

**BRITISH LIBRARY STUDY: THE NEED FOR BOOK
CONSERVATION IN THE UK AND INTERNATIONALLY**

BRITISH LIBRARY
March 2004

British Library Study: The Need for Book Conservation in the UK and Internationally

PURPOSE OF THE STUDY

1. The purpose of the study into The Need for Book Conservation in the UK and internationally was:

To look at the need for book conservation in the UK at present and in the future, to assess the British Library's need for book conservation and conservators, and to assess current training provision for book conservation in the UK. This is in order for the British Library to develop and plan its role and level of commitment for training in book conservation nationally.

2. The Study was undertaken in the context of the British Library's responsibility for the Conservation and Preservation of the collection and against the background of the following factors:
 - The continued need for conservation of the bound collections in the British Library.
 - The continued growth in the amount of bound material that is legally deposited in the British Library each year for which the British Library is legally obliged to maintain for the nation.
 - The reduction in the number of book conservation training courses in the UK and internationally.
 - The number of British Library staff who will be retiring in the next five to fifteen years and the need to replace them.
 - The number of book conservators required for positions in UK libraries and archives.
3. The terms of reference for the study were as follows:

BRITISH LIBRARY STUDY: THE NEED FOR BOOK CONSERVATION IN THE UK AND INTERNATIONALLY: TERMS OF REFERENCE

1. To identify the need for book conservators in the British Library and in UK libraries and archives with conservation centres.
2. To obtain a picture of the current situation for training in book conservation in the UK and the effect of the closure of courses on the ability to employ individuals with the relevant skills in book conservation now and in the future.
3. To look at long-term projection of the number of book conservators the British Library will require to fulfil its role for the conservation of the national collection.
4. To make a recommendation regarding the provision of book conservation training in the British Library with regards to the anticipated future needs of the Library.

4. The study was charged with reporting in late 2003, with a draft report completed in September 2003, and a final report submitted in January 2004.

ACKNOWLEDGEMENTS

5. The study was led by Helen Shenton, Head of Collection Care and was carried out by Catherine Atkinson, Head of Conservation Training and Development.
6. The British Library wishes to acknowledge the contributions made to the study by individuals in the UK and internationally who responded to the questionnaire on the provision and need for book conservation and conservators and to colleagues both internal and external who gave valuable comments and feedback.

British Library
March 2004

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INTRODUCTION

7. In 1998 there were 104 conservation centres in Libraries, Museums and Archives with specialist book conservators in the public sector across the UK. The 31 libraries with conservation centres in the UK employed 290 conservators, 104 of whom were specifically book conservators. The number of institutions requiring book conservation is now considered to be much greater than this, particularly in the university special collection libraries, and in public libraries with special collections (Museum Focus number 2, Chapter 3: Public Sector Conservation Provision in the UK, 1998). Special collections are generally considered to be collections that contain unique material, whether the item is a single copy, of particular value for its content and/or design.
8. ***In 2003 a British Library questionnaire, Identifying the Need for Book Conservation and Book Conservation Training in the UK, found that all respondents from libraries, archives and museums with book collections intended to either keep the number of conservators at a steady state or to increase the number.*** This study supported the need for greater provision of conservation training, in order to both counteract attrition through current conservators retiring or leaving the profession, and also to meet demand among organisations for increased staff numbers. Please see Annex 2 for further details of the study.
9. ***The demand in both the public and private sectors is for highly skilled, specialist book conservators with specific technical knowledge.*** This is due to the change in focus from rebinding material to a more passive approach of conserving material *in situ*.
10. The British Library has a collection of over 150 million items including material from 300 BC to today's newspapers. The current number of monographs in the collection numbers 12,500,000, in addition to 6,700,000 manuscripts and archives with the annual intake of legal deposit of monographs at 100,671, and the purchase of monographs at 92,759. ***The British Library has a legal obligation to preserve the national printed archive.*** The care of all of the collections is vital to the British Library from a heritage point of view as well as from the viewpoint of the Library as a public service. Collection Care, one of the departments within the British Library includes book and paper conservators, staff working in the areas of preservation, security and storage policies and implementation. ***The British Library with 58 staff working in book conservation is the largest employer of book conservators in the UK.***
11. In May 2003, the British Library Board endorsed the development of the new British Library Centre for Conservation (BLCC) on the St Pancras site. The Key drivers for the development of the conservation studios in the BLCC were:
 - To take a lead in book conservation in the UK with a centre for excellence in the provision of book conservation and to provide training for future book conservators.
 - The need to obtain new premises for the book conservation studios that remain in the British Museum for which the lease ends in 2007.
 - Cost of rented space elsewhere in London
 - The need for all conservation staff to be on one site with access to the collections.

- The need for a space to accommodate the number of staff required with updated equipment to reflect the changes that have taken place in book conservation practices.

THE GOVERNMENT AGENDA AND THE WORKFORCE

12. Access to cultural heritage has become central to the government's focus. As a result libraries, archives and museums need to have the ability to address the preservation needs of their collections in order to meet the service requirements of access to the material. This requires organisations to have conservators working in-house or to be able to access and pay for external conservation services.
14. Access and education have been leading issues for the cultural heritage sector. To give the public access to items, libraries, archives, and museums are working to ensure that their material is not only accessible now, but will be in the future. In order to maintain and increase access to material, it is important that issues within stewardship and collection care are addressed, including the conservation and preservation of heritage material. In an Archive Conservation Scoping Study undertaken by London's Museums, Archives and Libraries (LMAL) and London Archives Regional Council (ARC), it is stated that, "Conservation is a key element of stewardship and collections care. This activity needs to be managed effectively in order to ensure long-term access to archival (and other) material."
15. Education includes education of the casual visitor, the researcher, as well as development and education of the workforce (staff and volunteers), responsible for delivering services within these organisations. **Conservation professionals are a core part of the workforce that enables the accessibility of materials within libraries, museums and archives.** Central to the government's agenda is education and the acquisition of skills, particularly workforce development in the heritage sector. In order to maintain the skills required to work in conservation and preservation, individuals entering the field of conservation must be able to obtain the necessary training.
16. The concern at present is that changes have taken place in training and education in book conservation, and new conservators cannot meet the needs and expectations of employers. Courses must cover a wide variety of skills and information and it is the time to carry out practical application of conservation skills that is often diminished. Employers require knowledge of traditional skills in bookbinding and conservation, as well as experience of new techniques in conservation, and an increased knowledge of associated disciplines e.g. science. This is backed up in a recent report by DEMOS for MLA (previously Resource), *Towards a Strategy for Workforce Development*. **The report states that there appears to be little evidence that traditional skills, such as curatorial or technical skills, are any less in demand.** The report continues by saying, "In the context of restricted resources, the combination of rising demand for new skills and no decline in demand for traditional skills poses serious questions about the capacity for the sector to sufficiently add to its skill base and meet its anticipated future needs." (DEMOS, 2003: 22) This is born out by the training provision in conservation at present. **Not only are there fewer courses offering training in book conservation, but as conservation courses are required to meet the increased academic requirements of their institutions, there is less time**

for teaching and learning the practical, applied skills necessary to carry out book conservation.

BOOK CONSERVATION IN THE BRITISH LIBRARY AND THE FUTURE NEED FOR BOOK CONSERVATORS

17. The British Library currently employs 58 book conservation staff, and each has worked an average 19.5 years. ***Of the 58 book conservators, 16 will reach retirement age within the next 5 years, 40 within 10 years and 54 in 15 years.*** It is inevitable that there will be an additional attrition due to resignations or other changes to personal circumstances. ***To maintain the status quo in the British Library alone, a minimum of 4 new conservators must be recruited every year.***
18. Regardless of whether the function of the British Library changes over time or whether more material is born digital, there would be a need for book conservators now and in the future. This is mainly due to the rare books and special items that already exist in the British Library, and the number of printed books still being published. The number of books published in the UK in the year 2000 and legally deposited at the British Library was over 100,000. Not all material will require conservation on deposit or purchase, however the indications are that they will require some kind of conservation or preservation in the future. In order to continue to make the content of material published in non-book format (CD ROM, DVD etc.) accessible, it will either need to be recorded in the same format or in another format as technology moves on. The advantage of the printed book is that the content can be accessed at any time without special equipment that is prone to obsolescence. ***The printed book, providing it is stored and handled appropriately, is likely to be the only object that survives in its original format.***

THE NEED FOR BOOK CONSERVATION NOW AND IN THE FUTURE

19. The greatest gap, identified both in literature and through interviews, at present has been the level of practical experience gained by individuals on conservation degree courses. In the UK, formal degree courses have become the pre-requisite for employment in the field of conservation. It is evident from previous and present training in book conservation and conservation generally that gaps could be addressed in a variety of ways. These include changes to the content of the formal courses, greater opportunities for taking part in master classes, mid-career training, and professional development at all levels. ***Many changes have been made in the last forty years regarding training of conservators, and the types of skills that are required to be a professional conservator.***
20. ***All respondents to the questionnaire in Annex 3 see a continuing need for book conservation at a steady state, and some thought that there is likely to be an increase in the need for book conservation in the future.*** Rare books, material that is in unusual format (Asian material), large format (geographical material and maps), and newer material (photographic albums) will always need conservation in order to remain in a usable state, either to become usable as a primary source, or for surrogates of their content to be

made. The digitisation of existing book text often requires book conservation to be carried out in order for suitable copies to be made.

21. With the continuing increase in digitisation of the text in books, which enables greater access to its content, the book itself, and the binding will increase in value as the “real thing.” What might follow would be the book as a highly esteemed material object, something for display rather than be accessed as an original source by many. ***It is also possible that material that is “born digital” will remain digital if the information is of limited or only temporary importance, but that all information that has a higher or long-term importance will eventually be formatted into books.***
22. There will be an increase in preservation activities, boxing of fragile material, the creation of surrogate copies through digitisation or other means. Conservation in libraries is different from that in a museum as the material is generally handled more intensively. If the use of reading rooms is presently going down and the books are not being used, there is potential that libraries will become large conservation and preservation operations.

THE NEED FOR TRAINING IN BOOK CONSERVATION

23. The need for conservation work to be carried out is evident in libraries, museums, and archives whether public or private organisations. Where material is open to access both deterioration and damage will occur. The library sector and particularly those with rare and special collections feel this need, as their material is often unique and irreplaceable. Therefore, when damage occurs, by whatever means, the need to have specialised skills to preserve the material and ensure its accessibility and longevity is required.
24. A book conservator must be able to understand the three-dimensional object, how it works, and often to ensure the object continues to work and to be accessible for use, handling, copying etc. They must also be able to carry out work on the binding *in situ* (without dismantling and separating the binding and text block), and also treat the text block of a book.
25. The meeting held at West Dean in 1999 on *The Future of Book Conservation Training in the UK*, included individuals from the national libraries in the UK, other legal deposit libraries, the National Archives (formerly the Public Record Office), private conservators, museum conservators and representatives from several training courses. The outcome was that there are several training needs identified including book conservation skills at a variety of levels, internships for individuals who have completed a formal course and specialist short courses for book conservators already in the workforce. This discussion is still on-going.
26. One of the concerns raised in the last few years is the lack of training opportunities for individuals to pursue book conservation both in the UK and worldwide. As courses close, there is also a smaller pool from which employers are able to find trained book conservators.

Organisations offering full-time conservation courses covering book conservation	1988	1993	1998	2003
Camberwell College of Art	•	•	•	•
West Dean College	•	•	•	•
Guildford College of Technology	•	•	•	
Royal College of Art and Victoria & Albert Museum		•	•	
University of Surrey Roehampton		•	•	
Colchester Institute (School of Printing)	•	•		
Brunel Technical College	•			
Gateshead Technical College	•			
Lincolnshire College of Art	•			
Total	7	6	5	2

27. ***The number of book conservation courses available in the UK has declined steadily in recent years, from seven in 1988 to only two: at West Dean College and Camberwell College of Art.*** All respondents to the British Library's 2003 questionnaire (Annex 2) highlighted this decline, which is attributed to the high costs associated with the high supervisor to student ratio required in these courses, as opposed to lack of demand for places. The trend is increasingly for organisations to hire paper conservators and either train them in-house, or in partnership with another organisation which has both book conservation expertise and sufficient capacity for training. ***What is clear is that the number of book conservators being trained is not sufficient for the present need in the sector.***
28. ***On average nine book conservators graduate from Camberwell College of Art and West Dean College every year.*** Of these a third are usually from overseas (eg 3/6 from West Dean in 2002-03 and 2/6 in 2003-04) go on to jobs or further training and internships overseas. Another third go on to related work in the private sector, leaving just three graduates a year to meet the combined recruitment needs of all the national and regional libraries, museums and archives with conservation centres. ***This alone is insufficient to meet even the British Library's requirements.***
29. Given the changing education needs of the conservator, all the positions recently filled at the British Library have been by graduates from the Camberwell and West Dean courses, or international courses such as Spoleto, Italy. All have also had work experience after course completion at places such as Shepherds Ltd. in the commercial sector, private conservation practices, and other organisations with conservation centres. Courses vary in length and individuals enter courses from a variety of backgrounds, and therefore enter the job market with varying experience and expertise. ***The supply of suitable candidates is low, and urgent action is required if organisations like the British Library are to continue to be able to meet their book conservation needs.***
30. ***There is a continuing need for book conservators with traditional skills as well as those with an understanding of the conservation needs of new technologies and deterioration processes.*** The development of technology, the born digital material, and therefore changes to acquisition in libraries and other organisations will create some changes in education and

training programmes for conservators. However there is still a significant amount of material being published in traditional monograph format, in addition to the material that is already held by libraries, archives, museums and collectors. The need for book conservation and specialist conservators for the new as well as existing material is still very apparent.

31. At present there is nowhere that teaches the range of oriental and occidental book conservation techniques, craft heritage skills, history and culture of the book, that is required to steward the national documentary heritage in the short, medium and long term. The demand in both the public and private sectors is increasingly for highly skilled, specialist book conservators with specific technical knowledge. This is due to the change in focus from the rebinding of material to conserving material *in situ* which is largely due to the adoption of specific ethical codes for the treatment of material.

OPTIONS FOR BOOK CONSERVATION TRAINING AT THE BRITISH LIBRARY

32. As a result of the research and interviews carried out into the need for book conservators and conservation in both the British Library and the UK, an options appraisal was carried out to look at what the British Library could do to address the need for training in book conservation. A number of options for addressing the shortage of trained book conservators have been considered, and the advantages and disadvantages of each were looked at. These options included, to do nothing, in-house book conservation training for individuals new to conservation through a variety of means (National Vocational Qualifications, graduate and modern apprenticeships), short courses, internships for students completing a conservation degree or a post graduate internship, and collaboration with another UK or international Institution to deliver a degree in conservation.

OPTIONS APPRAISAL CONCLUSIONS

33. ***Having considered the options available, it has been concluded that the British Library should as a matter of urgency establish internships for post primary conservation courses in order to respond to the recognised and immediate need of students in courses in the UK.*** As a longer-term strategy, an MA or other relevant degree in book conservation will be developed in collaboration with an academic institute, and other training opportunities will be explored. The major steps to be taken will be:
 - Recommendation 1: Graduate internships will be offered for those who already have the necessary theoretical knowledge but require practical experience and skills. The emphasis for internships in book conservation has been to enable the individual to gain further experience in practical, hands on work. The intention is for them to work on a variety of materials but with particular emphasis on areas of need to the British Library, the specific interests of the students, and in their area of expertise. The British Library can deliver the variety of learning and training experiences required for interns due to the diversity of the collection which has the necessary range of Western and non-Western materials. ***The aim is that by targeting this group, it not only improves the employment prospects for the students,***

but also fills an immediate need for junior book conservators in the sector. This is the quickest route to meeting the Library's urgent recruitment needs and those of other British collections.

- Recommendation 2: The strongest solution for the medium- and long-term will be a joint two-year MA in Conservation (or similar course) in partnership with a Higher Education institution or institutions, with the Library delivering the practical half of the course. Discussions with potential partners are already underway and will be pursued in parallel with the development of the graduate internships, but it is anticipated that the course would not be open to students until 2007-08, with the first graduates therefore entering the job market in 2009-10.
- Recommendation 3: Discussions will also be pursued with Further Education colleges regarding the possibility of offering work placements. As no appropriate courses are currently offered, this will take longer to set up than the above two programmes. Given the advanced theoretical requirements now demanded from conservators, this step has in any case been given a lower priority than the preceding two, although it is recognised that it potentially has a valuable role to play in broadening interest in, and widening access to, the conservation profession.

THE NEED FOR INTERNSHIPS

34. Internships have been identified both in the literature on conservation training and in the recent interviews in Annex 2 as a method for addressing some of the changes in conservation training and the gaps in training as identified in this report. *The combination of academic instruction, work experience during the academic course, and supervised internships as the final year of a course and before a first job are considered the best way for students to obtain the desired competencies.*
35. Most individuals involved in providing training in degree courses, agree that, although students gain some practical experience during courses, the purpose of an internships is to give individuals the opportunity to put theoretical knowledge into practice, and to gain experience outside of the classroom in which an individual is given responsibility and is expected to be a member of a conservation team. (Mathisen, Rushfield, 1998: 55). Students who receive a degree in conservation are often not considered to have the expertise of a professional conservator in terms of practical hand skills, knowledge and approaches to treatment that comes with exposure to a variety of material and problems. Conservation students in the United States often find that two years' of internship post qualification is a precursor to a job as an assistant conservator. Internships have become a way for future employers to measure the abilities of an individual. Someone who has successfully completed a one-year internship is considered to have had experience working with others, an awareness of the pressures of an institution or private practice. It is also known that they have worked under the supervision of a qualified conservator, have generally worked on a variety of materials, and have been able to put their knowledge and skills into practice.
36. The message from course leaders and individuals working in the field is that as long as the main training opportunities remain in the colleges and

universities the emphasis will be on academic training, and there will be less and less time for the requisite practical skills. As a result, it is felt that the best way to develop and hone practical conservation skills is to promote internships to support the academic course in universities and colleges. **At present internships are becoming an integral part of conservation training, either as a requirement of the final year of a degree programme or as the first step after receiving a degree in conservation.**

37. Internship opportunities are often dependent on the goodwill and support of busy professional conservators working in organisations and privately owned conservation studios. Due to the pressures of their own work, it is often difficult to guarantee the opportunity of an internship on a regular basis. At the same time, internships are often not paid, although some students are able to secure a contribution for their expenses from the training institution, the host, or an external funding body. This limits the places students may be able to take due to the cost of living, the availability or need for transport etc. **However, it is generally agreed that completing an internship increases a student's employability, as organisations hiring conservators understand how internships function and what they provide in terms of instilling skills and decision making abilities.** This is supported by the publication of research commissioned by the Museums and Galleries Commission and carried out by The Institute for Employment Studies titled, *Nurturing the Conservators: The Early Career Paths of Conservation Graduates* published in 1999.

CONCLUSION

Five million items are issued to the reading rooms each year in the British Library. Collections in the UK vary greatly in type, size, use, and facilities. Libraries and archives are unique whether they sit in a designated building or are part of a museum or private enterprise. Material is handled, read, investigated, and displayed, causing deterioration of items over time. It is difficult to measure the future national need for book conservation as it will depend on the material acquired by libraries and other organisations and the amount of material published in book format. It could be based on the ratio of books in the collection to the number of book conservators, the cost of the collection to the cost of conservation staff, or the ratio of the number of items removed from the shelves for users to the number of in-house conservators, (as it is acknowledged that it is often in handling of items that the greatest damage is done). However even if print production eventually decreases, print collections will still grow (just a little more slowly) and therefore the need for book conservation is not likely to decline.

Conservation teaching and learning is not just a matter of method and technique. Conservators require the ability to analyse information, make and explain decisions, carry out treatment based on knowledge, not just through a learned routine, to select the information and materials required, to negotiate with others, and to manage each project within a given time frame. A skilled conservator will require training to enable them to assess and carry out work on large and varied collections with the myriad deterioration problems that will arise. It is essential that newly qualified conservators are able to obtain internships in organisations with knowledgeable conservation staff who can help them hone practical skills on a variety of materials, and discuss and compare conservation treatments in a supportive atmosphere. It is intended that the new Centre for Conservation will provide the British Library with the available space to offer a formal programme for learning and internships in book conservation.

ANNEX 1

THE PROFESSION OF THE CONSERVATOR-RESTORER

The position of the conservator-restorer has become more professional and is likely to increase in the number of individuals working to set professional standards. This is particularly true in the UK with an accreditation scheme for professional conservator-restorers, which is the framework by which the UK conservation profession aims to provide a common benchmark for conservator-restorers in practice.

In Europe the ECCO (European Confederation of Conservator-Restorers) guidelines for the Education of Conservator-Restorers of Cultural Heritage (ENCoRE) specifies that applicants to conservation-restoration education undertake specific entrance appraisals. These are mainly to ensure that individuals are not working on material without having achieved a certain degree of expertise through a formal training programme. The guidelines also specify the need for a junior conservator (an individual who has achieved a Bachelor's level degree) to be supervised, or to enter study at a Master's level.

The existing and emerging standards for professional conservators will have an impact on the education route of any individual pursuing a career in conservation. Guidance, after an initial phase of training through a formal course, a National Vocational Qualification (NVQ) or Modern Apprenticeship, on how to progress towards accreditation in the UK is presently being carried out by University College London and the United Kingdom Institute for Conservation (UKIC).

In order for an individual to meet the requirements to become a recognised professional conservator through accreditation or other means requires us to look at the education routes for individuals entering the profession.

DELIVERY OF TRAINING IN CONSERVATION PAST AND PRESENT

Methods for training book conservators and the traditional routes for a career in conservation have included apprenticeships, internships and a variety of programmes based at differing educational institutions. There are often several schools of thought on how and where a new book conservator should be trained. Comments often reflect personal experiences.

Traditional Apprenticeships

Traditional apprenticeships in book conservation were often seven years in duration, and started when an individual was between fifteen and sixteen years of age. (This shifted as law in the UK has changed.) The apprenticeship often consisted of learning the trade of book binding in an organisation with a bookbinding department with a master craftsman to teach individuals the manufacture of material, and the methods of binding and the materials used. This consisted of a variety of skills associated with the book structure and the attachment and care of the text block. Some apprenticeships included year long courses or day release onto courses in book binding and printing.

As conservation became a profession within libraries, museums and archives, apprenticeships changed little, but some may have shifted to include learning methods for the conservation of the material, where there was less of an emphasis on restoration and replacement of original material. Instead the aim was to maintain as much of the original material as possible while making the item accessible, safe for handling, and minimising the possibility of the same treatment being required at some future point. In order to carry out this type of work, it was thought that a more formal education would be necessary in order to develop analytical and problem solving skills.

The advantages of an apprenticeship is when there is the opportunity to work with skilled and generous practitioners on a variety of material and to build up expertise of book binding and conservation over a period of time. Thus as an individual gains hands on experience and expertise, they would work on more and more complex material depending on how their skills progressed. The disadvantages are that poor practices can be passed on if a 'master' is not suitably skilled or committed.

Traineeships

Trainee-ships for individuals without any book conservation experience such as those run by larger organisations like the British Library lasted for 2-4 years. Individuals came mainly out of colleges and employers were looking for an interest in book binding and conservation and manual skills. This type of training is rarely available now if at all. Trainee-ships operated along similar lines as apprenticeships in bookbinding, but differed in length and type of training undertaken. Whereas apprenticeships had been training in bookbinding methods only, trainee-ships which started later (with the first at the British Library in 1986), were intended to teach the practical skills of bookbinding and conservation. Individuals might have the opportunity while training to obtain theoretical knowledge externally through short courses or conferences. However there was no set framework for this type of training so that the theoretical knowledge an individual obtained could be very specific to the work they were carrying out, or not specific enough and the potential for gaps in theoretical knowledge was high.

Much of this type of training has declined or is no longer available mainly due to the educational changes in the UK system where individuals are encouraged to seek a qualification. With a drop in conservation and book binding personnel in conservation centres throughout the UK, there was also the difficulty in training individuals with little to no experience of book conservation or craft skills in-house while maintaining production.

In-house training also became difficult with the shift from carrying out bookbinding and restoration to more emphasis on conservation. There has been a distinct change in the last twenty years towards preservation, and the re-housing of material, the creation of surrogate copies (digitisation, facsimiles, and other copying methods), and an emphasis on conservation rather than restoration or complete rebinding of material. This does not mean that the craft skills needed for bookbinding have changed, and an understanding of book structures and materials is essential to working in book conservation. However the need for some aspects of book binding is not as great as it once was, i.e. gold tooling/finishing, and certain types of binding, particularly new binding for serials is often now carried out externally to the organisation by commercial binderies.

It is interesting to note that in Australia, where there are no longer courses available in book and paper conservation, they are now considering increasing in-house training. Thus relying on interested individuals either with binding skills who can then be gradually trained in conservation approaches, or with an individual without either binding or conservation experience, but with a high level of interest and manual dexterity. This also requires that the conservation teacher keep their knowledge of materials, techniques, and conservation ethics up-to-date, and is able to train others effectively. Additionally there is a concern that there will not be a formal training programme that could be used for the student to obtain the theoretical knowledge that is so important.

Degree courses

Entrants to degree courses vary widely in background. Some individuals have degrees or diplomas in subjects related to the arts or sciences, some have diplomas and certificates in book craft, and some have been apprenticed in book craft or book binding studios. The age range varies enormously from individuals with A-levels to those making a career change later in life. All come to the course with a variety of experiences and knowledge.

Due to the shift conservation training to tertiary education, degree level courses since the 1970's, that there has been a greater and greater emphasis on the need for individuals entering the field of conservation to obtain academic training. The lack of recognition for individuals not trained through formal university programmes is highlighted in an article by Colin Pearson in which he writes, "It is essential for the development of the conservation profession in any country that conservators are trained through a university level academic course." Pearson continues in the same article with, "Only by obtaining a recognised university degree will conservators gain employment in a cultural institution, in a government agency or in a private practice, at the level necessary for them to have status, responsibility, and a salary to perform as professional conservators." (Pearson, 1996: 122). This may appear to be overly strict in what is acceptable, and is part of the diminished respect for apprentice trained individuals. However this is largely due to the shift in where training is provided, shifts in society and its expectations, and advances in knowledge of the deterioration of material and how it affects heritage material and therefore decisions regarding how it is treated. In fact in an article titled, *What do Students Expect from Internships*, the authors state that, "With few exceptions, each student who enters a conservation program intends to become a conservator in a museum setting and work under a renowned conservator. Many students feel that academic training is the only way to attain this goal." (S.Mathisen, R Rushfield, 1998: 58) It should be noted that those working in conservation point out that in order to attract interested and motivated individuals to the profession there must be good employment prospects and career paths available to them.

In a presentation made in 1998 on "Improving the Route From Conservation Education to Professional Practice" the author states, "There is a general agreement on the need for university-level education that will shape conservators who can question, analyse and innovate (i.e. a training that provides the intellectual skills that traditional apprenticeships did not)." It is important to note that Pye continues on to say, "However, education alone does not equip a student to practice as a conservator." (Pye , 1998: 97) Students need to have the opportunity to apply the theoretical knowledge. The practical application is carried to a limited extent due to the needs to fulfil the academic requirements. Competence or the ability to practice at an acceptable level includes the understanding of the nature of material and how it

reacts to treatments as well as what tools are used and to be able to use them well. This comes only with repeated practical experience, as does innovation and the ability to adapt learning, both practical and theoretical, to each new problem. Course work without on the job experience also runs the risk of missing out on the work context that is such an important part of working with a collection.

ANNEX 2

RESULTS OF INTERVIEWS REGARDING BOOK CONSERVATION TRAINING

Methodology

Due to the acknowledged concern regarding training in book conservation, the British Library is looking at providing both formal internships and primary training in book conservation. In order to ensure there is such a requirement, it was decided that the British Library would look at what the need for book conservation is and what it might be in the future for the British Library and the UK generally.

To ascertain what individuals working in the field of book conservation thought were the necessary skills required by those starting work in book conservation, and what they saw as the most important development needs, interviews were conducted with individuals working and training in the field of book conservation. A questionnaire was written in June 2003 and 30 individuals were interviewed. These responses were collected through telephone interviews, interviews in person, and by email responses. The responses were solicited from individuals in the UK and in Europe, the United States, and Australia in order to obtain the widest feedback into the need for training in book conservation.

The interviews in Annex 2 are from individuals working in conservation in heritage organisations, who have direct responsibility for directing their conservation departments and who are actively planning for the future. They were interviewed in order to obtain their views on the need for book conservation and conservators generally, the need within their institutions, and the perceived future need. Questions included the types of skills they are and will be looking for with regards to conservation for their organisation's collections and how this fits in with the planned life cycle of the collections, as the preservation and conservation need of some material increases over time.

MAIN CONCLUSIONS FROM THE INTERVIEWS

1. Conservators and restorers are best trained in a way that combines a formal education programme and workplace experience.
2. Initial training itself is not enough.
3. There are concerns regarding whether teaching staff have the key skills necessary for training.
4. Teaching staff needs to be available to the students on an on-going basis throughout the course, and can include, but not be replaced by guest lecturers who are not.
5. That a student needs to understand the wider world of librarianship, curatorial and archives work.

THE RESPONSES TO INTERVIEWS REGARDING BOOK CONSERVATION TRAINING

Question 1. How many staff do you employ in book conservation at present?

Responses to question one varied as expected. Numbers of staff in conservation departments number in public and private organisations from 0 up, with 0 being the number for smaller organisations that send material out for conservation up to 48 staff at the British Library, one of the largest numbers of conservators employed in an organisation. The interviews I pursued were largely with individuals working in an organisation that has staff working in conservation and who may be members or heads of conservation departments themselves even if that meant they were the only person working in book conservation. Within question one, information regarding training was also sometimes provided.

Question 2. How many are working on the conservation of book structures, and do they also work in the conservation of paper?

Most book conservators and craft bookbinders also work on the conservation of the text block, although in some organisations this will be split and the person who carries out the paper repair will then give the item to another member of staff to bind. For question two, some interviewees also gave information on staff backgrounds. These vary from those with professional conservation qualifications, a few with formalised professional training specifically in book conservation, often obtained as part of post-graduate courses, and craft trained bookbinders with extensive in-house experience. Some staff are accredited conservator-restorers, some are working towards accreditation.

Question 3. What do you see as your organisation's greatest need with regards to book conservation in the future? 3a. In terms of material to be conserved 3b. In terms of the number of staff to carry out the work and their expertise?

The main needs that emerged, were for book conservators with highly specialist knowledge, with good practical the ability to carry out condition report and documentation, good communication, problem solving skills, understanding of material science and how material reacts. In terms of material to be conserved, the range depended largely on the type of material held in the organisation, but in most respondents cited the rare book items as having the greatest need in the future for conservation. Rare having a variety of meanings, either because of the material used in making the book, the age of the item, or the fact that it is the only one in existence. Several also cited the material printed post 1850 on acidic paper, and the potential for the deterioration of a vast number of items in their care. They are looking at finding the best conservation methods at present, and what the minimal treatment can be so that as little work as possible is carried out. Some respondents split their material needs depending on the date of the material beyond rare or modern. They considered the requirement for routine repairs of mass produced modern material, specialist conservation for the historic bindings, as well as the need for plans for the prevention of damage to book collections as a whole and devising alternative solutions for damaged material.

There was concern over staff recruitment in that many of the present staff in organisations are over 40 years of age, and therefore succession planning for the future was another concern. Responses varied from not needing to replace each

vacated post with someone with the same experience, as the need for conservation in the future may not require as many conservators carrying out interventive treatments. One example given was that there has been a reduction in the number of individuals able to carry out gold finishing, however it was considered that the need for this type of work is less than it had been. The need for gold finishing has not disappeared, however many organisations now see this as an act of restoration which they felt they were less and less likely to carry out if at all, and that there were other methods for achieving similar results that were sufficient for their needs.

The question also led to responses that were tailored around the greatest threat. The common threat seemed to be that there is scarcity of book conservators available now and for the future. This has become apparent during recent recruitment exercises in the UK. More and more organisations are hiring paper conservators whose experience and training has concentrated on work on flat art objects, and what departments want is for individuals to have at least some experience of working on bound material. The reasons for the lack of individuals with this experience is often cited as being due to changes in courses, with a broader emphasis on organic materials. The upgrading in the past 30 years of courses to degree status often means that according to one interviewee that, although qualified, and often with a sound understanding of the theoretical aspects of book conservation, book conservators can often be practically inexperienced and under confident with the actual objects. Several interviewees commented that they have had book conservators who can tell you what to do, but cannot apply that knowledge because they lack the hands on experience with a wide variety of materials.

Question 4. Does training in book conservation reflect the needs of your organisation at present? (1 being least reflective, 10 the most reflective) 4a. If you mark below 5, please state what you consider to be missing.

Most respondents marked three, the highest mark was a 6 and the lowest was one. Respondents wanted students to emerge from programmes with a an understanding of materials and the manufacture of materials that are used in book conservation, an understanding of the structure of books which are infinitely varied, knowledge of cutting edge developments in current research and practice. It was generally felt that individuals were not taking advantage of current research and may not even be aware enough of what research has been carried out. They wanted more experience, meaning a fluency in book conservation techniques and an understanding of the full range of up to date techniques. It was thought that courses at present were not giving students an understanding of the material and its history, although others felt that the courses were too short to do this, and this is something they have been helping employees gain in-house where there is a greater variety of material. Some also wanted students to gain a broader understanding of collections including risks to collections, their usage etc. Several respondents stated that they relied on in-house training or secondments to other organisations with a good reputation for book conservation to give staff additional training. Some also stated that in the past they had sent staff on theoretical courses for book conservation (through the IPC). However, these courses have become more specific in recent years, concentrating on one type of binding rather than, for example, the whole spectrum of western made bindings. For three of the respondents outside of the UK, it is even the formal conservation courses that are lacking, although they may have capacity to train individuals on practical conservation in-house.

There was some concern voiced in training on offer in programmes. This was mainly to do with whether there was someone available to student on an on-going basis, to

ask questions and supervise work carried out. Some courses rely more and more on guest lecturers and trainers, and there was concern that the learning process is less fluid, because sometimes questions arise later when the trainer is not available. This was of particular concern in conservation as there are skills and knowledge that are basic to its functioning, but are complex and take years to acquire. They felt that book conservation requires lecturers that are specialised in book conservation. That given the scope of book conservation, the variety of material, potential ethical and technical pitfalls, it requires specialist trainers. Also required is the ability to impart depth and breadth of practical and historical knowledge effectively and to help students develop qualities of reflection and judgement.

Technical skills are often transferred from one generation of conservators to the next, both in and outside the classroom, but always through observation of and gradual participation in practice. One interviewee questioned whether it would be sufficient for individuals to learn from demonstrations at conferences (i.e. Society of Bookbinders) or through a detailed description in a book, and then be left to practice. Or was it necessary to have a skilled individual available to answer questions and give help and information on an on-going basis? With regards to the use of certain methods in conservation, although some practices are used less now than at one time, the need for skills such as gold finishing and the full range of skills for rebinding are still necessary.

Question 5 How would you like to see book conservation training develop in the future? i.e. what skills do you see as being most important or most useful?

The responses were largely similar, with the emphasis on the maintenance of practical and craft skills, some of which are used less and less, but will still be required should rebinding of rare and important incunabula be required in the future. However it was not that the book conservator should remain a technician, but that they should have “the knowledge, judgement, understanding, and experience to make decisions, plan and carry out both interventive and preventive conservation.” In order to do this it is thought that a mixture of theoretical and hands-on training and education is needed, but that the courses either need to be longer or be able somehow have sufficient breadth to give students time to investigate ideas and take them further. One respondent stated that, “Finally, I think the professional book conservator must be able to take the profession forward, by carrying out research and by communicating what is most important about conservation to the rest of the world.” From an archivist, the response was that they would like book conservators to have an awareness of the specific issues for the conservation and preservation of archive materials. The respondent stated that, “As an archivist, I would like a conservator to be able to present me with a variety of options for treating objects; ranging from preservation/storage techniques to full interventionist conservation.”

It would appear that the workforce in conservation is likely to continue to diversify and split, with some that are concerned mainly with conservation and those with responsibilities for preservation with an underlying understanding of the other area, and more specific crossover on designated projects. However it will be necessary, regardless of an individual’s specific expertise, to have a broad understanding of the principles of conservation and preservation.

Question 6. What is your biggest concern regarding book conservation training? i.e. lack of training available, lack of conservation outlook in book binding and book craft courses etc.

According to the respondents, the formal academic training courses for conservation are too few. They also felt that they were insufficient in terms of conservation and craft training to produce skilled conservators. They thought they required more depth with regards to knowledge of types of material and their treatment. The amount of diverse information that an individual obtains is considered highly important so that in the future individuals know when to ask questions, and when to reconsider using a treatment that may be more harmful than good. The old adage of, "a little knowledge is a dangerous thing", was reiterated several times, with respondents having experienced working with newly qualified conservators on material or treatments that they did not fully understand, or were not able to adapt appropriately. Two respondents thought there was a need for a foundation course before embarking on a formal training course, and that the training course should be longer than what is presently available. Only one respondent linked the lack of training opportunities to the paucity of employment opportunities in book conservation. This is outside the UK and, and it was thought that the massive changes in the country's publishing business, and the movement to machine binding and offshore production was largely responsible for the lack of experienced binders and individuals entering the book binding trade and book conservation.

A separation in training book craft skills and conservation was important, although it was felt that both were needed to be an effective book conservator. It was felt that it was important to point out that bookbinding and courses in book arts are not the same as courses in conservation. It was not just the knowledge of skills that was of concern, other issues included, understanding of managing material and people, reprographics, how books are processed in libraries, and how material is displayed.

The other concern that came out among most of the interviewees was that of who is doing the teaching? What has the experience of the trainer been, and what can we do to encourage more individuals with good skills and knowledge to become trainers? The need to look at the courses offered in Germany and Italy which are longer and cover a greater amount of skills and range of materials was also voiced as a possibility for planning in the future, and as a source of individuals to be recruited.

Generally literature bears out the comments above. It is acknowledged that book conservation is different from bookbinding. That bookbinding is a set of skills used to bind a block of text, or used to repair and restore a bound work. Conservation requires the skills of the binder as well as the ability to assess, document, analyse material, have a knowledge of historical structure so as not to cause future damage to an object needing treatment. It is also being aware that rebinding is not always a solution as this may create additional problems if requirements for digitisation and other types of copying are made.

Question 7. What do you think is the best way of developing an individual's skills in book conservation? i.e. apprenticeship training, courses in conservation, internships etc. 7a. Reflecting on your response to the question above, at what point in an individual's career do you think they should be pursuing this training?

The responses to question seven once again reflected the need for skills to be repeated so that they became second nature, and did not require relearning each time the skill was required, i.e. paring leather. Responses did not vary enormously. Almost universally it was thought that individuals need a good grounding in craft skills

backed up by academic work, knowledge of chemistry or material science, and internships in an institution post qualification to enhance all the skills learned during a course. More specifically, necessary knowledge included, information on how collections work (how they are acquired, used, stored etc.), the historical aspect of material in the collections, a range of techniques in conservation, and an understanding of how material reacts.

It was thought that apprenticeships are the best way to develop practical skills, but not the best way to establish a broader conservation perspective. This perspective was from all interviewees due to the need to understand the craft side of what book conservation entails. One suggestion was of a scheme similar to the apprenticeship training shortened to three years followed with an internship and courses. All replied that courses need to be backed up with internships and placements and one respondent thought that courses could be directly linked to employers.

As part of question seven it was asked if there was an ideal time for conservation training to take place. It was thought that training should not be too early, as conservation requires a certain maturity of outlook. One respondent said, "Practical skills are best picked up young but most people need time to develop a sense of direction and commitment – so I don't think there can be any general rules." Otherwise, responses were not varied with regards to what basic skills were necessary before training in conservation, and it was felt that generally when an individual had achieved a high level of craft skill they could embark on book conservation. It was also thought that it is important to learn and understand the craft of the bookbinder and to understand the knowledge, skills, and responsibility of working on rare material. One respondent said, "Europe believes first an apprenticeship, then a course, then internship. I think this works." Regardless of age, it was generally thought that a year of foundation involving what it means to be a conservator and to be able to link into the specialist area they are interested in would be useful.

There was also mention several times regarding a need for mid-career training that could be more specific to an area of conservation, as well as training between first job and mid-career to enhance skills and knowledge. "Refreshers and re-evaluation are essential if you are to grow as a professional." Generally it was agreed that there is no set way of doing things, there is always something to learn, what is important is that the individual is always learning, always obtaining new information.

Question 8. Does this reflect your knowledge of training presently available or what has been available in the past?

Most interviewees went through either an apprenticeship or course based learning for book conservation. At present it was agreed that not much in terms of formal or informal training for book conservation is available. Regarding skills, the consensus was that although an apprenticeship was excellent for obtaining craft and binding skills, it was not enough and knowledge of chemistry or other science and ethics was essential, and that this was information often obtained externally. Most interviewees thought that from their own experience, that craft trained people had greater confidence in handling objects, and had a greater ability to get on with the practical side of conservation more quickly than individuals who had completed a conservation course only since the practical parts of these course has been shortened. There was also a difference noted in the courses with some offering direct and consistent training, and others having a larger percentage of guest teaching which was not considered to be consistent enough.

It is not presently possible to obtain a BA in book conservation, and there is the need to be able to carry out paper conservation on the text block as well (paper, vellum, and parchment conservation). It was noted that they as employers had difficulty recruiting book conservators. One interviewee said, "There has been a tension in that degree holding conservators can (although not always) be practically inexperienced because the courses have generalised almost to a point where subsequent courses are needed. You can address this by ensuring that a structured in-house training/experience programme is followed but this can be difficult to sell to senior managers who pay more (and rightly so) to recruit degree holding book conservators and then are required to accept that further training is required. A great deal of diplomacy is needed to sell this and to educate employers to understand that book conservators with experience are rare and must be valued."

The Society of Archivists conservation training scheme was mentioned a couple of times, although it was noted that the individual must already be employed. Another interviewee stated that that conservation training in the UK had never been consistent with course length sometimes shortened if the individual had already obtained a degree. Most interviewees thought that regardless of the training system, the quality of the trainers would be very important.

Question 9. What kind of skills and knowledge do you look for in a new recruit in book conservation?

The interviewees response to what an employer or supervisor is looking for varied from someone with excellent craft skills, to someone with "a good attitude, flexibility, intelligence and knowledge of conservation before practical skills." The majority would like interns and staff who can interact with other staff on a professional level. They want individuals to display eagerness and willingness to learn and openness to new ideas and approaches to work and conservation problems, and a continued interest in gaining knowledge. They want individuals to have the ability to communicate skills, have a feel for the materials.

Some look for a general skill base, and are willing to train individuals in-house on particular, preferred styles. Others wanted more specific skills and were looking for skills ranging from basic book binding skills to an understanding of the three dimensional book structure, an understanding of materials and issues, agents of deterioration, why things are the way they are. Other skills mentioned were neatness in the workplace, ethics, and chemistry, knowledge of history of conservation and of the material. Employers also seemed to be looking for individuals who can think critically. This would enable employees to understand not just the book structure styles but also their weaknesses. One example that was given was, that is not just the binding of the text block and how that will be affected, it is the understanding that the rebinding of a text block that was untreated acidic paper wouldn't last very long. Another expressed this as what not to do rather than what to do, they would rather something was left undone if the individual is unsure. Some knowledge of preservation was also included. One interviewee expressed what they looked for as follows, "Aside from professional qualification I am attracted by evidence of practical experience, this can be enhanced by knowledge that they have worked in a particular workshop or with a particular individual I personally recognise as a field leader." This kind of experience can be at any time in a career in conservation. Students are also aware that this is what employers are looking for, and often what they are looking to obtain through internships.

Question 10. What kind of skills and knowledge training do you offer new employees?

Responses varied once again, with the most general response as, "All that someone should know to do the job." However, most interviewees responded that there are in essence two stages. The first is a non-job specific induction to the organisation and how it works, and how conservation and preservation fit in to the overall work plan. The second stage concerns specific training linked to conservation and preservation normally dictated by the need of the organisation and the material. This training includes in-house and on-the-job training in conservation treatment and preventive conservation, paid evening classes, visits and tours of similar organisations. Some organisations let staff select the training they would like and offer them opportunities to attend conservation courses, meetings and in-house training. They offer differing levels of support for individuals to attend conferences and seminars. Some are encouraged to pursue a formal qualification through the SoA and to take up opportunities for continuing professional development that would lead to accreditation. One interviewee was able to state that individuals are allowed to pursue training for up to 10% of their time. Individuals are also encouraged to work in specific areas of conservation and craft (i.e. fine binding), as a way to ensure skills are maintained, and in order to try to promote staff development of skills and foster areas of expertise.

Aside from practical training it was felt that new employees needed an overview of how the building is used, to understand the vulnerability of the collection, how the collection is used, the inherent effect of collections in storage and those in the reading rooms. This could be followed with work to improve the care of the collection, technical treatment training,

Training can also consist of learning skills that are not centred around conservation, but include IT, management and presentation skills, having access to a reference library. One interviewee responded that the employer pays for half of accreditation and for membership to one professional body chosen by the individual.

The British Library has a newly appointed Head of Conservation Training and Development, the first such post in the UK. This post was created in order that the BL would be better able to fulfil its commitment to developing conservation in-house, and to develop the national provision in bookbinding.

Question 11. Does your organisation have the facilities, staff and time to train individuals in book conservation? Yes No

11a. If yes, how much time do you devote to training? 11b. If no, where do staff members obtain training?

Generally the response was no to all three, although some stated that they had the facilities and staff but no time. Responses to Question 10 tie into this to which most responded that there is generally an effort to offer staff training either internally or externally, and the ability to train internally varied from organisation to organisation.

However when the question was phrased with regards to offering external training to others, (interns, professionals in conservation, student on conservation courses), the responses once again varied. Some were not able to offer internships at all and others felt they could offer internships if they were able to choose the time of year due to the need to deliver their own work.

Several thought that they would like to see pressure from external bodies applied to employers to enable them to create more learning opportunities as it was difficult to convince organisations that this was important and worth the time and potentially the funding required. One interviewee, based at a university felt they could request the time to support training and internships as they are based in an educational institute. Some, although they did not have the time but had the facilities, are able to organise workshops and master classes with tutors from other organisations, and from overseas. Some support interns by spreading the workload over all staff. One respondent stated that with a full compliment of staff, they would be happy to offer internships throughout the year.

The difficulty seems to be the different pressures on staff to deliver work in organisations, although make a concerted effort to take interns. The other problem that came up earlier in the questionnaire came up again here with regards to who would provide the training, as there is a concern that it is harder and harder to find people who can train and educate others. This is an area the British Library would like to address, and encourage and enable staff to learn how to deliver intensive training to students studying conservation or to educate an interested member of the public.

Question 12. How do you see book conservation developing in the future regarding interventive and preventive conservation, do you think there will be an ever increasing trend to boxing fragile material, creating surrogate copies through digitisation etc? Yes No

12a. Preventive – would you want a course to reflect this or is this type of work?

Yes/No 12b. Interventive conservation – where do you think the emphasis should be in training, ie craft skills, book binding, new methods in book conservation etc

Generally interviewees thought that there would be an increased tendency towards preventive conservation, but that this did not preclude the need for interventive conservation. Preventive measures may be the way of the future, but there was a feeling that there are only so many boxes that can be made, that eventually some steps will need to be taken to preserve material that will otherwise disappear. Material on open access is vulnerable, and the need for conservation will always need to be addressed, even if it means dealing with the little problems on an on-going basis. Whereas putting an object in a box does not necessarily mean that deterioration will be arrested, although it might slow the deterioration down, and of course much would depend upon its future use. The need to document the existing state of material was thought to be important so that a record of its state was available should future conservation work be carried out, or at some future point, as a measure for the rate of deterioration. With an increase in preventive methods being employed, some organisations carry out remedial, first-aid work to a much greater extent than full conservation of an item. Once again it was felt that it is important to know what can be left even if an item is damaged, it may be unlikely to change any further, whereas some material would need to be treated as the process of deterioration was on-going or likely to accelerate.

Some saw preservation as the most protection for the least effort, cost and intervention, and that for these reasons there is a need to carry out preventive conservation and minimum intervention. It was also thought that conservation could be potentially more damaging. One interviewee stated, "I wonder if we will see a split

between preventive and interventive approaches, and interventive treatments will be concentrated on prestige objects, objects required for exhibition etc.” Some thought that preventive and interventive conservation should be working in parallel as the skills and knowledge base for conservation is ever expanding. Others thought there was also likely to be a greater split between the two regarding which staff would carry out what as time goes on. Microfilming and other methods for creating surrogate copies are likely to increase and were considered to be one option for books printed on highly acidic paper which had been mentioned by a few as presenting the most urgent problems in their collection.

With regards to Part A of the question, undoubtedly, employers would like to see individuals with an understanding of the concepts of preventive conservation such as environmental monitoring, risks and hazards to collections. Whether they learned this in their courses or while working was not important, but they must understand that this is also part of their job.

A fairly strong emphasis on conservation outlook was expressed in Part B of the question with a few number still feeling the emphasis should be on craft skills, and most stating that they were not mutually exclusive. In conservation, the emphasis was on policies and ethics, and it was thought that those with a particular aptitude and interest in the craft side would find training appropriate to them. The majority also mentioned the need for individuals to keep up with and learn new methods in conservation and the need to develop the conservators’ judgement and decision making skills. All thought that an individual must have a conservation approach if they are trying to carry out conservation.

The reason given for most of the responses to what was most important was that the need for the technical skills will not go away, and conservation does not stand still, therefore gaining knowledge in new methods and materials will always be important.

Question 13. What is most important to you, i.e. that an individual has good craft skills or that they have a conservation approach to the work that they carry out?

The general consensus was that an individual must possess good craft skills and a sound conservation approach. There is the need to have a reflective approach to the book and its history, and to realise that approaches to conservation are not static. It was also considered important to understand the values behind decision making, the ethics, team working, and preservation issues.

Only two interviewees actually stated craft skills first. Others thought they were equally necessary, and that a combination of both is needed, but definitely thought a conservation approach was of greater necessity. Although it was stated that it is important to keep traditional skills, the present priority in most institutions at the moment is to carry out minimum intervention. It was thought that if an individual only had craft skills, mistakes could be more easily made without the philosophy of why they are doing something. One respondent stated that they thought that a book conservator with poor skills could be useful in preventive work, however that a skilled craftsperson with poor conservation understanding required constant monitoring and supervision. Therefore an individual’s training is not complete without the theoretical knowledge. Due to experience with past students some thought that bookbinding and craft training can be inflexible, that it is not always possible to predict who will pick-up book conservation, and that it was not always the book binders. Most thought that craft skills need to be channelled through conservation ethics, as it is possible to

ruin a book skilfully if the approach is not sound. Ideally employers wanted a conservation mentality and approach with an emphasis on new methods in book conservation, plus craft and bookbinding skills. The outcome seems to be that you cannot have one set of skills without the other. That it was possible to potentially inform/educate a skilled craftsman to a degree but in their own organisation the conservation approach is more essential.

One respondent felt that, "Currently craft skills must take precedence over conservation approach. This is required to redress the imbalance of College trained conservators who possess theoretical ability but limited practical ability and the decline of skilled bookbinders employed by institutions. Craft skills are a prerequisite to becoming an efficient book conservator. Economy of movement, high manual dexterity, the ability to work quickly, understanding how a binding is constructed and functions properly i.e the requirements emphasised during a non-trade apprenticeship." Even in this response, it seems the need is the training of the craft skills mixed with a knowledgeable approach of the material – its function and construction.

Question 14. In what way if any do you think internships are useful to an organisation, private studio or other conservation facility? i.e. to develop skills and knowledge pre or post a diploma, certificate or degree course in book conservation, to become more employable etc.?

All respondents were in favour of internships from the employers and the intern's perspective. One interviewee stated, "Internships should enable an individual to perfect their hands on skills and learn about the treatment decision making process in the organisation, and learn that decisions are not always driven by conservation." It was thought that internships enable the intern to consolidate their practical skills, broaden and deepen skills and knowledge experience in a real as opposed to a training environment. Several thought that individuals would have the necessary academic background from formal conservation courses and that the internship should primarily consist of bench work and treatment skills, repetition in order to gain confidence. Interns gain a greater understanding of the vulnerability of material, and that the variety of work is not always great. It also allows interns to see that in some larger organisations the emphasis is on conserving the larger collection rather than specific items, and that this changes the approach to conservation to some extent.

With all practical training, demonstration is very powerful, and internships are an opportunity to learn by being practical experience, and watching others work. It is also an opportunity to learn about an organisation, how it works, its history etc. It was felt that interns develop more confidence through greater experience with materials, knowledge of the realities of a working studio, making decisions, and negotiating. Overall, it has the possibility of making them more employable due to the additional experience, but this is not an absolute. Almost all interviewees thought that internships offer an understanding of conservation in practice, and that obtaining this understanding at the beginning of your career in an addition to enhancing knowledge and skills was beneficial.

Other benefits were mutual. Both the intern and the conservation facility are subject to an outside influence and a different approach to work, both experience different cultures, and the practices of different organisations. The contribution of the intern to the organisation was also acknowledged, and the potential benefits of this contribution to the organisation. Staff in organisations also thought they could learn from interns (different techniques, new methods and materials). One interviewee

said, “staff develop through their experience of dealing with an intern as they are forced to reflect on why they do things and explain this cogently to the intern.” Finally several mentioned the need to consider the amount of time, costs (overhead), and delivery of conservation to the collections. Although this was not necessarily a negative aspect of having an intern, it did mean that some organisations found it harder to take interns, and others felt that without keeping these practical considerations in mind, it would be difficult to persuade the organisation to make the commitment to internships. Some said it was difficult to have interns without sufficient core conservation staff, and that post internship, what was needed was more assistant conservation positions. This very much reflects articles in conservation literature with regards to what education institutions are looking for their students to gain through internship programmes, and the difficulties in finding internships and employment in the sector.

Question 15. What would you like to see included in a year-long internship in book conservation?

Overall, it was thought that practical experience of a range of interventive and preventive conservation work (within the given timeframe) would be ideal. Specifically, although the emphasis varied from person to person, they should be gaining knowledge of a wide spectrum of conservation issues and practical issues - material science, sewing techniques, historical understanding of binding styles, use of materials in conservation as well as how the object is likely to be used. They should be exposed to binding techniques employed in book production in the styles of binding requiring conservation that the intern is likely to encounter. In addition, interns should be exposed to how conservation departments function in the wider context of the institution, experience of how conservation managers prioritise treatments and develop strategies.

The benefit is to consolidate knowledge and build experience and obtain diverse experience. It is an opportunity to discuss mistakes, to learn to work independently and efficiently, to learn to work with client contacts, improve and hone skills, have exposure to different kinds of problems and to finding solutions. Interns can learn about budgets, access, and materials. Ideally they will be confronted with a variety of situations and conservation problems that may arise, something different from what they have done as well as building the strengths of what they already know.

Question 16. Please look at the table attached and first, mark which skills you think are most important in book conservation today, secondly, at what level of proficiency you think should be required of a new employee in the field of book conservation.

Skills of a Book Conservator	Essential to working in book conservation	Minimum skills required for a new employee in book conservation			
		Basic	Skilled	High	NA
Documentation/ Record keeping	13	5	7	3	
Photography	5	5	2	0	
Graphic Skills	2	4	1	0	
Communication	11	3	7	3	
Project management	4	4	1	2	1
Research	10	6	5	1	
IT skills	5	5	3	1	
Analytical techniques	8	8	2	1	
Palaeography	1	3	0	1	1
Knowledge of chemistry	10	6	5	1	1
COSHH awareness	10	5	1	2	
Understanding of ethics	13	3	3	8	
Understanding of Historical book structure	14	5	5	3	
Membership of professional organisations	7	2	1	2	1
Manual dexterity	13	3	5	5	
Minimum intervention approach	13	2	6	4	
In-situ repair techniques	13	4	6	4	
Paper repairs	11	3	6	3	
pH measurements	7	4	4	2	
Dismantling an existing structure	10	3	6	3	
Paper cleaning methods	10	5	4	3	
Deacidification methods	10	4	4	3	
Sizing methods	9	5	4	2	
Pigment consolidation	7	5	1	3	
Leaf casting	6	9	0	1	
Parchment repair techniques	12	5	4	3	
Sewing techniques	13	6	5	2	
Preparation / covering of leather	13	3	8	2	
Leather consolidation	11	6	5	1	
Preparation / covering of cloths / fabrics	13	5	5	2	
Construction of enclosures	11	10	3	1	
Lettering of enclosures	4	9	2	0	
Lettering of leather	10	7	3	1	
Carpentry	1	6	1	0	2
Metal work	1	6	1	0	2

Not all interviewees went through the chart. This is potentially something that could be changed in the future when interviewing. However, from the number of those who were able to respond, the chart seems to reflect the responses to early questions on skills required for working in book conservation, and the types of skills they would like individuals coming out of courses to have. The variations really are in the level of skill that was expected rather than which skills.

PART II

Have you ever had to send an item out for conservation as a result of a lack of skills available in your own department?

The general response to this question was no, or only non-library material. Some organisations contract boxing work as it is more efficient and cost effective to have this work done externally. Several respondents said that some high level work has been sent out because it was felt that there was someone who could carry out the work with more skill as they clearly had more experience with a type of work, not that the work could not be done in-house. Fine art work, mount cutting, unusual material i.e. metal work and globes were sent out in some cases. This was often due to studios not being set up for this type of work or the decision that the necessary skills were not required over skills for the bulk of their work, and sometimes material was sent out due to time pressure and lack of staff. Several also said that although they do not send work out, they do invite expert opinion in.

Does your organisation have external contracts for conservation or is all conservation of the collections carried out in-house?

Some organisations have external contracts some do not. Rather than contracts, some organisations send out individual items to a specialist conservator or call a conservator in to work on site. Most organisations appear to try to carry out most work in-house.

PART II FOR COURSE PROVIDERS

When was your course established?

The present post graduate course structures at Camberwell commenced in September 2002. The West Dean course for book conservation has undergone changes and has recently recommenced as the course it is at present.

CONCLUSION TO THE QUESTIONNAIRE RESPONSES

From the responses of the interviewees, it appears that the majority of in-house conservation is concerned with the conservation and preservation of rare book collections, although this is not true for all organisations. The need for in-house bookbinding has declined as more work that is not considered to be too fragile or too costly (in terms of insurance), is sent out for binding. However, it is important to note that there are fewer training courses for bookbinding, and therefore the commercial binderies may not be able to sustain the level of present production. This will have an effect in the future as to whether libraries and other collections will be able to continue to send items out for binding or low level conservation/restoration in the future. It will also have an effect on the craft skills that are so often considered the building blocks for book conservation training.

It has been generally accepted that formal courses in conservation would not give anyone the level of specialist book skills that would be expected or required for an appointment as a book conservator, but that the degree and diploma course are a reasonable introduction to a career in conservation. This is largely agreed in the

published literature by those involved with the delivery of courses. What appears to come out of this is the expectation that internships will be the bridge between newly qualified book conservators and jobs. Employers seem committed to continuing professional development for their employees, but none the less, employers expect a newly qualified individual to have experience and knowledge, and that the loss of time to carry out practical work is evident. Most interviewees thought that this experience gap could be filled through well-structured internships.

For many respondents, the lack of training programmes available is a real difficulty when hiring staff to work in book conservation, even though they continue to need to hire conservators and may even need to increase the number of conservators in their organisations. There was a consensus that conservation work is increasing and becoming more complex and the information required to work and improve standards and treatments is no longer found in one place, but internationally.

ANNEX 3

RESPONSES TO QUESTIONS ON THE NEED FOR BOOK CONSERVATION AND BOOK CONSERVATION IN THE FUTURE

After initial interviews were carried out on the need for training in conservation, it was decided that information regarding the need for book conservation now and in the future was necessary, particularly in light of existing collections, new technology, and the ways in which collections are presently expanding. As with the questionnaire for Appendix A, these responses were collected through telephone interviews, interviews in person, and by email responses. The responses were solicited from individuals in the UK and in Europe, the United States, and Australia in order to obtain the widest feedback into the need for book conservation and the future requirement for book conservators.

Question 1. Do you see a future for book conservation?

All respondents said yes, the general feeling was that as long as cultural heritage institutions continued to hold rare book collections, book conservators will be required. Some responded that the future could be problematic depending on employment opportunities and changes in the way book conservation and binding is being undertaken.

Question 2. On what do you basis do you see a need/not see a need for book conservation and conservators?

For those libraries that have circulating collections, there will always be a need for conservation. Small specialist collections are likely to want conservation of individual items, larger collections may need more of the non-interventive approaches, although it was thought that practical excellence would always be in demand. One respondent pointed out that even if a collection appeared to be unused or used very little, it was not possible to know when material will be requested, when it will become popular, and therefore if it will require more or less conservation in the future.

The Interest of Students?

The interest of students is highly important, and it was thought by all that there was a sufficient level of interest in individuals wanting to pursue book conservation as a career as well as employment to sustain those numbers.

Contact with Employers?

This is obviously important in order that there are career prospects for those pursuing a conservation career. The level of interest appears to be in employing the same number of book conservators as they have at present.

Number of Books and Bound items in a collection?

The responses varied from the need being high due to the volume of material, with alternative approaches to dealing with these collections being pursued. However there was also the feeling that the number was not as important as the intrinsic value of the material, and their esteem in the library or institution in question.

Question 3. Do you think new media has affected the need for book conservation? i.e. born digital?

Some thought that the born digital material would restrict growth in traditionally bound material and the need for its management. However others thought that material that is of long-term importance is likely to eventually end up in book format for purposes of longevity, thus becoming an object with the traditional book conservation requirements.

Surrogates of original material?

This has affected the conservation of books as the ability to create copies in various formats allows greater access to the content, and ignores the need to address the conservation and repair issues of the bound material. Generally respondents thought that IT based processes are valuable tools for preservation of information resource, and will continue to supplement, but not replace book conservation. For books that are interesting for their content only, this is a useful mechanism, however for those interested in the book as an art object as well as an historic recording of information, this will not fulfil the requirement of studying the whole object, and seeing the original material. The potential backlash of the flood of information available may even support esteem for the book as a material object.

Question 4. Do you think the need for book conservators will increase? Decrease? Or stay in a steady state?

The feeling from respondents was that the need is for a steady state or higher. This will depend to some extent on employment prospects as much as the need of the material in collections. Potentially there could be an increase to match the increase of books published, and this may differ in countries with larger publishing industries in comparison to those where book publishing is decreasing.

On what do you base your response?

For those that responded that the need would be at a steady state, reasons varied from balancing the employment of book conservators with the competition for preservation resources as the collections become more varied (from traditional book to digital). Those who saw an increase in book conservation based this largely on the esteem of the book increasing, and the longevity of material being reliant on information ending up in book format whether it started that way or not.

However, even material that is of low use has conservation and preservation requirements. The emphasis is on access to material rather than on long-term use, and there must be a conservation strategy for this kind of working as well.

CONCLUSION TO INTERVIEWS

Respondents were unanimous in their feeling that there is a need for book conservation now and in the future. All organisations that are not directly involved in training individuals in book conservation are concerned with the lack of training available and how this will affect book conservation in the future. There is a shift for all in the resources allocated to preservation and new technologies. However for some the shift towards preservation is due to a lack of conservation expertise

available, and this is due to a lack of formal training available as well as employment and career opportunities. For others the shift is due to changes in the way collections are used and accessed.

ANNEX 4

List of individuals contacted for interviews and feedback

ArtLab

Ian Cook, Director

Bodleian

Chris Woods, Head of Preservation

British Library

Helen Shenton, Head of Collection Care

John Mumford, Senior Conservator (books)

Serena Kelly, Head, Corporate Information Management Unit

Camberwell College of Arts– London Institute

Mark Sandy

Fachakademie Munich

Helmut Bansa (Retired), editor Restaurator

Glasgow University Library

David Weston, Keeper of Special Collections and Head of Preservation

Library of Congress

Dianne Can de Reyden

Maria Nugent

London Metropolitan Archives

Helen Lindsay

Loughborough University

John Feather

National Archives

Mario Aleppo

National Archive of Scotland

Linda Ramsey

National Library of Australia

Colin Webb, Director of Preservation Services

National Library of Ireland

Catherine Fahy

National Library Wales

Iwan Jones

Julian Thomas, Manager Conservation Treatment Unit

Oxford Conservation Consortium

Nancy Bell

State Academy of Art and Design Stuttgart
Regina Schneller

Trinity College Dublin
Susan Bioletti
Nicki Ralston

University of Dundee
Yvla Player - Dahnsjö , Chief Conservator, Library Conservation Unit

University of Texas School of Information
Ellen Cunningham Kruppa, Lecturer
Karen Pavelka, Senior Lecturer
Chela Metzger, Lecturer

Victoria & Albert Museum
Alison Richmond
John Meriton, Deputy Keeper Word & Image Department

Wellcome
Tony Bish

West Dean
David Dorning

ANNEX 5

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