustrates how this can be achieved.



It was the intention of the project to pursue curriculum design issues in greater depth. Three workshops were planned. However, it was the decision of the Steering Group that this aspect of development should be deferred until a clearer picture has emerged about strategies for certification and delivery. Resources for this were therefore diverted to enhance the work on standards development.

## 12 Development of associated learning and assessment materials\*

In preparing the bid we were conscious that the archaeological community is small and widely dispersed. This was confirmed in the development of the study and in the associated research into occupational structures and the numbers employed (see separate report on Occupational and Functional Mapping in Archaeology). This creates a variety of logistics problems relating to

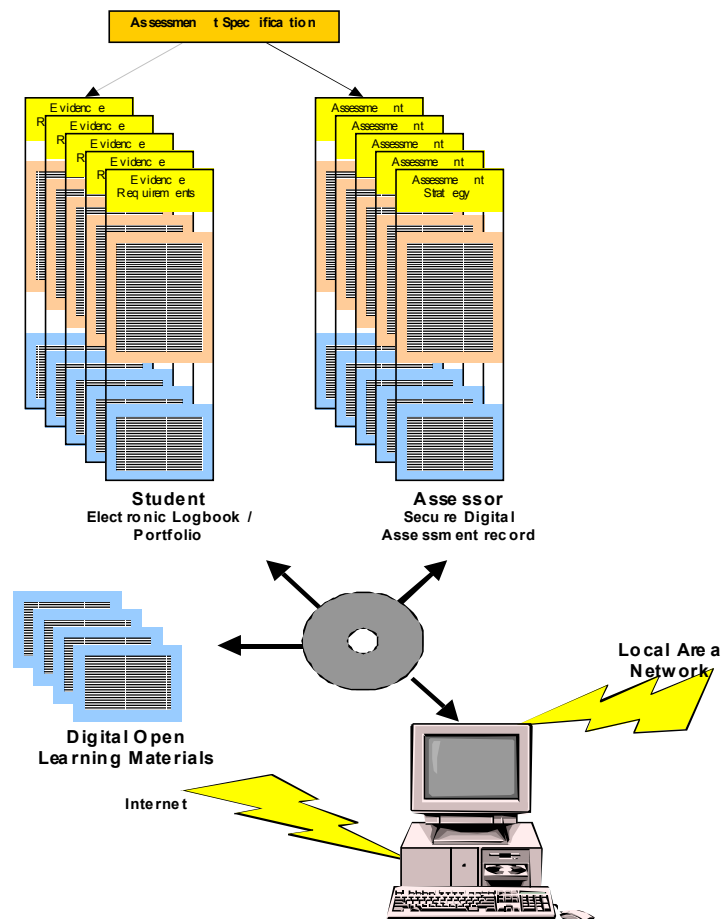
learning and assessment. The use of digital media is therefore paramount in developing accessible and affordable learning and assessment systems. Q-West has been working in the UK and internationally on digital assessment and open learning systems and the design of the S>P>F model is geared directly to the use of this media. The general approach is illustrated below.

**Digitally based open learning materials** - The structure of the standards informs the content of future materials development for learning and it is possible to see, in electronically linked formats, learners could access appropriate materials through intranets or via the internet. In the field of archaeology there is a wide range of source documentary material that can already be accessed - given that a cataloguing system is available. Similarly, there are considerable archive data in the form of film and video which is also potentially accessible through broadband internet links.

This is for the future - but the potential is there for an open learning resource. While the development of the resource exclusively for the employed group of archaeologists in the UK is not likely to be cost-effective, when the volunteer community, which is much larger, and the international corpus of archaeologists are taken into account, the opportunities are substantial.

**Digitally based assessment** - Several bodies have now successfully introduced digitally based assessment documentation and support arrangements for standards based awards. They are ideally suited to occupational groups who are widely dispersed and who often lack ready access to assessors and advisors. These systems necessarily complement face to face contact rather than entirely replace it. However, they are very cost-effective and minimise the need for candidates to meet frequently and in regard to issues which deal with the more routine and procedural aspects of competence.

In particular, the introduction of electronically based logbooks is helpful and allows assessors and mentors regularly to touch base with candidates and review the sufficiency of practice experience without having physically to post large documents or meet.







## 13 The Way Forward

The preceding report describes what has been done and what could be done in terms of implementation. What remains is a view of what should be done.

### ***Approval of Standards as National Occupational Standards***

This should take place as soon as the Archaeology Training Forum has determined that the Standards are fit for purpose and the bodies whose standards have been imported have given their endorsement. QCA, on behalf of PSAG have given their initial views and these have been incorporated in the final submission to ATF.

It is likely that the final approval process will take less than 3 months.

### ***Awarding arrangements***

The primary objectives of this programme has been to: develop a training culture within the profession; drive up performance standards; improve the consistency of practice standards; and provide better benchmarks for career development and salaries. Occupational Standards have been designed as the vehicle to facilitate this and credible certification arrangements are an important component in the strategy.

It has been said previously that a decision to proceed to develop NVQs and SVQs should be approached with caution. Both OUVS and QFI have been approached for advice and QFI are actively collaborating with CHNTO and IFA on a way forward on NVQ accreditation.

If the NVQ/SVQ accreditation route is chosen, then the assessment requirements will be prescribed by the Awarding Body, using the guidance set out in the Assessment Strategy as the framework. A draft Assessment Strategy, to meet QCA/SQA requirements, has been prepared and is set out later in this report.

### ***Alternative assessment arrangements?***

While the occupational standards have been designed to fit with NVQ/SVQ assessment methodology, they are also compatible with other modes of assessment. Below is set out a typical assessment model used by professional institutions to accredit professional formation programmes.

In process terms, the task of the candidate (as with NVQ/SVQ assessment) is to provide sufficient evidence to demonstrate they can meet the professional formation requirements. This is usually broken down into four main components:

**A 'log-book'** - which records their learning experience against the criteria in the Modules. This could be produced electronically and would need to be endorsed by a relevant qualified person in the workplace or learning centre.

**A 'portfolio'** - in which relevant examples of work etc can be collected and independently reviewed. This may also contain witness testimony from those that have observed the candidate's performance in the workplace. It may also contain signposts to records not in the portfolio that are available for verification if required.

**Marked 'assignments'** - which specifically address key aspects of the module and which could either be case studies based on the candidate's own activities or 'scenario-based' assignments based on hypothetical situations.

**A 'professional review'** - in which the candidate is interrogated about the material produced and questioned on aspects of performance better done orally than through documentation.

The first two of these components, the record of achievement, at present form part of the IFA's CPD process. Introducing elements of assessment would represent a significant amplification and enhancement of the present scheme.

Elaboration on this model is always possible, but this would represent the basics. The assessment process would be based on individual Modules (not Units), however there is the option for more than one module to be assessed at the same time where the candidate is prepared for this.

The quality assurance of the assessment system is very important and independent validation is very helpful here. However, the quality of assessors, their skills in assessment as well as in practice and the extent to which they apply standards consistently are very, very important. While the attached Assessment Strategy is designed for NVQ/SVQ assessment purposes, it may be a helpful framework for setting down some of the ground rules for an accreditation scheme based on IFA. Also, a look at how other institutions carry out the task would be helpful in selecting the right procedures for archaeology.

**End**

## The General Framework

**This includes:**

- **The schedule of Units & Elements within the Archaeology Occupational Standards Framework**
- **The schedule of Modules in the Archaeology Qualifications Framework**
- **The matrix of potential awards - indicating examples of how the Modules fit with typical work roles**

# Schedule of Units & Elements within the Archaeology Occupational Standards Framework

**There are 57 Units in the Framework incorporating 168 Occupational Standards**

**AA1 Develop policies and guidance for archaeology**

- AA1.1 Establish emerging trends and priorities
- AA1.2 Identify and assess community requirements and expectations
- AA1.3 Identify and evaluate constraints and opportunities
- AA1.4 Prepare and consult on drafts of new policy and guidance
- AA1.5 Recommend and justify new policy and guidance

**AA2 Commission research**

- AA2.1 Specify research requirements
- AA2.2 Commission and brief researcher(s)
- AA2.3 Monitor the progress of the research programme
- AA2.4 Verify research outcomes against the brief

**AA3 Propose and plan a research project**

- AA3.1 Propose a research project
- A3.2 Develop and plan a research project

**AA4 Establish plans and monitor policy implementation**

- AA4.1 Establish plans for the implementation of policies and proposals
- AA4.2 Promote policy implementation
- AA4.3 Develop support arrangements for implementation
- AA4.4 Monitor and evaluate the effects of policies and operations

**AA5 Provide guidance on and process applications for resource support**

- AA5.1 Provide guidance and advice on applications for resource support
- AA5.2 Process applications for resource support

**AB1 Develop and agree objectives for projects**

- AB1.1 Define aims and initial objectives for the project.
- AB1.2 Identify and assess factors affecting the achievement of objectives for the project
- AB1.3 Develop and agree objectives for the project

**AB2 Propose and agree project methods**

- AB2.1 Identify project requirements
- AB2.2 Agree project methods

**AB3 Agree a brief**

- AB3.1 Assess and present a proposal for a brief
- AB3.2 Agree a brief

**AB4 Estimate resources and develop programmes**

- AB4.1 Specify and estimate resources required for the project
- AB4.2 Develop programme and schedules for the project

**AB5 Co-ordinate the procurement process**

- AB5.1 Agree a procurement procedure
- AB5.2 Evaluate and select potential suppliers
- AB5.3 Obtain tenders
- AB5.4 Select suppliers

**AB6 Prepare and agree the contract**

- AB6.1 Recommend and agree a form of contract
- AB6.2 Prepare contract
- AB6.3 Negotiate and conclude a contract

- AC1 Research and analyse information to achieve objectives (archaeology) (CH Unit A2)**  
AC1.1 Identify sources and availability of information  
AC1.2 Collect information to achieve research objectives  
AC1.3 Analyse research information  
AC1.4 Report results
- AC2 Conduct non-intrusive investigations**  
AC.1 Prepare for operations  
AC2.2 Observe and record measurements  
AC2.3 Analyse and present investigation data
- AC3 Contribute to non-intrusive investigations**  
AC3.1 Prepare for operations  
AC3.2 Observe and record measurements  
AC3.3 Prepare records and schedules
- AC4 Conduct intrusive investigations**  
AC4.1 Prepare for operations  
AC4.2 Undertake intrusive investigations  
AC4.3 Assess and present investigation data
- AC5 Contribute to intrusive investigations**  
AC5.1 Prepare for operations  
AC5.2 Undertake intrusive investigations  
AC5.3 Prepare records and schedules
- AC6 Store items**  
AC7.1 Identify the appropriate environment in which to maintain and protect items  
AC7.2 Control the environment to preserve and protect items
- AC7 Transfer items**  
AC7.1 Identify the handling requirements of an item  
AC7.2 Pack an item for transportation to a new location  
AC7.3 Monitor the transportation of items  
AC7.4 Monitor the installation of items within a new location
- AD1 Undertake analysis and interpretation**  
AD1.1 Confirm requirements for analysis and interpretation  
AD1.2 Carry out agreed programme of analysis and interpretation  
AD1.3 Prepare and submit reports
- AE1 Characterise the archaeological resource and recommend action**  
AE1.1 Describe the archaeological resource  
AE1.2 Describe what data the resource has the potential to reveal  
AE1.3 Describe the potential significance of the archaeological resource  
AE1.4 Evaluate options and recommend action
- AE2 Assess options for conserving the archaeological resource in situ**  
AE2.1 Explore and evaluate options for conserving the archaeological resource in situ  
AE2.2 Define the risks of conserving the archaeological resource in situ  
AE2.3 Recommend strategies for conserving the archaeological resource in situ
- AE3 Identify and describe items (archaeology) (based on CH Unit A4)**  
AE3.1 Provide a description of an item  
AE3.2 Identify and classify an item  
AE3.3 Describe the potential significance of an item as an archaeological resource
- AE4 Develop conservation plans for items (archaeology) (CH Unit E5)**  
AE4.1 Explore conservation options for items  
AE4.2 Specify conservation options for items
- AE5 Develop and implement preventive conservation procedures for items (archaeology) (CH Unit E8)**  
AE5.1 Specify the appropriate environment in which to maintain and protect items  
AE5.2 Monitor, evaluate and advise on the environmental protection of items

- AE6 Apply preventive care procedures to items (archaeology) (CH Unit E3)**  
 AE6.1 Control the environment to preserve and protect an item  
 AE6.2 Monitor and modify the environment and the condition of an item
- AE7 Develop and implement remedial conservation procedures for items (archaeology) (CH Unit E7)**  
 AE7.1 Explore, test and develop conservation procedures to solve specific problems  
 AE7.2 Minimise the deterioration of items  
 AE7.3 Physically intervene to aid interpretation of items
- AE8 Implement routine interventive conservation procedures (archaeology) (CH Unit E2)**  
 AE8.1 Apply routine stabilisation  
 AE8.2 Implement routine cleaning and repair
- AF1 Develop information systems to meet the needs of users (archaeology) (CH Unit B1)**  
 AF1.1 Identify the needs of users of information systems  
 AF1.2 Identify and recommend improvements to information systems  
 AF1.3 Implement improvements to information systems
- AF2 Develop procedures for the use of information systems (archaeology) (CH Unit B2)**  
 AF2.1 Develop procedures for accessing and amending data  
 AF2.2 Develop documentation rules  
 AF2.3 Maintain the security and safety of information
- AF3 Classify, compile and maintain data on the material remains of past communities**  
 AF3.1 Agree methods for classifying and compiling data on the material remains of past communities  
 AF3.2 Maintain data and records on the material remains of past communities
- AF4 Provide information on the material remains of past communities to others**  
 AF4.1 Interpret customers' requests for information on the material remains of past communities  
 AF4.2 Access data sources and compile data on the material remains of past communities  
 AF4.3 Collate and present data to meet customers' requirements
- AG1 Develop strategies for the maintenance and use of a collection (archaeology) (CH Unit C1)**  
 AG1.1 Determine the scope and potential development of a collection  
 AG1.2 Plan the acquisition and disposal of items and collections  
 AG1.3 Develop a loan policy
- AG2 Prepare the accommodation of items (archaeology) (CH Unit C4)**  
 AG2.1 Identify the accommodation requirements of items  
 AG2.2 Organise the preparation of facilities to accommodate items
- AG3 Acquire and dispose of items and collections (archaeology) (CH Unit C2)**  
 AG3.1 Establish criteria and procedures for acquisition and disposal  
 AG3.2 Assess items and collections for their contribution to the organisation  
 AG3.3 Initiate procedures for acquisition and disposal of items and collections  
 AG3.4 Negotiate the transfer of rights over items and collections
- AG4 Lend and borrow items (archaeology) (CH Unit C3)**  
 AG4.1 Establish criteria and procedures for lending items  
 AG4.2 Evaluate a request for the loan of an item  
 AG4.3 Agree the loan of an item to a borrower  
 AG4.4 Agree the loan of an item from a lender
- AH1 Devise a strategy for interpretation and learning (archaeology) (CH Unit F2)**  
 AH1.1 Develop the organisation's interpretation and learning strategy  
 AH1.2 Develop a programme to implement the interpretation and learning strategy
- AH2 Commission work on interpretative and educational media (archaeology) (CH Unit F5)**  
 AH2.1 Prepare a brief for a specialist to produce media  
 AH2.2 Select a specialist  
 AH2.3 Evaluate educational and interpretative media
- AH3 Identify and evaluate the requirements of users of learning and interpretative activities (archaeology) (CH Unit F3)**  
 AH3.1 Identify current and potential users and their needs  
 AH3.2 Evaluate the impact of interpretative and learning activities on users

- AH4 Plan and deliver interpretative activities (archaeology) (CH Unit F7)**  
 AH4.1 Plan the use of resources  
 AH4.2 Deliver and evaluate an interpretative activity  
 AH4.3 Develop information materials to support an interpretative activity
- AH5 Plan marketing activities**  
 AH5.1 Plan and commission marketing materials  
 AH5.2 Develop and distribute marketing materials  
 AH5.3 Contribute to evaluating the success of marketing activities
- AJ1 Develop a strategy for the development of an archaeological organisation (CH Unit H1)**  
 AJ1.1 Specify the aims and objectives of the organisation  
 AJ1.2 Plan the future development of the organisation
- AJ2 Represent the interests of an archaeological organisation (CH Unit H2)**  
 AJ2.1 Generate external commitment to the future of the organisation  
 AJ2.2 Represent the interests of the organisation to policy makers and the public
- AJ3 Develop public relations strategies (archaeology) (CH Unit J20)**  
 AJ3.1 Determine requirements of public relations strategy  
 AJ3.2 Determine public relations strategy  
 AJ3.3 Prepare proposal  
 AJ3.4 Brief staff on requirements of public relations strategy  
 AJ3.5 Confirm strategy and monitoring arrangements
- AJ4 Agree professional services**  
 J4.1 Obtain the client's requirements, budget and timetable (AP1.1)  
 J4.2 Agree fees for professional services  
 J4.3 Establish and maintain relationships with clients and stakeholders
- AJ5 Select personnel for activities (NFMED C8)**  
 AJ5.1 Identify personnel requirements  
 AJ5.2 Select required personnel
- AJ6 Develop teams and individuals**  
 AJ6.1 Identify the development needs of teams and individuals  
 AJ6.2 Develop teams to improve performance
- AJ7 Oversee project costs, quality and progress**  
 AJ7.1 Oversee project costs against agreed budgets  
 AJ7.2 Oversee project against agreed quality standards  
 AJ7.3 Oversee project compliance with legal and statutory requirements  
 AJ7.5 Keep stakeholders informed of project progress
- AJ8 Prepare for potential disasters (archaeology) (CH Unit E9)**  
 AJ8.1 Conduct a risk assessment  
 AJ8.2 Develop a disaster plan  
 AJ8.3 Implement disaster readiness measures
- AJ9 Reduce risks to health and safety in the workplace**  
 AJ9.1 Develop procedures for maintaining a healthy and safe workplace  
 AJ9.2 Identify the hazards and evaluate the risks in your workplace  
 AJ9.3 Reduce the risks to health and safety in your workplace  
 AJ9.4 Review the effectiveness of health and safety procedures in your workplace
- AJ10 Contribute to health and safety in the workplace (NFMED C16)**  
 AJ10.1 Operate safely in the workplace  
 AJ10.2 Respond to emergencies  
 AJ10.3 Assist in the security of the workplace
- AJ11 Manage the performance of teams and individuals (CH Unit J9)**  
 AJ11.1 Allocate work to teams and individuals  
 AJ11.2 Agree objectives and work plans with teams and individuals  
 AJ11.3 Assess the performance of teams and individuals  
 AJ11.4 Provide feedback to teams and individuals on their performance
- AJ12 Deal with poor performance in your team (NFMED C16)**  
 AJ12.1 Support team members who have problems affecting their performance  
 AJ12.2 Implement disciplinary and grievance procedures



AJ12.3 Dismiss team members whose performance is unsatisfactory

**AJ13 Devise and implement methods to resource an archaeological organisation (CH Unit H3)**

AJ13.1 Identify funding objectives and methods for the organisation

AJ13.2 Identify potential contributors to the organisation

AJ13.3 Negotiate and secure funding for the organisation

**AJ14 Manage finance in the business unit**

AJ14.1 Make recommendations for expenditure

AJ14.2 Control expenditure against budgets

AJ14.3 Maintain the financial viability of the business unit

**AJ15 Evaluate project achievements and secure improvements (OSCEng EPM59)**

AJ15.1 Obtain and evaluate feedback information

AJ15.2 Provide advice and support to solve problems, make improvements and maintain progress

AJ15.3 Promote and protect planned work and those who carry it out

**AK1 Maintain compliance with archaeological requirements**

AK1.1 Identify situations requiring formal action

AK1.2 Process applications for compliance with statutory and policy requirements

AK1.3 Control project against agreed quality standards

AK1.4 Enforce compliance with archaeological requirements

**AK2 Contribute to advances in the body of knowledge and archaeological practice**

AK2.1 Contribute to advances in knowledge and theory that underpin archaeological practice

AK2.2 Exploit opportunities to broaden the public's understanding of the historic environment

AK2.3 Enable others to learn and benefit from one's experience

**AK3 Develop your own resources and protect the interests of others**

AK3.1 Develop yourself to improve your performance

AK3.2 Manage your own time and resources to meet your objectives

AK3.3 Contribute to the protection of individual and community interests

**Key References**

The Bracketed references at the end of Unit titles refer to the following Standards Setting Bodies from whom Units have been imported:

CH	Cultural Heritage NTO
NFMED	National Forum for Management Education and Development /Management Charter Initiative
CITB	Construction Industry Training Board
OSCEng	Occupational Standards Council for Engineering

# Schedule of Modules in the Archaeology Qualifications Framework

**Note: Gaps in Numbering relate to modules excluded from the framework**

**There are 21 Modules in the Qualifications Framework**

**Shaded Units represent Optional Additions to modules**

## **Module 1 Develop Policies and Plans**

- AA2 Commission research
- AA1 Develop policies and guidance for the historic environment
- AA4 Establish plans and monitor policy implementation
- AA5 Provide guidance on and process applications for resource support

## **Module 2 Propose & carry out research projects**

- AA3 Propose and plan a research project
- AC1 Research and analyse information to achieve objectives (archaeology)

## **Module 3 Propose & carry out analysis & interpretation**

- AD1 Undertake analysis and interpretation

## **Module 4 Specify requirements and contract for projects**

- AJ4 Agree professional services
- AB1 Develop and agree objectives for projects
- AB3 Agree a brief
- AB5 Co-ordinate the procurement process (for works, services and supplies)
- AB6 Prepare and agree the contract

## **Module 5 Evaluate and plan projects**

- AJ4 Agree professional services
- AB2 Propose and agree project methods
- AB4 Estimate resources and develop programmes
- AJ7 Oversee project costs, quality and progress

## **Module 6 Carry out site investigations**

- AJ9 Reduce risks to health and safety in the workplace
- Either AC2 Conduct non-intrusive investigations
- Or AC4 Conduct intrusive investigations on an archaeological site

## **Module 7 Contribute to site investigations**

- AJ10 Contribute to health and safety in the workplace
- Either AC3 Contribute to non-intrusive investigations
- Or AC5 Contribute to intrusive investigations on an archaeological site

## **Module 8 Handle and store items**

- AC7 Transfer items
- AE3 Identify and describe items (archaeology)
- AC6 Store items

## **Module 9 Characterise the archaeological resource and advise on its conservation**

- AE1 Characterise the archaeological resource and recommend action
- AE2. Assess options for conserving the archaeological resource in situ

## **Module 10 Advise on and maintain compliance with archaeological requirements**

- K1 Maintain compliance with archaeological requirements

- Module 11 Specify and implement conservation procedures**  
 AE4 Develop conservation plans for items (archaeology)  
 AE5 Develop and implement preventive conservation procedures for items (archaeology)  
 AE7 Develop and implement remedial conservation procedures for items (archaeology)
- Module 12 Conserve items**  
 AE6 Apply preventive care procedures to items (archaeology)  
 AE8 Implement routine interventive conservation procedures (archaeology)
- Module 13 Develop and implement systems and procedures for recording information**  
 AF1 Develop information systems to meet the needs of users (archaeology)  
 AF2 Develop procedures for the use of information systems (archaeology)
- Module 14 Record data and make available to others**  
 AF3 Classify, compile and maintain data on the material remains of past communities  
 AF4 Provide information on the material remains of past communities to others
- Module 15 Manage collections**  
 AG1 Develop strategies for the maintenance and use of a collection (archaeology)  
 AG2 Prepare the accommodation of items (archaeology)  
 AG3 Acquire and dispose of items and collections (archaeology)  
 AG4 Lend and borrow items (archaeology)
- Module 16 Devise and plan education and learning programmes**  
 AH1 Devise a strategy for interpretation and learning (archaeology)  
 AH3 Identify and evaluate the requirements of users of learning and interpretative activities (archaeology)  
 AH2 Commission work on interpretative and educational media (archaeology)
- Module 17 Contribute to interpretative, learning and promotional activities**  
 AH4 Plan and deliver interpretative activities (archaeology)  
 AH5 Plan marketing activities
- Module 18 Develop and promote the archaeological organisation**  
 AJ1 Develop a strategy for the development of an archaeological organisation  
 AJ2 Represent the interests of an archaeological organisation  
 AJ3 Develop public relations strategies (archaeology)
- Module 19 Resource and control the finances of the archaeological organisation**  
 AJ1 Develop a strategy for the development of an archaeological organisation  
 AJ13 Devise and implement methods to resource an archaeological organisation  
 AJ14 Manage finance in the business unit
- Module 20 Manage teams**  
 AJ5 Select personnel for activities  
 AJ6 Develop teams and individuals  
 AJ11 Manage the performance of teams and individuals  
 AJ12 Deal with poor performance in your team
- Module 21 Manage projects**  
 AJ7 Monitor contract costs, quality and progress  
 AJ9 Reduce risks to health and safety in the workplace  
 AJ15 Evaluate project achievements and secure improvements  
 AJ8 Prepare for potential disasters (archaeology)
- Module 22 Manage and develop yourself**  
 AK2 Contribute to advances in the body of knowledge and archaeological practice  
 AK3 Develop your own resources and protect the interests of others

## Matrix indicating how the Modules might fit with typical work roles

This table overleaf contains a series of examples of the relationship between the standards modules and actual work roles. It is important to distinguish between a job description and a work role: an archaeologist's job description may cover more than one work role.

The following work roles have been included in the table

- Giving archaeological advice to a planning authority
- Giving archaeological advice to a major property developer
- Managing commercial archaeological projects
- Conducting archaeological field projects
- Assisting on archaeological excavations
- Assessing and researching finds assemblages
- Conserving archaeological artefacts
- Directing an archaeological heritage centre

Ref	Module Title	Giving archaeological advice to a planning authority	Giving archaeological advice to a major property developer	Responding to enquiries for archaeological information	Managing commercial archaeological projects	Conducting archaeological field projects	Assisting on archaeological excavations	Assessing and researching finds assemblages	Conserving archaeological artefacts	Directing an archaeological heritage centre
1	Develop policies and plans	√								
2	Propose and carry out research projects							√		√
3	Propose and carry out analysis and interpretation							√		
4	Specify requirements and contract for projects		√							
5	Evaluate and plan projects				√					
6	Carry out site investigations					√				
7	Contribute to site investigations						√			
8	Handle and store items							√	√	
10	Characterise the archaeological resource and advise on its conservation		√		√					
12	Advise on and maintain compliance with archaeological requirements	√								
14	Specify and implement conservation procedures								√	
15	Conserve items								√	
16	Develop and implement systems and procedures for recording information									√
17	Record data and make available to others			√						
18	Manage collections									√
19	Devise and plan education and learning programmes									√
20	Contribute to interpretative, learning and promotional activities					√				
21	Develop and promote the archaeological organisation									√
22	Resource and control the finances of the archaeological organisation									√
23	Manage teams				√					√
24	Manage projects				√					√
25	Manage and develop yourself	√	√	√	√	√	√	√	√	√

## Assessment Strategy

### **This Strategy will relate to awards based on National occupational Standards for Archaeology**

What is set out in this document is the basis for a submission by the relevant Sector Skills Council.

### **Note on the structure of the Assessment Strategy**

The first section contains the guidance that is designed to apply to all Archaeology awards.

Annexes will be attached (see Appendix 1) which will contain guidance that is specific to the individual awards associated with the profession. The detail in the Appendix will be agreed with the Awarding Body and subject to the advice of the Archaeology Training Forum.

# An Assessment Strategy to cover NVQ and SVQ Awards in Archaeology

## **External Quality Control of Assessment**

The external quality control of assessment is guaranteed by the use of trained, qualified and occupationally competent external verifiers that sample a high proportion of candidate evidence.

- **All** evidence will be generated in a working cultural heritage organisation or an organisation concerned with the collection, preservation or interpretation of cultural heritage
- **All** candidates will be assessed by trained, qualified and occupationally competent assessors
- **All** portfolios will be internally verified by trained, qualified and occupationally competent internal verifiers
- The assessments of **all** assessors and the evidence from **all** candidates will be internally verified
- An external verifier will sample the assessments of **all** assessors and the evidence from **all** candidates.
- **All** completed portfolios will be retained by the assessment centre until released by the external verifier
- Where assessors are new or where there is evidence that assessment or internal verification has not been effective, 100% sampling will be implemented
- **All** EV 'decisions' are subject to confirmation by the awarding body

## **National occupational standards that must be assessed in the conditions of the workplace**

All national occupational standards must be assessed through actual performance in the workplace. The evidence of performance must be generated through the work of a cultural heritage organisation or an organisation providing a service to a cultural heritage organisation. For example a university classroom would not be considered as a cultural heritage workplace but an archaeological site being investigated by a university project team would be and a university archive or collection could be if they were providing an archaeological service commercially or for cultural heritage organisations. The external verifier will decide on what constitutes a cultural heritage workplace if there is any doubt.

## **The use of simulation**

In some circumstances it would not be possible to assess particular units without providing a simulated experience. Where the reason for simulation is due to the fact that the performance is dependent upon an unpredictable or infrequent event (e.g. responding in the event of a fire) then a simulated event is necessary (e.g. a fire drill). However, CHNTO has provided specific guidance with the unit where this is likely to occur.

*Unless this it is specified in the actual assessment guidance, simulation must not form the main proportion of performance evidence.* Simulation can always be used to supplement the performance evidence for a unit but it should not supplant it. Sometimes, the performance evidence is patchy and evidence from a simulation is used to corroborate and validate the performance evidence.

Where candidates are students in HE and FE or other institutions, simulation should not be used to provide access to assessment situations. Where assessment is required for students the education provider should negotiate with sector employers (who may be commercial, public or recognised voluntary organisations) to provide assessment situations for students working for the employers in a voluntary capacity.

Indeed, where it is not possible for any candidate to provide good quality evidence from their own workplace they should consider offering their services to another sector organisation. This would prove particularly useful in the procurement, contracting and marketing process (Units AB4, AB5, AB6, AH5, AJ3) and provides a very real situation although it may not be their own organisation.

The particular units or elements where it is clear that simulation is not appropriate at all have been identified within the assessment guidance. Some units (AC1, AD1, AE3, AJ10, AK2, and AK3) are key mandatory units at different levels of the qualification structure and must all be assessed in the workplace without the use of simulation.

### **Requirements of assessors and verifiers**

**All assessors** will be appointed by an approved centre to assess candidates' evidence. They must be qualified in line with the requirements of the accrediting organisation.

In addition they will be competent in the units they are assessing. This will mean that they have either achieved the qualification or will have actual experience of performing the functions in the units they are to assess. Assessors will normally have a minimum of two years experience of performing the function in the previous five years. Where a centre wishes to appoint an individual that does not meet minimum experience, the awarding body<sup>6</sup> can approve Assessors on an individual basis if there is a strong case. All such applications must have the recommendation of the External Verifier

**All internal verifiers** will be appointed by an approved centre to ensure the quality and consistency of assessments within the centre. They must be qualified in line with the requirements of the accrediting organisation.

In addition they will be competent in the units they are verifying. This will mean that they have either achieved the qualification or will have actual experience of performing the functions in the units they are to verify. Internal Verifiers will normally have a minimum of two years experience of performing the function in the previous ten years. Where a centre wishes to appoint an individual that does not meet minimum experience, the awarding body<sup>4</sup> can approve Internal Verifiers on an individual basis if there is a strong case. All such applications must have the recommendation of the External Verifier.

**All external verifiers** will be appointed by the awarding body to monitor and ensure the quality and consistency of assessments between centres. They must be qualified in line with the requirements of the accrediting organisation.

In addition they will have some competence in the units they are verifying. This will mean that they have either achieved the qualification or will have actual experience of performing the functions in the qualifications. They will have at least seven years experience in the sector and will have held senior management positions within a cultural heritage organisation or an organisation concerned with the collection, preservation or interpretation of cultural heritage. Where a centre wishes to appoint an individual that does not meet minimum experience, the awarding body<sup>4</sup> can approve External Verifiers on an individual basis if there is a strong case.

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<sup>6</sup> The awarding body will consult the ATF in any cases where the assessor's credentials are in doubt  
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### **Independent Assessment**

QFI has, since January 1999 been the awarding body for NVQs and SVQs in the sector and the above strategy is based on the organisation's experience as an awarding body for the cultural heritage sector and on the consultations with employers and other key interest groups. Employers consulted were unanimous in seeing independent assessment as an added cost to the system without supplying any additional value. Indeed, after several quality assurance visits from SQA (SCOTVEC) and QCA, there has never been any question that the above system does not provide the rigour and the quality required for this sector.

## Appendix 1 Award Specific Assessment Guidance linked to Archaeology Awards

### **Award Title (N) (The details of this will be defined for each NVQ/SVQ in conjunction with the Awarding Body)**

#### **General Please note the following:**

- This award will be implemented in accordance with the Archaeology Assessment Strategy
- The following information should be read alongside the Archaeology Assessment Strategy
- The following information is intended to complement the Archaeology Assessment Strategy
- Evidence of performance will normally be drawn from activities carried out regularly over a period of no less than (**Minimum period recommended**)

#### **1 External Quality Control**

See Assessment Strategy

#### **2 Workplace Assessment**

It has been agreed that unit (Y) must include Assessment in a work-based context.

#### **3 Supplementary Evidence**

This evidence *may* be supported by additional supplementary evidence such as (e.g.):

- ◆ Daily/Weekly site records
- ◆ Witness testimonies from authorised persons (see Assessment Strategy)

#### **4 Simulation**

Simulation is discouraged for all parts of this award. In the event of a candidate being unable to generate workplace evidence for a particular Standard of Performance, then the use of this method of assessment must be agreed in advance with the External Verifier. (See Assessment Strategy)

#### **5 Knowledge Assessment**

- Responses to pre-set questions (oral/written) and/or
- Responses to Assessor devised questions. (Assessor devised questions and responses to be recorded)

#### **6 Assessor/Verifier Expertise**

See Archaeology Assessment Strategy. (plus any specific conditions that may apply to this award)

# Key and Core Skills Signposting

**(Attached as a separate document)**

## Participation in Project Activities

A considerable number of people from within the archaeological profession have been involved in this project, some in a variety of capacities. Their contribution has been considerable. Below we list those who have formally advised the consultants, but there are many others, all of whom are due our thanks. The final responsibility for the content of the project report and all other related documents rests with Q-West Consultants.

### Steering Group

David Stocker	Chair (English Heritage)
Carla Harrison	Joint Project Manager (CHNTO)
Kenneth Aitchison	Joint Project Manager (IFA)
Mark Novels	QCA
Claire Costin	QCA
Paul Coffey	SQA
Peter Hinton	IFA
David Jennings	Oxford Archaeological Unit
Bob Hook	English Heritage & ATF
Gill Chitty	Consultant to English Heritage
Mike Bishop	Nottinghamshire County Council

### Working Group

Stephen Carter	Project Leader
Kenneth Aitchison	IFA - Joint Project Manager
Carla Harrison	CHNTO - Joint Project Manager
Mark Williams	Lindsay Archaeological Services
John Valentin	AC Archaeology
Andy Thomas	Cambridgeshire County Council
Nicola Powell	IFA Finds Group
Paul Pattison	EH Cambridge
Darren Miller	Worcestershire Archaeology Service
Miriam McDonald	RCAHMS, Edinburgh
Frank Green	Test Valley Borough Council
Adrian Green	Museum of London
Jill Cook	British Museum
Gill Chitty	Consultant to English Heritage

### Expert Review Group

Ellen McAdam	City of Glasgow Council
Andy Josephs	Entec (UK) Ltd
Jill Harden	National Trust for Scotland
Amanda Clydesdale	AOC Archaeology Group
Simon Buteux	Birmingham University Field Archaeology Unit
David Baker	Historic Environment Conservation

### Education Group

Gary Lock	OUCE
David Rudling	UCL FAU

### English Consultation

Don Henson	Council for British Archaeology
Ian Greig	Archaeology South-East
Simon Buteux	Birmingham University Field Archaeology Unit
Rob Reed	Association of Archaeological Illustrators & Surveyors
John Preston	Institute of Historic Building Conservation
Ian Panter	English Heritage
Roger Martlew	University of Leeds
Gary Lock	University of Oxford
Jan Wills	Gloucester County Council

### Scottish Consultation

Jonathan Wordsworth	Council for Scottish Archaeology
Caroline Wickham-Jones	Freelance consultant
David Strachan	Perth & Kinross Council
Jack Stevenson	RCAHMS
Ian Oxley	Historic Scotland
Neil Curtis	Marischal College Museum
Geraint Coles	University of Edinburgh
Beverley Ballin Smith	Glasgow University Archaeological Research Division
Derek Alexander	National Trust for Scotland

### Trials Group – Scotland

Erica Guttman	University of Stirling
Beverley Ballin-Smith	University of Glasgow
Julie Gibson	Orkney Archaeological Trust
Jane Downes	Orkney College
Miriam McDonald	RCAHMS
Peter McKeague	RCAHMS
Richard Connolly	Headland Archaeology Ltd
Ross Murray	Headland Archaeology Ltd

### Wales Consultation

Vanessa Straker	English Heritage
Chris Martin	Clwyd Powys Archaeological Trust
Martin Locock	Glamorgan Gwent Archaeological Trust
Denise Lavis	Council for Museums in Wales
Gwilym Hughes	Cambria Archaeology
Stephen Clarke	Monmouth Archaeology
Don Benson	CBA Wales
Fiona Gale	Denbighshire Council

## The Archaeology Training Forum

The ATF is a delegate body that represents all those organisations that have an interest in the issues of training and career development in archaeology. The ATF has formed the Steering Group for the sector, supported by the Cultural heritage NTO.

It was constituted in 1998 to review the present provision of training in archaeology and to co-ordinate future strategies to meet the profession's training needs.

The Forum exists to:

- keep current training provision by member bodies and others under review
- seek to ensure that funding for training from whatever source is distributed according to need within a framework of priorities
- work towards the alignment of existing and proposed training sessions and units, sponsored or run by bodies represented, into a series of related programmes accessible to all members of the profession and to interested amateurs
- work towards agreement on the validation of training units and their integration within a widely accepted professional career structure

The Forum is concerned to promote solutions to current training issues in the profession and to engender action to ensure that future needs are met. To do so it will work with academic and professional partners to promote a range of training to meet the needs to the profession and co-ordinate strategies to fill any perceived gaps.

The bodies making up the Forum are:

**The Association of Local Government Archaeological Officers**

**The Council for British Archaeology**

**English Heritage**

**The Institute of Field Archaeologists**

**The Institute of Historic Building Conservation**

**The Standing Committee of Archaeology in Continuing Education**

**The Standing Conference of Archaeological Unit Managers**

**The Standing Committee For Archaeology**

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