Phil Banfill and Barry Bridgwood, School of the Built Environment, Heriot-Watt University, Edinburgh, EH14 4AS.
P.F.G.Banfill@hw.ac.uk

ABSTRACT

Most building conservation practitioners perceive projects as finishing upon handover of the conserved building to the client, without necessarily giving much thought to the continuing management of the heritage asset for the rest of its lifetime. Since the key objective of conservation is to prolong the life of historic assets by giving them a sustainable new use, this narrow focus is unfortunate. Equally facilities managers are often constrained by the particular features of historic buildings and the regulatory environment in which they must function. This paper explores the competences which are needed by those responsible for the conservation and management of historic buildings and describes work done to establish an agreed framework of educational support for conservation practitioners to raise their competence level. Features of the framework have potential benefits for facilities managers. Five educational support units, based on the ICOMOS (International Council on Monuments and Sites) training and education guidelines have been converted, under the leadership of Heriot-Watt University, into an on-line format suitable for use by the practitioner at his or her desk. The paper describes the rationale behind the competence framework, gives a brief outline of the on-line content and its philosophy, and suggests how the principles embodied could be adopted by facilities managers in their work within the historic environment. It concludes that, while facilities managers are unlikely to participate in any of the built environment conservation accreditation schemes, those responsible for historic buildings need to be aware of the special needs of the historic environment.

KEYWORDS: building conservation, ICOMOS guidelines, education, professional accreditation

INTRODUCTION

In the words of ICOMOS (1993) the object of built environment conservation is:

“to prolong the life of cultural heritage and, if possible, to clarify the artistic and historical messages therein without the loss of authenticity and meaning. It is a cultural, artistic, technical and craft activity based on humanistic and scientific studies and systematic research.”

Thus it includes engineering structures, landscapes, townscapes and monuments, as well as historic buildings, and explicitly aims to prolong the life of historic assets by giving them a sustainable new use. While conservation uses the same technical skills as are developed by studying the “new-build” built environment, it has developed its own ethics and philosophy for dealing with the heritage of what already exists - the key principles of integrity, authenticity, reversibility and minimum intervention.

In the UK, education in this field is almost entirely a postgraduate activity. Apart from single modules in some undergraduate degrees most graduates enter practice ignorant of conservation philosophy and practice. They may develop an interest in conservation and build up skills and experience through practice, supported by established postgraduate courses at a number of universities. However, the increasing trend towards requiring accreditation of professional practitioners demands a more structured approach and this paper
describes a framework which has been developed to support professionals as they prepare portfolios of their work for assessment. The framework is targeted at professionals of any discipline and the competences described will be relevant to facilities managers. As far as we know, this approach is unique in Europe.

BACKGROUND

The UK government has committed itself to improving the quality of design and architecture and recognises the part played by historic buildings. For example the Policy on Architecture for Scotland (Scottish Executive, 2001) has, as one objective, “to promote the value and benefits of good architecture...[and] work...to commission and publish research on matters relating to building conservation and traditional materials”. Another objective is “to foster excellence in design, acknowledge and celebrate achievement in the field of architecture and the built environment, and promote Scottish architecture at home and abroad”. This will be met by working to “promote the imaginative re-use of old buildings and develop the skills necessary for their conservation, repair and maintenance.” (Scottish Executive, 2001). Similar sentiments underpin the work of the UK Commission on Architecture and the Built Environment (CABE, 2006).

The value of the built heritage is being increasingly recognised, even though it can be difficult to quantify such value (Allison et al, 1996). Cultural tourism is a major contributor to the economies of most northern countries: tourists are attracted by the historic built environment and they expect to see conserved buildings and structures in appropriate and well-maintained settings. Culture and heritage are key contributors to a sense of national identity: people need to identify their origins, and buildings, through their associations with particular historical events, are essential aids in the education process. The quality of life of the inhabitants of any area is enhanced by the enlightened conservation and imaginative re-use of old buildings: run-down districts can be given new life and communities re-invigorated by conservation and restoration work (English Heritage, 2000).

Conservation is a major component of the built environment industry, contributing to the repair and maintenance sector’s turnover of about £28 billion in the UK. This is not matched by educational provision, which focuses on the issues of new-build work, and this in turn leads to variable levels of practitioner competence. To address this Historic Scotland, English Heritage and the Heritage Lottery Fund now all require, as a condition of grant assistance, that conservation projects be led by an accredited practitioner. All grant assisted projects require a conservation plan, which must include a management plan for the sustainable use of the building after project completion and handover of the conserved building to the client. Thus, although they are unlikely to lead a conservation project, facilities managers have a clear interest in these long-term management arrangements.

PRACTITIONER ACCREDITATION SCHEMES

Against this background several schemes have been set up in recent years - by the Royal Institution of Chartered Surveyors, Architects Accredited in Building Conservation (under the Royal Institution of British Architects, the Royal Incorporation of Architects in Scotland, Royal Irish Architects Institute (Ireland and Ulster), the UK Institute of Conservation and the Conservation Accreditation Register for Engineers - and about 300 professionals have been accredited in the UK. The Edinburgh Group, a pan-professional forum convened by Historic
Scotland, has been working towards a common accreditation approach since 2001 (Maxwell et al, 2004), which requires candidates to demonstrate their competence and experience through a portfolio of projects of different types. It has been recognized throughout this process that educational support, in the form of Continuing Professional Development (CPD), would be needed to help practitioners develop their skills and present their portfolios for assessment. This was felt to be the only way to effect the improvement in the ability and competence of individual professionals which the accreditation initiative set out to achieve.

A set of competences were presented to the Edinburgh Group in 2001, from which an educational framework was prepared, which in turn has been developed into a set of distance-learning materials for use by practitioners at their desks. The aim is to present the material in a way that challenges participants’ understanding of why conservationists do what they do. It starts from the premise that participants are already experienced and knowledgeable in conservation practice and therefore does not duplicate the already existing body of accessible information. However, self-assessment questions force them to examine their perceptions and values. It gives guidance to help them assemble the portfolio of evidence which will demonstrate their competence to those responsible to assessing their application for accreditation through any of the professional schemes. The rationale and framework are described next.

RATIONAL

The international ICOMOS Training and Education Guidelines (ICOMOS, 1993) (see Table 1) are the key reference points established from the conservation policies and charters (Bell, 1997, BSI, 1998, Historic Scotland, 1998). The Guidelines were originally conceived as a training framework but are a useful basis for identifying the functions relevant to conservation professionals, stating that conservation works should only be entrusted to persons competent in these specialist activities. The guidelines refer to ensembles (groups of buildings) and cultural heritage sites defined as such by the World Heritage Convention of 1972, as well as monuments. They include historic buildings, historic areas and towns, archaeological sites and their contents, as well as cultural and historic landscapes.

The 14 clauses in paragraph 5 of the ICOMOS Guidelines are arguably quite complex and certainly make an interlocking set of desiderata. Individual practitioners have experienced difficulty in understanding or interpreting some of them and one aim of this work was to provide a simplifying basis for such professionals. Additionally, the lack of a formal order within the guidelines makes the direct translation into a course curriculum difficult.
Table 1 The ICOMOS training and education guidelines (14 clauses)

<table>
<thead>
<tr>
<th>Clause</th>
<th>Description</th>
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<tbody>
<tr>
<td>a</td>
<td>read a monument, ensemble or site and identify its emotional, cultural and use significance</td>
</tr>
<tr>
<td>b</td>
<td>understand the history and technology of a monument, ensemble or site, in order to define their identity, plan for their conservation and interpret the results of this research</td>
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<tr>
<td>c</td>
<td>understand the setting of a monument, ensemble or site, its context and surroundings, in relation to other buildings, gardens or landscapes</td>
</tr>
<tr>
<td>d</td>
<td>find and absorb all available sources of information relevant to the monument, ensemble or site being studied</td>
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<tr>
<td>e</td>
<td>understand and analyse the behaviour of monuments, ensembles or sites as complex systems</td>
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<tr>
<td>f</td>
<td>diagnose intrinsic and extrinsic causes of decay as a basis for appropriate action</td>
</tr>
<tr>
<td>g</td>
<td>inspect and make reports intelligible to non-specialist readers of monuments, ensembles or sites illustrated by graphic means such as sketches and photographs</td>
</tr>
<tr>
<td>h</td>
<td>know, understand and apply UNESCO conventions and recommendations, and ICOMOS and other recognized Charters, regulations and guidelines</td>
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<tr>
<td>i</td>
<td>make balanced judgements based on shared ethical principles, and accept responsibility for the long term welfare of cultural heritage</td>
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<tr>
<td>j</td>
<td>recognize when advice must be sought and define the areas of need of study by different specialists, e.g. wall paintings, sculptures and objects of artistic and cultural value, and/or studies of materials and systems</td>
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<tr>
<td>k</td>
<td>give expert advice on maintenance strategies, management policies and the policy framework for environmental protection and the preservation of monuments and their contents and sites</td>
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<tr>
<td>l</td>
<td>document the works executed and make same accessible</td>
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<tr>
<td>m</td>
<td>work in multi-disciplinary groups using sound methods</td>
</tr>
<tr>
<td>n</td>
<td>work with inhabitants, administrators and planners to resolve conflicts and to develop conservation strategies appropriate to local needs, abilities and resources.</td>
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Bell (2001) provided such a simplifying basis, based upon a consideration of the conservation process in terms of seven sequential stages:

(i) investigation and assessment of the cultural significance of a site;

(ii) investigation and assessment of its physical condition;

(iii) conservation planning and the definition of issues;

(iv) resolution of social and economic issues;

(v) resolution of technical issues;

(vi) implementation of the action plan;

(vii) management of a site of cultural significance.
By dealing with the definition of issues together with their resolution and recognising that the last two are both related to management of the site over its lifetime, it became possible for her to propose the five unit framework that is described next.

SUMMARY OF FRAMEWORK

Stirling and Bölling (2002) developed Bell’s content to assist individuals identify where they lack knowledge or expertise and expounded the framework to inform the provision of appropriate professional development and training. The framework recognises that the competences are additional to basic professional qualifications and is divided into five units, each with a clear statement of the aims, competences required and examples of the sort of evidence that practitioners would expect to provide for assessment. Every unit includes the explicit requirement that practitioners show knowledge and understanding of conservation principles and ethics and the impact they have on their work.

Unit 1 Cultural significance

The success of every conservation project depends on understanding a site’s cultural significance. By identifying a site’s qualities, what needs to be protected against decay, intervention or removal becomes clear and working within a common code of ethics prevents applying contemporary social, political or individual bias to what needs to be preserved. The unit aims to explain the concepts on which the significance of a building or site is based and to provide tools to investigate and assess the components of this significance, whether historical, cultural, social or emotional.

Practitioners should be able to identify, survey, assess and analyse sources relating to the historical, cultural, social or emotional significance of a site, and record it as appropriate. From this they will be able to identify vulnerable aspects of a site and define a philosophical approach to its conservation, from which a conservation plan will emerge.

Unit 2 Architectural qualities and value

Architectural quality is a major component in the assessed value of most historic buildings and areas. Since any intervention will affect appearance and thus value no project work should be undertaken without fully understanding its impact on existing architectural quality. The unit aims to ensure that practitioners are able to identify architectural quality and value and therefore design interventions that meet the requirements of the brief without reducing the existing architectural quality.

Practitioners should be able to identify, survey and understand the architectural quality of any structure in terms of its formal concept, spatial relationships, massing, form and proportion, influence of light, colour and texture, detailing, and use of materials. From this they will be able to identify existing qualities and vulnerable areas and define a conservation philosophy. They should be able to appraise alternative solutions and choose those which satisfy the technical, functional and economic requirements of the brief with minimum impact on existing quality. The level of intervention may range from basic repairs to full projects where re-use, alteration, adaptation, addition, landscaping, public access needs, safety requirements and the introduction of modern services may be required.
Unit 3 Investigation, materials and technology

The special qualities of cultural sites restrict the choice of investigative and repair methods for historic buildings. Further, construction that does not conform to present day standards is not necessarily defective and no detailing should be changed without serious consideration. Clearly, those materials that have deteriorated through environmental processes may need replacement, but the reasons for the deterioration must be understood and addressed. This unit aims to ensure that practitioners have the skills to carry out a condition survey, investigate defects and make balanced decisions on the options for action within sites of cultural significance.

Practitioners should be able to select and use appropriate survey methods, employing specialists as necessary and backed up by the contribution of documentary evidence, to identify defective material, structure and construction and the causes of decay and its likely rate of spread. From this they will be able to identify vulnerable areas and define a conservation philosophy. They should be able to appraise and select from alternative solutions to deal with the problems presented and preserve the significance of the site or building.

Unit 4 Social and financial issues

This unit covers a broad range of social, financial and other activities associated with the use, evaluation and management of sites of cultural significance. Function, use, ownership, property valuation, public attitudes and external factors such as vibration, mining subsidence, atmospheric pollution, vandalism and theft, all need to be investigated and their impact assessed before conservation plans can be drawn up. Legislative controls and the existence of potential new users, together with the availability of project funding and sustainable income sources for the building after conservation, may all restrict the options available to the practitioner. This unit aims to ensure that practitioners can make balanced and defensible decisions on options for action and develop these in such a way as to resolve the social and economic issues that threaten the building or site. Practitioners should be able to deploy or call upon specialists in all the above areas.

Unit 5 Implementation and management of conservation works

Significant problems created by the site’s sensitivity influence the way the work should proceed and dictate the use of the most suitable contract, contractor or directly employed labour. This unit aims to ensure that practitioners involved in the financial and managerial aspects of implementing a conservation plan or project can do so without damaging or compromising the cultural significance of a site, and can install measures to ensure its future survival.

Practitioners must be aware of the special needs of conservation projects in identifying the standard of work required and suitably expert contractors, in selecting appropriate means of procurement, cost planning and control, and in the management and supervision of works in progress to assure success. They must also be able to develop and implement short and long term maintenance plans, provide for the sustainable management of tourism and be able to participate in continuing monitoring and review of the site’s overall condition, significance and conservation.
DISCUSSION

The framework has been developed into a set of educational support materials in a web-based format. The website (www.understandingconservation.org) went live in March 2007 and has subsequently been receiving about 600 visits per month. It contains support material, text, illustrations, links to other sites, and is supported by self-assessment questions and other challenging exercises. As well as a note-taking facility, it will be possible for candidates for accreditation to log-in and build up their personal portfolio but this will require the accreditation schemes to activate the links to their online forms.

The mapping of these five units on to the ICOMOS guidelines is summarised in Table 2 and this confirms that all of the guidelines are covered by the competences. The framework recognises that professionals already possess a body of knowledge and skills as a result of their own discipline but that conservation requires those knowledge and skills to be applied in a context which is ethically and philosophically different from new build.

Table 2 Matching of units to ICOMOS guidelines

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Most professional groups likely to be leading conservation projects are concerned with all five units so the framework provides a universally applicable set of competences. The most obvious role of facilities managers in the historic environment is in managing buildings which must be financially viable within the constraints of legislation or other regulations aimed at protecting the built heritage. This requires management which understands the philosophical issues of why a building should be conserved, why it is significant and why that significance is vulnerable during the day-to-day operation of the building. A less obvious role of facilities managers is to use their skills in managing buildings to work with designers of conservation projects to ensure that the conserved building delivers what the client expects. In other words to feed knowledge and understanding gained through objective evaluation of building performance into the design process.

Thus the mainstream expertise of facilities managers will bear on ICOMOS clauses e, i and k, which are covered by unit 5 of the framework. They will be able to contribute to the architectural interventions in the historic environment and bear on ICOMOS clauses c, e and h, covered by unit 2, and work within the philosophical environment covered by unit 1. The framework of competences is clearly relevant to facilities managers working in historic buildings.
CONCLUSION

A common set of competences for professionals working in built environment conservation has been identified. Support materials for professionals to improve their competence and work towards accreditation have been set up on a website, and this is expected to help assure the supply of accredited professionals and improve the overall quality of conservation work in the UK. Facilities management professionals are likely to find the competences helpful in understanding the philosophical and practical issues faced by conservation professionals.

ACKNOWLEDGEMENTS

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