

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.

**PRESERVATION EDUCATION AND TRAINING FOR
SOUTH AFRICAN LIBRARY AND ARCHIVE PROFESSIONALS AND STUDENTS**

By Kathleen Murray, mrrkat004

A dissertation submitted in partial fulfilment of the requirements for the award of the
Degree of Master in Library and Information Science (MBibl)

Department of Information and Library Studies

University of Cape Town

2002

ACKNOWLEDGEMENTS

I gratefully acknowledge all the kind people who helped me with this research project including everyone who responded to my queries and surveys. In particular, I would like to thank Paula De Stefano, Johann Maree and Keith Seafort for lending me their personal research materials, Lesley Hart for her generosity and enthusiasm and the collective staff at University of Cape Town's Manuscripts and Archives Department and African Studies Library for their support. Any and all errors within are my responsibility. Also, I thank my advisor Professor Peter Underwood for his consistently constructive guidance. Finally, I thank my husband, Dan Collins, my family and friends for their ongoing encouragement.

University of Cape Town

DECLARATION

This work has not been accepted in substance for any degree nor is it being submitted in candidature for any degree other than the Master's Degree in Library and Information Science (MBibI) of the Department of Information and Library Studies at the University of Cape Town.

Candidate

Signed by candidate

Kathleen Murray

Date

*4 September 2002***STATEMENT OF ORIGINALITY**

I certify that, except where otherwise indicated, the concept, organisation and writing of this dissertation is the result of my own independent investigation under the supervision of Prof. Peter G. Underwood, MBA, FCLP

Candidate

Signed by candidate

Kathleen Murray

Supervisor

Prof. P.G. Underwood

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	II
ABSTRACT.....	VII
LIST OF ACRONYMS.....	VIII
CHAPTER 1: OVERVIEW OF THE ISSUES.....	1
1.1 INTRODUCTION	1
1.2 GOALS AND OUTLINE OF THE RESEARCH PROJECT	4
1.3 RESEARCH METHODS.....	5
1.4 DEFINITIONS OF KEY TERMS.....	8
1.4.1 Preservation vs. Conservation	8
1.4.2 Related Terms.....	11
1.4.2.1 Guardianship.....	11
1.4.2.2 Stewardship.....	11
1.4.3 Education vs. Training.....	12
CHAPTER 2: PRESERVATION EDUCATION IN CONTEXT	14
2.1 INTRODUCTION	14
2.2 THE RESPONSIBILITY FOR PRESERVATION IN LIBRARIES AND ARCHIVES.....	14
2.3 PRESERVATION AND THE PROFESSIONAL EDUCATION PROCESS.....	16
2.3.1 Historical Context of Preservation Education	16
2.3.2 LIS and Archive Professional Degree Programs	17
2.3.2.1 A Need-to-Know Basis	19
2.3.2.2 Introductory Education: Preservation 101	20
2.3.2.3 Education for the Generalist: Equipping a Preservation Army	20
2.3.2.4 Education for the Specialist: Preservation Administrators and Conservators.....	21
2.3.3 Continuing Professional Development.....	22
2.4 GLOBAL PERSPECTIVES ON THE STATUS OF PRESERVATION EDUCATION	23
2.4.1 United States.....	24
2.4.2 United Kingdom	26
2.4.3 Africa.....	28
2.4.4 Continental Europe, Australia and Elsewhere	31
CHAPTER 3: THE DISSEMINATION OF PRESERVATION INFORMATION	33
3.1 INTRODUCTION	33
3.2 METHODS OF DISSEMINATING PRESERVATION INFORMATION	33
3.2.1 International Professional Organisations.....	33
3.2.1.1 IFLA: International Federation of Library Associations and Institutions	33
3.2.1.2 UNESCO: United Nations Educational, Scientific, and Cultural Organisation....	35
3.2.1.3 ICA: International Council on Archives	36
3.2.1.4 IICPA: Joint IFLA/ICA Committee for Preservation in Africa.....	37
3.2.1.5 Conclusions about the Role of International Professional Organisations	38
3.2.2 South African Professional Organisations.....	38
3.2.2.1 SAPCON: South African Preservation and Paper Conservation Group	38
3.2.2.2 SASA: South African Society of Archivists	40
3.2.2.3 LIASA: Library and Information Association of South Africa	41
3.2.2.4 AMLIB: Association for Archivists and Manuscript Librarians.....	42
3.2.2.5 SAMA: South African Museums Association	43
3.2.2.6 Conclusions about the Role of South African Professional Organisations	43

LIST OF APPENDICES

APPENDIX A: PRESERVATION COURSE SURVEY GROUP LIST	93
APPENDIX B: PRESERVATION PROFESSIONAL SURVEY GROUP LIST	94
APPENDIX C: PRESERVATION COURSE SURVEY QUESTIONNAIRE FORM.....	96
APPENDIX D: PRESERVATION PROFESSIONAL SURVEY QUESTIONNAIRE FORM ...	97
APPENDIX E: LIST OF SELECTED PRESERVATION TRAINING OPPORTUNITIES FOR SOUTH AFRICAN PROFESSIONALS.....	98
REFERENCES.....	99
ADDITIONAL READING	109

LIST OF TABLES

TABLE 1.	SUMMARY OF PRESERVATION COURSE SURVEY RESULTS	56
TABLE 2.	PRESERVATION COURSE AND MODULE CONTENT	59
TABLE 3.	JOB TITLES, INSTITUTION TYPES AND RESPONSIBILITIES OF PRESERVATION PROFESSIONALS	73
TABLE 4.	TRAINING OF PRESERVATION PROFESSIONALS	75
TABLE 5.	MEMBERSHIP IN PROFESSIONAL ORGANISATIONS.....	77
TABLE 6.	ONLINE PRESERVATION NETWORKING.....	78
TABLE 7.	LIST OF REGULARLY READ PROFESSIONAL JOURNALS	79
TABLE 8.	PROFESSIONAL PRESERVATION NETWORK.....	80
TABLE 9.	SOUTH AFRICAN PRESERVATION NEEDS FOR THE 21 ST CENTURY.....	82
TABLE 10.	PRIORITIES FOR FUTURE SOUTH AFRICAN LIS AND ARCHIVE STUDENTS ...	84

3.2.3	The Invisible College	44
3.2.3.1	North-to-South Networking	45
3.2.3.2	South-to-South Networking	46
3.2.4	Other Methods of Information Dissemination	47
3.3	PROBLEMS WITH THE DISSEMINATION OF PRESERVATION INFORMATION	48
3.3.1	Lack of Standard Vocabulary	48
3.3.2	Language Issues	50

CHAPTER 4: THE CURRENT STATE OF PRESERVATION EDUCATION IN SOUTH

AFRICA	51	
4.1	INTRODUCTION	51
4.2	HISTORICAL OVERVIEW OF PRESERVATION EDUCATION IN SOUTH AFRICA	51
4.3	PRESERVATION COURSE SURVEY	54
4.3.1	Goals of Survey	54
4.3.2	Survey Methodology	54
4.3.3	Preservation Course Survey Results	56
4.3.3.1	Overview of Preservation Education Offerings	56
4.3.3.2	Preservation Course/Module Content	59
4.3.3.2.1	Basic Book Repair	59
4.3.3.2.2	Environmental Monitoring and Control	61
4.3.3.2.3	Disaster Planning and Recovery	61
4.3.3.2.4	Binding Options	62
4.3.3.2.5	Staff and User Education	62
4.3.3.2.6	Reformatting	63
4.3.3.2.7	Digitisation	64
4.3.3.2.8	Preservation Management	65
4.3.3.2.9	Co-operative Initiatives, Resource Sharing and Grant-writing	65
4.3.4	Qualifications for Teaching Preservation	67
4.3.5	Conclusions about Preservation Education in South African LIS and Archive Degree Programmes	68
4.4	PRESERVATION PROFESSIONAL SURVEY	69
4.4.1	Goals of Survey	69
4.4.2	Survey Methodology	69
4.4.3	Preservation Professional Survey Results	71
4.4.3.1	Snapshot of the South African Preservation Community	71
4.4.3.2	South African Preservation Community in Detail	71
4.4.3.2.1	Job Description of a Preservation Professional	72
4.4.3.2.2	Training of Preservation Professionals	75
4.4.3.2.3	Staying Current	76
4.4.3.2.4	Networking	80
4.4.3.2.5	Perspectives on the Future	81
4.4.4	Conclusions about the Training of Preservation Professionals with Regards to LIS and Archive Degree Programmes	85

CHAPTER 5: PRESERVATION COURSE OUTLINE..... 86

5.1	INTRODUCTION	86
5.2	COURSE OBJECTIVES	86
5.3	COURSE SYLLABUS OUTLINE	86
5.4	COMMENTS ABOUT THE PROPOSED COURSE SYLLABUS CONTENTS	90

CHAPTER 6: RESEARCH PROJECT CONCLUSIONS 91

6.1	PROPOSALS FOR ADDITIONAL RESEARCH	91
6.2	CONCLUSIONS ABOUT THE FINDINGS OF THE RESEARCH PROJECT	91

ABSTRACT

Many experts in the global library and archive sector consider preservation a fundamental responsibility for all institutions and professionals. However, preservation is not yet an established core topic in the professional education of South African information workers, despite the increased availability of education and training options in recent years. Many of the current course and module offerings at university and technikon teaching departments do not cover the essential preservation issues adequately. As a result, professional librarians and archivists often feel ill prepared to address preservation issues in the working world. There are other options for learning about preservation outside the traditional classroom environment including publications and short workshops often organised by interested professional organisations.

University of Cape Town

LIST OF ACRONYMS

Acronym	Organisation/Definition
AIC	American Institute for Conservation of Historic and Artistic Works
ALA	American Library Association
ALASA	African Library Association of South Africa
ALCTS	Association for Library Collections and Technical Services (ALA)
ALIA	Australian Library and Information Association
ALP	Advancement of Librarianship Programme (IFLA)
AMLIB	Association for Archivists and Manuscript Librarians
ANSI	American National Standards Institute
APOYO	Association for the Conservation of the Cultural Patrimony of the Americas
BAILER	British Association for Information and Library Education and Research
CD	Compact disk
CILIP	Chartered Institute of Library and Information Professionals (UK)
CLIR	Council on Library and Information Resources
CoOL	Conservation Online
CPA	Commission on Preservation and Access (US)
CPE	Continuing professional education
DACST	Department of Arts, Culture, Science and Technology
DISA	Digital Imaging Project of South Africa
DPI	Dots per inch
EAD	Encoded Archival Description
EBAD	Ecole des Bibliothecaires, Archivistes et Documentalistes, L'Université Cheikh Anta Diop (Dakar, Senegal)

Acronym	Organisation/Definition
ECPA	European Commission on Preservation and Access
EPA	Ecole for Patrimoine Africain (Porto-Novo, Bénin)
ESARBICA	Eastern and Southern Africa Regional Branch of the International Council on Archives
ESI	Ecole des Sciences de L'Information (Rabat, Morocco)
GBW	Guild of Book Workers (US)
ICA	International Council on Archives
ICA/CPTC	International Council on Archives/Committee on Preservation in Tropical Climates
ICBS	International Committee of the Blue Shield
ICOM	International Council of Museums
ICOMOS	International Council on Monuments and Sites
IFLA	International Federation of Library Associations and Institutions
IIC	International Institute for Conservation of Historic and Artistic Works (UK)
IIS	Institute of Information Scientists (UK)
IPC	Institute of Paper Conservation (UK)
IPN	International Preservation News
ISO	International Organisation for Standardisation
JICPA	Joint IFLA/ICA Committee for Preservation in Africa
LA	Library Association (UK)
LIASA	Library and Information Association of South Africa
LIBER	Ligue des Bibliothèques Européennes de Recherche
LIC	Library and Information Commission (UK)
LIS	Library and information science
MAS	Master's of Archival Studies (US and Canada)
MGC	Museums and Galleries Commission (UK)

Acronym	Organisation/Definition
MLS	Master's of Library Science (US)
NCHM	National Cultural History Museum
NEDCC	Northeast Document Conservation Center (US)
NISO	National Information Standards Organisation (US)
NLSA	National Library of South Africa
NPO	National Preservation Office (UK)
PAC	Preservation and Conservation Core Programme (IFLA)
PADG	Preservation Administrator Discussion Group
PCS	Preservation and Conservation Studies (at the University of Texas at Austin Graduate School of Library and Information Science)
RAMP	Records and Archives Management Programme (UNESCO)
RESOURCE	Council for Museums, Archives and Libraries (UK)
RH	Relative humidity
SAA	Society of American Archivists
SADC	Southern African Development Community
SAILIS	South African Institute for Librarianship and Information Science
SAMA	South African Museums Association
SAPCON	South African Preservation and Paper Conservation Group (formerly South African Paper Conservation Group)
SAQA	South African Qualifications Authority
SASA	South African Society of Archivists
SGB-ARM	Standards Generating Body for Archives and Record Management
SLIG	Special Library Interest Group
SLIS	Special Libraries and Information Services Group
SLS	School of Library Service, Columbia University (US)
SUNY	State University of New York (US)

Acronym	Organisation/Definition
UK	United Kingdom
UNESCO	United Nations Educational, Scientific, and Cultural Organisation
UNISA	University of South Africa
US	United States of America
UWC	University of the Western Cape

University of Cape Town

**PRESERVATION EDUCATION AND TRAINING FOR
SOUTH AFRICAN LIBRARY AND ARCHIVE PROFESSIONALS AND STUDENTS**

CHAPTER 1: OVERVIEW OF THE ISSUES

O, that record could with a backward look,
Even of five hundred courses of the sun,
Show me your image in some antique book,
Since mind at first in character was done!

Sonnet LIX, William Shakespeare

1.1 INTRODUCTION

In his Sonnet 59, Shakespeare comments on the importance of “some antique book,” dating back “five hundred courses of the sun.” Imagine his despair if that book was no longer available for his “backward look.” Time, storage conditions and handling can extract a steep toll on the world’s library and archive collections, leaving Shakespeare’s “record,” like so many others not nearly so old or sought after, severely damaged or even unusable. The continuity of the world’s history and culture depends on the preservation of these materials.

But why should information professionals care about preserving South Africa’s past, especially in the post-apartheid era when there is much the public may want to forget? In his 1986 Nobel Prize lecture, Elie Wiesel reminds us “remembering is a noble and necessary act ... It is incumbent upon us to remember the good we have received, and the evil we have suffered. ... The rejection of memory becomes a divine curse, one that would doom us to repeat past disasters, past wars ... We must remember” (Wiesel, 1986). Wiesel is stressing the importance of preserving the collective memory of what has come before because this past shapes the future. Peters specifically discusses the need to preserve South Africa’s past and communal heritage within “cultural and historical contexts” because this can “foster critical thinking and action” (Peters, 2002). She goes on to say the “appreciation of heritage [can] provide a valuable resource in an education for economic and social empowerment” (Peters, 2002). She also lists the advantages of appreciating the varied heritage of a multicultural society like South Africa.

Heritage provides a link between historical knowledge and current realities.

[It] affirms the identities of the diverse human culture, both nationally and internationally. [Heritage] encapsulates, develops and promotes the Spirit of the Nation (Peters, 2002).

Preserving the history and memories of individuals and communities will foster “a respect and tolerance for diverse cultures” which in turn will “promote the democratic principles of critical thought, engagement and decision-making” (Peters, 2002). South Africa’s encouraging future is very much a product of its complex past. Remembering and preserving what has come before will shape what comes next.

The unique socio-political history and cultural diaspora of South Africa is reflected in the holdings of its library and archive collections. These collections, comprised of books, journals, newspapers, posters, ephemera, pamphlets, correspondence letters, photographs, as well as non-paper based materials like CDs, audio and visual tapes, phonograph records, microfilm and microfiche, are an important contribution to the “memory of the world” to borrow the phrase from the United Nations Educational, Scientific, and Cultural Organisation (UNESCO).¹ Of specific interest to South Africa, as in many developing nations, is the additional importance of documentary and oral history. Dominy (1985:156) says that “it is also our [South African archivists] duty to purposely collect the records of the less articulate: the poor and ill-educated who do not write to government departments or newspapers.” Everyday working people and their societal contributions are recorded for posterity in initiatives such as University of Cape Town’s (UCT) Centre for Popular Memory (University of Cape Town, 2002a). All of this material helps shape the ever-evolving culture of South Africa and the world.

The professionals who work in these libraries and archives need to be aware of the existing and potential dangers that may affect the physical condition of these irreplaceable collections. As a result, the compelling need for preservation education for South African library and information science (LIS)

¹ See the *Memory of the World* web site (http://www.unesco.org/webworld/mdm/index_2.html) for an overview of this project. UNESCO’s other contributions to preservation education will be discussed in 3.2.1.2.

and archive professionals is well documented (Axer, 1997:92; Clements, 1987:137; Coates, 1995:38; Harris, 1997:42; Kerkham, 1987:136; Maree, 1985:169; Peters, 1987b:133; Saleh, 1998:104; Theron, 1998:111; Twentyman Jones, 1987:188; Twomey, 1989:198; Westra, 1987b:9). But the responsibility for the long term well-being of collections does not stop at the country's borders. As the most developed country in Sub-Saharan Africa, South Africa also plays an important role in fostering preservation awareness in neighbouring countries. Other African countries look to South African institutions and professionals as peers who understand the practicalities of the African situation. Through projects such as the Digital Imaging Project of South Africa (DISA), organisations such as SAPCON (South African Preservation and Paper Conservation Group) and workshop initiatives including those held in conjunction with the United States (US)-based Northeast Document Conservation Center (NEDCC), South Africa both financially and intellectually supports preservation education and training in the region. South African LIS and archive professionals must be made conscious of preservation issues to safeguard not only their own collections but also those of their continental neighbours.

The need for recognition of the importance of preservation education is crucial now because South African higher education is undergoing review and major restructuring.² In a nutshell, in late 2001 the Department of Education proposed an outline "for consolidating the provision of higher education on a regional basis through establishing new institutional and organisational forms, including reducing the number of higher education institutions ... from 36 to 21 through mergers" (Asmal, 2002). Some institutions will merge with others to form larger "unitary institutions," some will close targeted departments, and some will close down entirely. The aim of this fundamental restructuring is to "transform [the] apartheid edifice of the higher education system and lay the basis for a higher education system that is consistent with the vision, values and principles of our young and vibrant democratic order" (Asmal, 2002). Although at the time of this writing (May 2002), the proposal is still

² The details of the restructuring of higher education institutions in South Africa is out of the scope of this research project aside from how it directly impacts LIS and archive teaching departments. See chapter 4 for more discussion on these specific departments and the Department of Education's *Higher Education* web page for more details on the overall restructuring plan (http://education.pwv.gov.za/DoE_Sites/Higher_Education/Higher_Education_Index.htm).

receiving comments, Asmal (2002) strongly asserts that “reconfiguration of the higher education system is beyond debate” and is a virtual certainty although the actual changes may differ somewhat from the proposed changes. At a time when many South African tertiary institutions face mergers or even closure, and LIS and archive teaching departments fall to the wayside because of decreased enrolment and/or funding, the remaining institutions have an increasingly serious responsibility to equip professionals with the skills they will need in the working world. And as this paper will discuss, a solid understanding of preservation issues should be part of every information professional’s background.

1.2 GOALS AND OUTLINE OF THE RESEARCH PROJECT

The goals of this research project are

- to determine the value and scope of preservation in professional education and training for librarians and archivists,
- to discuss the national and international distribution of preservation information,
- to establish the available options for preservation education and training for South African LIS and archive students and professionals,
- to review the professional development, networking skills and future objectives of South African preservation professionals,
- to develop an outline for an “Introduction to Preservation” course which will address the specific needs of the South African situation,
- to propose areas of future research.

This research paper is structured to explore each of these preservation education issues in depth. The introductory chapter 1 defines the overarching issues and key terms in the discussion. Chapter 2 explores the role of preservation in the real-world library and archive sector. How important is a basic education in preservation, for example, to a cataloguer or interlibrary loan librarian or records manager? To what breadth and depth should LIS and archive students be exposed to preservation

issues? What are the options for working professionals to learn about preservation issues? Chapter 3 investigates the distribution of preservation information and professional networking issues both internationally and within South Africa. It also examines the role of professional organisations in continued professional development and the dissemination of preservation information. Chapter 4 details and analyses the results of two original surveys aimed to assess the current state of preservation education in South Africa. The first survey, targeting LIS and archive degree programmes, determines the extent and content of available preservation education in South Africa. The second survey, targeting South African professionals who deal with preservation issues, seeks to identify the common threads of this “underground” community. Who are these professionals and how did they come to be interested or specialise in LIS and archive preservation? How do they stay up-to-date on developing research and projects? What are the preservation issues these South African professionals think will be most important in the years to come? Chapter 5 uses the data collected from the original surveys to outline an introductory preservation education course that is geared towards addressing the preservation concerns specific to South Africa. The final chapter, chapter 6, sums up the findings of the research project and makes recommendations for future research.

1.3 RESEARCH METHODS

The research project is investigated through a combination of documentary resources and questioning to obtain factual data. The first component of the primary research is an exploratory literature survey of the common issues in global preservation education in order to create a framework with which to compare and contrast the South African situation. This literature survey is not exhaustive certainly because a detailed analysis of worldwide preservation education concerns is far beyond the confines of this project. However, it is comprehensive and representative of the key issues and personalities as evidenced through the published literature pertaining to South African preservation and preservation education. The literature survey allows the assessment of this research project against research projects with a similar focus in other geographic regions.

The second part of the primary research is the results of two original surveys, one on preservation education options offered through South African LIS and archive teaching departments and the second on the training, networking and future objectives of South African preservation professionals.

The survey data collection is in the mode of questionnaire forms and interviews. There are advantages and disadvantages to each of these methods that have an impact on both surveys for different reasons. Collecting information via questionnaire forms (either printed or electronic) is the most cost-effective method, especially across a large geographic area such as South Africa (American Statistical Association, 1997:2). A survey conducted via mail requires only an investment in postage, and not even that if forms are e-mailed rather than posted. Questionnaires also allow the participant to consider and prepare his or her answers in depth without the pressure of feeling “on the spot” by an unexpected question. Both of these advantages are significant. However, there are downsides to survey questionnaire forms as a data collection method that are relevant to the results of this project. First, a survey needs a pool of interested parties from which to extract responses. This is often a sample group or a “proportional representation of each discipline present in the population to be surveyed” (Martyn and Lancaster, 1981:7). This is not a noteworthy problem for the survey of degree programmes as the survey group is by design comprehensive rather than representative. There is a finite list of institutions that offer LIS and archive education in South Africa and each of these institutions received a survey addressed to the head of the appropriate academic department (see appendix A). However, as explained in 4.4.2, this is a significant issue for the preservation professional survey. Who is asked to complete the survey obviously influences the results of the survey. As explained by the American Statistical Association (1997:4), “the main problem with mail surveys is procuring an accurate list of people in the population from which to draw the sample for your survey.” Because the preservation professional group is so diffuse, assembling this list was no easy task (see appendix B). Moreover, who actually *returns* the survey form is equally if not more influential to the survey results. Martyn and Lancaster (1981:12) explain that “the more important a respondent feels a subject is for him, the greater the chance of him answering the questions. The more closely a questionnaire deals with something that concerns respondents, the higher the potential response rate.” Again, response rate is not an issue for the preservation course survey as explained in 4.3.2 but it is in the preservation professional survey

(see 4.4.2). Both surveys strive to zero in on key issues in the realm of the proposed respondents' experience with the expectation that, because the topic of preservation education is relevant to their field, they will be more inclined to return the completed survey form. Admittedly, the institutional survey is one page (see appendix C), comprised of mostly check boxes and yes/no answers and requires very little time investment. This partially may account for the high return rate of this survey. The preservation professional survey however is much more open-ended with essay-style questions designed to allow more leeway in the answers (see appendix D). Faced with a two-page questionnaire filled with soul-searching questions requiring thought- and time-consuming answers, it perhaps is not surprising that less than half of the group returned their forms. As noted in 4.4.2, some returned a detailed résumé instead of the survey form no doubt to save themselves some time and effort. But the survey questions for this group strive to get the group actively involved in the research question. Standard professional preservation journal titles, for example, are not listed on the questionnaire form to force the group to review what titles they *actually* read instead of just ticking titles they know they *should* read but do not. In addition, the open-ended format permits more creative answers to the "brainstorming" questions about the future of preservation education that might not have been anticipated by the researcher.

Another disadvantage of questionnaire forms is the lack of opportunity for follow-up. This is an issue in some respects for the institutional survey, specifically concerning details of the proposed core curriculum preservation class at the University of Fort Hare (see 4.3.3). Attempts to get more information on this course yielded no further result but information should be more readily available once the class actually is in session.

As an alternative to survey questionnaires, interviewing was used on a limited basis. One advantage of the interview method is that the response is immediate, providing one can get in contact with the interview subject. A disadvantage is that it is costly for the interviewer in terms of both time and money, i.e. travel and/or telephone expenses. Another is that the personal interaction between the interviewer and interviewee opens the door for bias or even misinterpretation on both sides (Schonlau, Fricker and Elliot, 2001:6). Because of the geographic diversity of both survey groups, interviewing was the secondary technique to questionnaires for data collection. Interviewing and personal

communication however is used to crosscheck or tri-angulate results. This is most significant in the preservation professional survey with regards to real and reported networking issues (see 4.4.3.2.4).

In summary, the research project makes use of a variety of appropriate research methodologies to produce valid results. The strengths and weaknesses of each type of research method is addressed and resolved to all possible extent.

1.4 DEFINITIONS OF KEY TERMS

It is important to clearly understand some of the key terms involved in LIS and archive preservation education. First, how is *preservation* different from *conservation* and second, how is *education* different from *training*?

1.4.1 PRESERVATION VS. CONSERVATION

The terms *preservation* and *conservation* historically are somewhat problematic. In their early paper on the history of preservation activities in the US, Darling and Ogden (1981:10) observed that “no working consensus has yet emerged within the library profession” on what the terms *preservation* and *conservation* mean. And in fact, they use the terms interchangeably throughout the paper. Even Paul Banks, a co-creator of the two distinct conservator and preservation administrator master’s degree programs originally at the Columbia University School of Library Service (see 2.4.1), did not draw a firm line in the sand (Banks, 1979). But later authors, including Darling, firmly distinguish between the two terms as each concept defined itself more clearly over time (Darling, 1981; Conway, 1989; Cloonan, 1994).

John Baker (1993:224) attempts to describe the distinction this way.

Conservation seems more specific and object-oriented, whereas preservation is a broader concept that embraces conservation as well as protection,

maintenance, and restoration in its meaning.³ It also carries a connotation of official policy and perhaps for that reason is the preferred term to describe the entire constellation of administrative and technical activities that bear on collection management in libraries and archives.

But in fact even Baker found the two terms confusing; in the 1980 edition of the same article in the American Library Association's (ALA) *World Encyclopaedic of Library and Information Services*, he switched the two words consistently throughout this paragraph, in essence defining *conservation* as *preservation* and vice versa! One can assume however that he clarified the matter for himself as well as readers as later editions are corrected.

Like Baker in the later editions, Ratcliffe is very clear in his own mind about the distinction between the two but he also adds a new criterion to the definition. He asserts that *conservation* is "strictly the repair work and binding carried out on items and of an essentially remedial nature" whereas *preservation* is "strictly all the steps taken to protect materials, that is including conservation and restoration but often is used in reference to the treatment of materials on first entering the library. It is preventative rather than remedial" (Ratcliffe and Patterson, 1985:73-74). Ratcliffe's interpretation correctly implies that *preservation* is pre-emptive, agreeing with Maree (1985:168) that preservation is "the art of anticipating decay," while *conservation* addresses already present damage. He also emphasises a timeline in commenting that preservation attention often is focused on new acquisitions. This may or may not be true depending on the institution. Although many items or even entire

³ *Restoration* is a term and philosophy whose relevance in institutional collections has passed. Few modern conservators would restore "an item either by rebinding or extensive repair as near as possible to its original appearance" (Ratcliffe and Patterson, 1985:74). Most contemporary conservators instead favour a minimum intervention approach that stabilises the object without making radical or irreversible changes to the object. Conway (1989:49) quotes Christopher Clarkson's comparison that "restoration implies major alterations, conservation minimal and preservation none." University of Natal conservator Dr. Dale Peters (1987b:129) discusses the *restoration* concept in South Africa: "The term *restorer* still conjures up those images which this profession is trying to escape. Conservation ethics demand that responsibilities are far wider than the odd miracle—we must ensure that the collections we hold in trust will show no sign of deterioration, that their expected lifespan will be extended rather than desecrate their integrity by making the old look new." However, the word *restoration* is used by a limited number of South African conservators (most of who speak Afrikaans as their first language) when they really mean *conservation*. It seems that the term, but not necessarily the philosophy, has been retained for linguistics reasons (see also 3.3.2 for a discussion on language issues).

collections are assessed for preservation needs at the time of acquisition, very often preservation projects are geared towards long-held collections.

Cloonan (1994:4) suggests some regional distinction in her definition.

Americans have used conservation to refer to the physical treatment of individual items and preservation as a more general term pertaining to collections as a whole having to do with administering programs: disaster recovery plans, patron education, reformatting, co-operative initiatives, library binding and other physical treatments, and mass treatments ... Conservation is sometimes an integral part of a comprehensive preservation program.

It would seem that this is currently the internationally accepted view, that the *conservation* of individual items is generally part of the *preservation* of a collection. The two are equal in importance but there is an inherent hierarchy in how they relate to one another. Preservation is the *big picture*, focusing on the collection as a unit, while conservation is a *detailed close-up*, focusing on the individual items within the collection.

In his seminal paper, *Archival Preservation: Definitions for Improving Education and Training*, Paul Conway (1989) discusses the relationship between preservation and conservation in great detail. In the end he puts forth what he hopes is the consenting opinion that “preservation is the all-encompassing term.”

We are all coming to realise that, having accepted that we are all in the conservation business, and having set about trying to make it a central part of our activities as collectors and providers of historical documents, what we are all engaged in is, in fact, preservation (Conway, 1989:48).

IFLA (International Federation of Library Associations and Institutions) agrees. The most recent 1998 edition of its *Principles for the Care and Handling of Library Material*, edited by Adcock and first

published as *Principles for the Preservation and Conservation of Library Materials* in 1979, places both the managerial and technical issues under the larger umbrella term.

[Preservation] includes all the managerial and financial considerations, including storage and accommodation provisions, levels, policies, techniques, and methods involved in preserving library and archival material and the information contained in them (Adcock, 1998:5).

This research project employs the IFLA definition of *preservation* in the exploration of preservation education.

1.4.2 RELATED TERMS

1.4.2.1 **Guardianship**

Some of the participants in Cloonan's (1994) research on global preservation education, specifically Native Americans, felt that the term *preservation* has colonialist overtones in that it implies culture as found in libraries and archives is not an organic process but something rather that can be owned. These respondents prefer the term *guardianship* as an alternative because it implies "that we will care for objects though we do not necessarily own them" (Cloonan, 1994:1).⁴ Thebridge and Matthews (2000:51) stress that discussions of definitions must reiterate that the underlying concept of preservation is *access* and not hiding objects away (see 2.2).

1.4.2.2 **Stewardship**

In the United Kingdom (UK), the recently established organisation Resource: the Council for Museums, Archives and Libraries (a merger of Library and Information Commission [LIC] and Museums and Galleries Commission [MGC]) advocates the *stewardship* philosophy. Resource defines *stewardship* as "the entire range of demands and responsibilities associated with the management of

⁴ While colonialist legacies have played an important role in the history of South Africa, the term *guardianship* is not widely used, if at all, within the local LIS and archive preservation community. *Preservation* is the accepted term. The definition for guardianship is included however because this discussion may further develop with additional local participation and research.

cultural heritage collections, whether books, manuscripts, objects or digital material” (Resource, 2001). Preservation it would seem is at the core of the stewardship concept.⁵

1.4.3 EDUCATION VS. TRAINING

Education and training are not synonymous and, as Matthews and Thebridge (2001:446) reiterate, the distinction between them is important.

The dictionary definition of *education* is “the knowledge or skill obtained or developed by a learning process [or] ... a program of instruction of a specified kind or level” (The American Heritage Dictionary of the English Language, 2000). *Training* on the other hand is “to coach in or accustom to a mode of behaviour or performance [or] ... to make proficient with specialised instruction and practice” (The American Heritage Dictionary of the English Language, 2000). Yet even these static definitions leave room for ambiguity.

Cloonan (1994:38) describes the difference this way.

Education is a more comprehensive term, which refers not only to acquiring new skills, but also to obtaining knowledge through experience, creativity, analysis, and the exchange of ideas. Education is lifelong while training takes place over a finite period of time. Training courses cannot educate a student—because of their brevity.

With regards to preservation issues, *education* is an in-depth exploration and critical examination of the concepts, considering the pros and cons of reformatting options for example, while *training* focuses more on addressing or resolving specific points, such as how to tip-in loose pages.

⁵ The term *stewardship* is not in common use currently in the South African library and archive sector but it may be in some areas, especially those that receive extensive funding or training from the UK and in the museum sector. The definition is included because the concept of stewardship may become increasingly important with international interaction. At the August 2002 IFLA (International Federation of Library Associations and Institutions) 68th General Conference and Council in Glasgow, Scotland, Resource announced that the term *stewardship* be equated with the phrase *collection management*, with the latter replacing the former in time.

Why is this distinction between education and training important? A recent summary of a review of preservation management training and education in the UK gets to the heart of the matter. In summary, the review proposes that *preservation education* is the domain of degree/certificate programmes in library and archive teaching departments/schools while *preservation training* is the domain of continuing education often led by professional organisations (Matthews and Thebridge, 2001:445).

Nevertheless the lines between education and training, and degree programmes and continuing professional development opportunities, slowly are becoming blurred. Structural changes in the British education and training sectors as outlined by Wears (2000) encourage a continued and improved cross-sectional approach as initiatives promote lifelong learning and continuing professional development. Nonetheless, traditional degree programmes must assess how far they want to get involved with training as opposed to education (Matthews and Thebridge, 2001:448).

Matthews (2000:15) sums up the correlation between the two concepts: "Education and training are not the same but they do have sufficient similarities for those concerned with the delivery of either to need to involve themselves in regular dialogue and discussion." Indeed, this "dialogue and discussion" could lead to collaboration in areas such as the development and production of teaching aids and increased lobbying strength for government funding.

In South Africa, preservation education and training are very closely related. Many professional development programmes, such as the SAPCON/NEDCC workshops (see appendix E), include both education and training to some degree. In addition, the vast majority of South African practising professionals received the bulk of their preservation qualifications through practical training, not educational degree programmes, simply because such degree programmes did not (and do not) exist in South Africa (see 4.3.3.1). Nonetheless, the distinction between education and training will continue to define itself as additional programmes and experts are developed locally.

CHAPTER 2: PRESERVATION EDUCATION IN CONTEXT

2.1 INTRODUCTION

This chapter will discuss the importance of preservation education for information professionals and the state of preservation education in the global context. Much of the research and professional literature about preservation and preservation education originates in the US and the UK. Nonetheless, other geographic areas have an equally important role in preserving the “memory of the world.” Discussing the international framework of preservation education will establish benchmarks by which to evaluate South Africa’s situation in chapter 4.

2.2 THE RESPONSIBILITY FOR PRESERVATION IN LIBRARIES AND ARCHIVES

Preservation is not the sole domain of one person in a library or archive, even in those institutions with a preservation administrator/librarian or conservator on staff. The preservation of library and archival materials is the combined responsibility of every staff member at every stratum.

The importance of ... preservation is found in the relationship of preservation to almost every other library activity. Building plans, collection and access policies, processing procedures, and handling methods used by both staff and patrons from the moment an item arrives in the shipping room through its last trip to the discard pile, all have a direct bearing on the survival of the collections. Put another way, the responsibility for the physical care of the collections is, whether recognised or not, diffused throughout the library at every level of staff (Darling, 1981:180).

Although she is speaking here specifically of library collections, the same holds true for archival collections as well. In short, Darling suggests that any person who comes into contact with the material in any capacity at any stage during its lifespan is responsible for the well-being of the collection. It is a “library-wide concern,” (Conway, 1989:52) not just a “single person in his paste-pot and scissors

corner” (Maree, 1981:4). Non-professional staff (such as architects, casual workers, volunteers, facilities, cleaning and shelving staff) as well as professional librarians and archivists all in some way affect the health of collections either through direct contact with the collections themselves or contact with the collections’ environment.⁶ This is of course also true for South African professionals as Dominy (1985:155) says: “Every person involved with the handling of documents, from cleaners to researcher, must learn to treat documents with respect and handle them with care.” Maree (1985:165) comments on the perils of untrained staff and users handling materials: “Have you ever observed readers and fellow staff members handling books and paper—it can be a nerve-racking experience.” If all of these people contribute to the well-being of the collection, then they are all responsible for its preservation to some degree. Ratcliffe (1986:497) emphasises the role of professional staff saying that a “responsible attitude from the [professional librarians and archivists] staff quickly communicates itself” to paraprofessional staff and patrons.

Preservation is an inherent part of the work of all information professionals. It is, after all, the key to continued access. The *Preservation Education Institute Final Report* published by the US-based Commission on Preservation and Access (CPA) states that the goal of preservation is “to keep the collection available, ... a way of treating collections so they will survive to serve their intended purposes” (Marcum, 1990).⁷ “Access is fundamental to the purpose of preservation” according to Conway (1989:54). The two are forever and inextricably linked. And serving users through access to collections and information is at the heart of all library and archive activities. Theron (1998:113) underscores that “the emphasis in archives is shifting from preservation with little use to USE and ACCESS in capital letters.” Similarly Walters (1995:419) stresses preservation is “an integral part of archival functions and is not considered a separate program element in the same way that reference or

⁶ Preservation awareness campaigns for paraprofessional/clerical staff and users are essential components of any institutional preservation programme. This type of inservice or “on the job” training for staff should include such matters as appropriate shelving techniques, identifying items in need of repair and proper book handling. The most detailed disaster plan in the world is all for naught if the collections are seriously damaged through mishandling before the disaster even strikes! Staff and user education initiatives are a separate field of study with a great deal of reference and resource information in the professional literature. See Feather (1990) and Buchanan and Esserman (1994) for a general overview of the key issues. Also see Kufa (1998) for an African perspective detailing a project at the University of Botswana.

⁷ CPA later evolved into CLIR (Council on Library and Information Resources).

collection development is.” Ratcliffe (1986:497) firmly believes preservation “is an essential part of the grammar of librarianship.” In an earlier paper, he goes on to say “no one should be in doubt that the maintenance, treatment and handling of stock is as vital in library service as the cataloguing and classifying of it” (Ratcliffe and Patterson, 1985:61). Therefore, preservation “must become a state of mind” or second nature for information professionals (Marcum, 1990). Preservation is the responsibility of all LIS and archive professionals in order to safeguard continued access.

2.3 PRESERVATION AND THE PROFESSIONAL EDUCATION PROCESS

2.3.1 HISTORICAL CONTEXT OF PRESERVATION EDUCATION

Concern for the preservation of library material has a long history as Cloonan concisely outlines in her 1994 book, *Global Perspectives on Preservation Education*. The first “preservation professionals” were medieval scribes who repaired the animal skin or cotton rag manuscripts they created. However, as the basic materials became less durable and the causes of their deterioration more complicated, the preservation challenges became more complex. The maintenance of existing items was not as high a priority as fashioning new items. Even the time-honoured apprenticeship system focused on the creation of books and paper but not necessarily the repair of these items. In the modern era, large libraries and museums were the first to offer education programs mostly for the benefit of their own staff. Although scientific methods were being introduced into repair work, there still were no formal preservation education programs available until relatively recently. Cloonan (1994:7) summarises that the history of preservation education is a developmental process that “gradually evolved from a hands-on apprenticeship served under a master bookbinder to a management-oriented discipline where a master’s degree in librarianship and sometimes also an advanced certificate comprise the training.”

Perhaps the most dramatic and influential milestone in the contemporary history of preservation education is the famous flood of 1966 in which the River Arno overflowed its banks and flowed into the vulnerable and irreplaceable libraries of Florence (Ogden, 1979). This unprecedented disaster forced a rethinking of preservation responsibility and a new spirit of co-operation between bookbinders and librarians. “The response to the flood confirmed an awareness that conservation, along with crisis preparation and prevention, was a new and distinct field apart from repair and restoration” (Ellenport,

1993). Ratcliffe (1985:86) recalls “it is almost impossible to overstate the impact of Florence on conservation ... the total lack of preparedness for any such event became apparent. There was an almost helpless ignorance of what to do and when to do it at all levels in the library world: disaster planning was not even a remote concept.”

But some good came out of the disaster. The response to the problems caused by the flood led to new techniques and ideas about bookbinding and repair, materials and storage as well as, among other things, the establishment of the Preservation Office at the US Library of Congress. But more important from the global perspective, it brought “librarianship back to a traditional responsibility” of preservation (Ratcliffe, 1986:493). Librarians realised they have neglected the long term physical well-being of their collections.

Not least among the lessons to be learned from Florence was the lack of information among librarians on the scientific knowledge and expertise which already existed. There was little awareness of it and, when revealed, no ready means of applying it. It brought into focus the absence of instruction in the use and management of existing technology for librarians and binders alike in this country [the UK]. It also showed an ignorance among scientists and technologists of library needs and interests (Ratcliffe, 1985:87).

Not surprisingly the first preservation courses for information professionals began in the years following the Florence flood.

2.3.2 LIS AND ARCHIVE PROFESSIONAL DEGREE PROGRAMS

In the aftermath of the loud wake up calls of the Florence flood and the increasingly evident problems of embrittled and deteriorating paper in the mid-twentieth century, the global need for additional and sustained preservation education was evident.⁸

⁸ See Ratcliffe (1986) for a description of the Library Association’s (LA) early investigations into paper quality. Also see Barrow (1974).

Up until fairly recently, preservation was an outer circle speciality, like rare books or children's librarianship. Most information workers would complete their professional education without knowing a thing about it, either by choice or circumstance. However, as both current and future preservation problems became part of everyday working life in ageing and evolving format collections, it became clear that preservation should be considered an essential, rather than a peripheral, aspect of professional education.

Thebridge and Matthews (2000:68) insist "the basic education of information workers needs to have at its heart a preservation ethos." And they have the research to back up this claim. Their recent survey of preservation management training in the UK determined "the need was expressed for preservation to become part of the core curriculum of information studies courses. ... [The] incorporation of preservation as a core study would ensure that library managers of the future recognise preservation as a key rather than a fringe part of the management of all types of library and information services" (Matthews and Thebridge, 2001:445-446). These researchers advocate a fundamental shift in professional education for information workers in which professional education programmes recognise preservation as a central, intrinsic part of librarianship and archival studies and, as such, consider it an essential overarching component of the professional education process.

This push to include preservation as a core study in information management studies is not a recent concept by any means. More than fifteen years ago, Bansa (1991:55) felt strongly about the need to reorientate library education to "penetrate the librarian's consciousness to a much greater degree than it does today" when he spoke at the IFLA-sponsored 1986 conference, *Education and Training for Preservation and Conservation*. Moreover in an earlier paper, he laments in laborious detail the shortcomings of the LIS education sector dating back some thirty years (Bansa, 1986:36). Conway points out that the discussion dates back long before even Bansa's timeframe.

In 1956, when librarians were just beginning to realise the enormity of the preservation task before them, Edward Lathem sought to focus a discussion on education and training by asking, "what should the conservation officer be

expected to know? His answer, that they “should in substance, know as much as possible about as much as possible” (Conway, 1989:47).

Nonetheless, many instructors are extremely critical of the role of library schools/teaching departments as a venue for preservation education as Cloonan explains. She quotes one American faculty member as saying “library schools better get their act together” with regards to the relative importance placed on preservation education (Cloonan, 1997:182). Although many library schools “offer at least one course in preservation, it is not usually integrated into the core courses, nor is it necessarily a required course” (Cloonan, 1997:182). In addition, many courses are taught by less experienced, less established adjunct faculty as opposed to full time faculty. Neither of these issues is relegated to the United States by any means as discussed in chapters 3 and 4.

2.3.2.1 A Need-to-Know Basis

Should every LIS and archive student be educated about preservation issues? Since experts have demonstrated that preservation is fundamental to the mission of all libraries and archives, the answer must be a resounding yes—but not all need the same coverage of the same issues to the same extent.

Although Barnes (1987:38-39) misuses the term *conservation*, his point is well taken that “an essential ingredient in the training of librarians should be the promotion of awareness of conservation needs, practices and resources and their management and application in libraries [and archives].” Meadows (1987:20) agrees that all information students need a background in preservation and conservation.

All students need to think of the limitations imposed on communication by the physical properties of the medium, and also of the relative importance of conservation and preservation. Thus even totally computer-oriented information scientists would do well to ponder these points in relation to (say) magnetic tape.

He goes on to suggest the nature and extent of preservation instruction be based on a *need-to-know* principle, where education and training can “be aimed at the immediate needs of the students [and]

those who subsequently require additional knowledge can be trained on the job” or through additional specialised education (Meadows, 1987:20).

This is an important point. Not everyone needs to know everything about all preservation aspects all at once. Nevertheless, all information professionals should know the basics and perhaps more importantly where to get more information and training when they need it.

The nature and scope of preservation education can be broken down into three levels: introductory, generalist and specialist.

2.3.2.2 Introductory Education: Preservation 101

The goal of an introductory course or module in preservation is to acquaint general information workers with the basic principles and practices of preservation theory. Upon completion of the course, attendees should be able to identify basic problems and know where to go for additional help. These information workers should not be expected to address preservation issues without further education and training or consultation with preservation professionals. Feather (1986:499) stresses that the focus in an introductory preservation course should be on “basic knowledge and awareness.” In this same article, he further defines the topics this type of course should cover. These include the physical properties of books (paper production, bookbinding materials and techniques), the storage and handling of books (environmental factors, shelving, protective materials and staff and user instruction), preservation management skills (criteria and priorities in decision making for binding, boxing and reformatting) and concerns for older materials (Feather, 1986:499). Introductory sessions on preservation “could or should be incorporated within existing [core] curriculum such as technical services, bibliography or rare books” (Russell, 1991:82).

2.3.2.3 Education for the Generalist: Equipping a Preservation Army

Over and above an introductory synopsis of preservation issues, there are dedicated elective classes in higher degrees that focus specifically on preservation issues. The goal of these classes is “to build a new generation of preservation-conscious librarians [and archivists] ... generalists rather than specialists; Librarians [and archivists] who probably will not be employed as full time preservation

administrators, but whose positions will include preservation responsibilities along with other duties” (Russell, 1991:82).

What kind of issues should be covered in this more in depth investigation of preservation for generalists? Russell (1991:82-83) describes her have and have-not topics.

Physical conservation treatment procedures and bookbinding skills should be de-emphasised in such classes.... Instead the course should emphasise the administrative aspects of preservation such as environmental controls, proper storage of collections, housing of different kinds of material, security, disaster prevention and recovery, relations with commercial binders, microfilming and reformatting, surveying collections and making decisions about appropriate levels of treatment for various materials.

A generalist should be able to see how preservation fits into the overall workings of library or archive institutions but does not get bogged down in the machinery of physical repair.

2.3.2.4 Education for the Specialist: Preservation Administrators and Conservators

Finally, there is the highly specialised education for those who want to specialise in preservation and conservation. The comparatively newly minted job description for a preservation administrator/librarian is a position Russell (1991:84) defines as “highly complex ... [with duties that may include having to] supervise a large, diverse staff, performing a wide variety of functions, such as preparation of books for commercial binding, reprography, treatment of rare objects, monitoring of environmental conditions and preparation of objects for exhibition.” Education at this level goes far beyond the one or two class education of a generalist. A specialist education should cover in depth topics such as management skills, grant writing, pest management, disaster planning, digital reformatting, security, storage and housing needs, building design and renovation, library binding, general collections conservation, staff management and policy decision making.

Paul Banks (1979) correctly considers education and training for conservators distinct from that of preservation administrators. As discussed in 1.4.1, a conservator executes (or directs) the hands-on

physical repair/stabilisation process and requires focused technical training, which very often is out of the scope of LIS and archive degree programmes.⁹ There are a few programmes worldwide within the information science community that focus exclusively on books while others in the art conservation community focus on works of art on paper and objects but also cover book conservation to some extent. These conservator education programmes within or affiliated with traditional LIS and archive degree programmes cover both the academic background in chemistry, history, philosophy and the ethics of conservation as well as the technical skills acquired through apprenticeships and internships. There are still other options, although not academic degree programmes, which focus on hands-on or “bench” skills.

2.3.3 CONTINUING PROFESSIONAL DEVELOPMENT

In conjunction with the well-documented need for preservation education in professional degree programmes, there also is a defined need for continuing professional development (also known as *continuing professional education* or CPE) for both new and established LIS and archive professionals. Many working information professionals receive their initial exposure to preservation through an introductory continuing education course, and many “beginners” (those who only have taken an introductory course) become “intermediates” by taking the occasional CPE course in specific topics. Cloonan (1997:183) discusses the importance of preservation education programmes outside of the traditional, and increasingly fragile, library school/teaching department framework.

Preservationists must continue to view library schools as just one cog in the preservation education wheel, albeit a significant one. Even if library schools do not survive, librarians, museum curators, and scholars will still be responsible for preserving the human record. Conservation and preservation training will always be needed.

⁹ This very unique education and training is beyond the scope of this research project. For a near comprehensive list of global training options in various types of conservation, see Conservation Online's (CoOL) *Educational Opportunities in Museum, Library, and Archives Conservation/Preservation* web page (<http://palimpsest.stanford.edu/bytopic/education/>).

In recent years, many library schools around the world have closed down due to decreased funding and/or enrolment. Library and archive degree programmes are on *terra infirma* as Cloonan (1997:183) says and certainly not just in the United States. South African degree programmes are most definitely also at risk with the Department of Education's tertiary education restructuring proposals (see 1.1 and footnote 40).

Continuing professional development courses are perhaps the most flexible option in preservation education because they can be tailored for specific audiences, topics and situations. These courses have many forms and guises. They are often "road shows" or travelling workshops organised by interested professional organisations and institutions like SAPCON or NEDCC (see appendix E).¹⁰ Aside from the traditional classroom format, there are a number of distance learning options such as the online tutorial for digital imaging hosted by Cornell University's Department of Preservation and Conservation or the School of Information, Library and Archive Studies at the University of New South Wales Australia's Internet-based course on preservation management in libraries and archives.¹¹

2.4 GLOBAL PERSPECTIVES ON THE STATUS OF PRESERVATION EDUCATION

Previous sections have established the need for and the goals of preservation education but to what degree is preservation education available globally? Again, it is important to stress that developed countries dominate the research and publication history while less developed countries, including South

¹⁰ The problem with travelling workshops on whistle stop tours is that the visiting presenters often take the enthusiastic momentum built up during the workshop with them when they leave for the next town. Learning all about "dpi" (dots per inch) and "bit depth" and "Dublin Core metadata" at a digital imaging workshop for example will not have any lasting value if one's institution has no plans to implement a digital imaging project any time soon. There is a managerial responsibility on the part of the employer to actively reinforce the acquired knowledge of the employees. Speaking specifically of JICPA (Joint IFLA/ICA Committee for Preservation in Africa) organised hands-on conservation training workshops, Varlamoff and Kremp (2000:223) question the benefit of short workshops saying "as there is no real follow up, it is difficult to check whether all the trainees become trainers when they go back to their country, and whether because of strenuous economical situations, they can put into practice what they have been taught."

¹¹ The worldwide continuing education opportunities are far too numerous to list with new workshops and course announced on various electronic mailing lists constantly. See CoOL's *Educational Opportunities in Museum, Library, and Archives Conservation/Preservation* web page (<http://palimpsest.stanford.edu/bytopic/education/>) and the archives of Preservation Administrators Discussion Group (PADG) list also available through CoOL (<http://palimpsest.stanford.edu/byform/mailling-lists/padg/>).

Africa, struggle to catch up.¹² Yet South Africa and similar countries have much to gain from these established programmes elsewhere, in terms of sharing resources and expertise. The more developed countries are also an important source of funding and training opportunities. This section will describe the preservation education situation in those geographic areas with which South Africa has an established relationship in the field of preservation.

2.4.1 UNITED STATES

The United States has a long history of preservation education and so has a wide range of options available, from basic introductory workshops to specialised training for library/archive conservators. But even in the relatively well-funded US, the preservation education road is still under construction.

While a number of training programmes in art conservation were available in the US since the early 1960s, the first degree-granting programme specifically addressing the needs of libraries and archives began in 1980.¹³ Paul Banks was instrumental in the curriculum design of the two master's degree programmes, one for preservation administrators and one for conservators at the School of Library Service (SLS) at Columbia University in New York. When SLS closed in 1992, this groundbreaking programme moved on and resurfaced as the University of Texas at Austin Graduate School of Library and Information Science Preservation and Conservation Studies (PCS) programme. PCS remains the only option in the US for those who want to specialise in the preservation administration or conservation of library and archives materials at the postgraduate level. Other universities have specialisation tracts for those that want to focus on preservation as part of their overall Master's of Library Science (MLS) degree programme. Still others offer continuing education programmes outside

¹² The term *developing country* in this paper is defined by Dosa and Katzer (1991:86) as "an economically developing entity and is used with the understanding that the rich diversity of these countries cannot be subjected to generalisations."

¹³ The art conservation programmes include New York University's Conservation Center of the Institute of Fine Arts, founded in 1960. This was soon followed by a second in 1969 in Cooperstown, New York. This program, now at Buffalo State College, was run by the State University of New York (SUNY) and the New York State Historical Association. The University of Delaware started a third graduate level programme in 1974.

of degree programmes.¹⁴ According to the Society for American Archivists (SAA), all Master's of Archival Studies (MAS) programmes "must include coursework ... in complementary areas such as conservation" (Society of American Archivists, 2002).

For a while, the trend in the US looked like library education itself was on the decline and taking preservation education to the grave with it. But the field experienced a resurgence of sorts as demonstrated by 1995 statistics from the ALA's *Preservation Education Directory* edited by Coleman.

Several schools have added preservation courses to their syllabuses, and other schools have increased the number of preservation courses they offer. This edition of the Directory lists 78 courses; the previous edition [1990] listed 52 courses. Other courses that include a preservation component have also grown in number: 134 in this edition as against 124 in the last. The number of schools offering continuing education programs that include preservation has risen from 14 in the 6th edition to 20 in this one. The value of practical experience for students is likewise recognised by an increase in the number of internships listed: 7 in the earlier edition; 18 in the new one (Coleman, 1995).

Coleman (1995) also puts forth a rather radical theory that "it may be that the very reductions in budgets that caused some library programs to close are also responsible for this continued growth in courses and workshops around the nation" although he does not provide data to back up this hypothesis. This thought-provoking explanation aside, overall the numbers suggest that preservation education is on the upswing in the US via traditional degree programmes and workshops.

¹⁴ See ALA's *Directory of Accredited LIS Master's Programs* for a full listing of LIS education programmes in the US. However, opportunities for preservation education are not listed as a group in this publication. For a full listing of preservation programmes in the US, see the Association for Library Collections and Technical Services (ALCTS) *Preservation Education Directory* edited by Coleman. Note that this directory, while comprehensive when last revised in 1995, may be out of date now.

2.4.2 UNITED KINGDOM

The defining event in preservation education in the UK was the publication of *Preservation Policies and Conservation in the British Libraries: Report of the Cambridge University Library Conservation Report* (Ratcliffe and Patterson, 1985), better known as the *Ratcliffe Report*. In a nutshell, this report laments the lack of preservation courses in library schools and the lack of preservation information available to library staff.

This influential publication had two major results. First, it led to the establishment of the National Preservation Office (NPO) in 1984 which, briefly summarised, is jointly funded by a number of institutions including the British Library and its role is “to provide an independent focus for ensuring the preservation and continued accessibility of library and archive material held in the United Kingdom and Ireland” (National Preservation Office, 2001). The second major result was the 1986 Library Association (LA) organised seminar *Education for Preservation* where, among other things, experts decided that conservation training is a speciality outside of library school domain but preservation education is not (Clements, 1986:136).¹⁵

More recently, Feather informally surveyed BAILER (British Association for Information and Library Education and Research) LIS academic departments and found the community has learned, to varying degrees, from the Ratcliffe Report.

All the respondents are teaching some aspect of preservation management in some part of their respective programmes; three offer a full module in the subject, although in at least one other institution preservation and conservation forms a very substantial part of a core postgraduate module. All three full modules are optional, and the wording of the response from one institution suggests that in some years their module is cancelled for lack of student interest (Feather, 2000:19-20).

¹⁵ Incidentally, in April 2002, the LA and Institute of Information Scientists (IIS) unified to form CILIP: the Chartered Institute of Library and Information Professionals (Chartered Institute of Library and Information Professionals, 2002).

He goes on to explain that, instead of being relegated to stodgy historical bibliography or rare books classes, preservation is now being incorporated into core curriculum classes. This is mildly encouraging news since it implies that “preservation management is apparently recognised as an essential part of a librarian’s professional toolkit” (Feather, 2000:20).

The situation in the UK is off the critical list but not quite out of the woods yet. While the growing acceptance of preservation as an essential core curriculum component is heartening, there are issues that still need to be addressed. Feather laments that there is no UK programme to train library and archive conservators, such as the University of Texas at Austin PCS programme (see 2.4.1). He suggests that the lack of employment in the field would make such a programme redundant since the “the demand for its graduates would be insufficient to generate a programme which would be cost-effective on a year-by-year basis” (Feather, 2000:20). But perhaps more disquieting is the fact that very few schools are providing education on the preservation of digital information. The one school that provided details of its coverage of digital preservation indicated that this was a postgraduate course in records management for archivists, not librarians (Feather, 2000:21).¹⁶

The team of Thebridge and Matthews (2000) as well as Feather conclude that the preservation learning curve in the UK is definitely skewed in the favour of archivists over librarians.

Archivists are given a thorough grounding in preservation and conservation during their professional training ... [while] newly qualified librarians can have expected to have learned something about the basic principles of preservation management in their professional education programmes (Feather, 2000:22).

Feather (2000:21) continues to add that as the use of the common technologies, data systems and media continues to grow, the line between librarian and archivist is blurring and in time perhaps so will their professional training.

¹⁶ Education on digital preservation is expanding in the UK however with the Digital Management and Preservation MPhil course at University of Glasgow established in 1999.

Where is preservation education in the UK currently? Matthews and Thebridge (2001:446) strongly advocate LIS and archive educators further explore ties with “professional bodies and working in tandem with them, exploring input into national training initiatives, securing funding for research into education and training.” The growing interest in preservation activities as a result of issues relating to increased digitisation may help springboard funds and collaboration. They also put forth the question that LIS and archive degree programmes explore how deeply they want to get involved in training as opposed to education (Matthews and Thebridge, 2001:448). Feather (2000:22) is reservedly optimistic that despite the still obvious shortcomings of preservation education in the UK, “the fact of the matter is that far more of the librarians who qualified in 1999 will have some knowledge of preservation than would have been the case in 1989 or 1979. That is some sort of achievement and we can build on that.”

2.4.3 AFRICA

Outside of South Africa (whose situation will be discussed in depth in chapter 4), consistent ongoing preservation education in Africa is scarce indeed. A 1999 JICPA-sponsored survey of preservation resources in Africa (compiled by Coates and published in 2001) summarises the situation.

It would appear that no formal training in conservation is offered in Africa, although numerous short courses are provided or are merely introductory modules offered as part of archival or introductory training. Indigenous training consists for the most part of apprenticeships and on-the-job training ... The few most highly trained conservators in Africa are to be found in English-speaking countries (Coates, 2001:4-5).

“It is a matter of concern, even dismay, that expertise and facilities are so extremely limited” in a continent as large as Africa, Coates (2001:6) goes on to say.

But the news is not all bleak. “Expertise and facilities do at least exist and this could be regarded as a foundation on which to build” says Coates (2001:6), echoing the sentiments of Feather in the UK (see 2.4.2). Some countries, especially the Francophone countries, have tried at least to initiate preservation programmes and training sessions with varying degrees of success. The Ecole des Bibliothecaires,

Archivistes et Documentalistes (EBAD) at L'Université Cheikh Anta Diop in Dakar, Senegal has proposed an outline for a lengthy preservation course for both managers and technicians (Tendeng, 1995:151-155). Similarly, the Ecole des Sciences de L'Information (ESI) in Rabat, Morocco has a strong interest in promoting preservation education in the Arabo-Islamic region (Berrada, 1995:163). In addition, the Ecole for Patrimoine Africain (EPA or the *School for African Heritage*) in Porto-Novo, Bénin, defines itself as "a university institution with a regional vocation for training and specialised research in the preservation and promotion of immovable and movable objects comprising the cultural heritage" (Ecole for Patrimoine Africain, 2002). Although this institution focuses on museum objects, Kremp (2001:32) notes that the school has plans "to extend to future librarians and archivists too." Other countries like Botswana, Zimbabwe, Gabon, Kenya, Namibia and Uganda have all demonstrated their commitment to, or at least interest in, the importance of preservation education in various professional publications (Mnjama, 1996; Kukubo, 1995; Mazikana, 1995; Sonnet-Azize, 1995; Rosenberg, 1995; Coates, 2001; Rhys-Lewis, 2000).

Why is preservation education so difficult in the less developed African countries? Alegbeleye (1991:69-70) summarises some of the possible causes for this paucity, including the dearth of teachers at both the professional and paraprofessional levels, limited economic conditions, fluctuating currency values which restrict the importation of raw materials and the exportation of staff for training, and the "lackadaisical attitude" of some state and local governments towards cultural heritage proved by not supporting long term preservation efforts. War also has an enormous impact on African libraries and archives. In Rwanda, for example, most of the country's archives were "utterly destroyed ... either through theft, fire or looting" during the prolonged conflicts in that region (Coates, 2001:11). Coates (2001:11) reports that the National Archives of Rwanda no longer even has a working telephone line.

In addition to these very substantial hurdles, there are the incongruities of trying to adhere to "international standards" which are almost without exception developed for and by wealthy developed Northern Hemisphere countries. The less developed, economically-strapped, climatologically-challenged countries of the Southern Hemisphere can not realistically meet many of these standards. For example, how can an institution possibly "aim at maintaining stable conditions year round, no higher than 70°F and between 30-50% RH [relative humidity]" as recommended by NEDCC

(guidelines authored by Patkus, 1999) when there is no consistent electricity supply? Peters (1987a:206) insists that “while these recommendations may be theoretically valid, they are of very little relevance in New Delhi or Durban.” Clearly, “there is an absence of acceptable standards to which conservators in African countries could conform” (Alegbeleye, 1991:69). This is not to imply that African countries are not capable of meeting appropriate standards but rather that the current “international standards” do not take into consideration the African extremes of weather variations, building structures and entomology to name just a few issues. As a result, some of the current international standards are irrelevant from the African perspective.

The issue of international standards also applies to education and training standards according to some South African researchers.

In the process of setting training standards, every effort must be made to ensure that they have international credibility. However, although account should be taken of international trends, care must be taken not to focus solely on, or simply adopt, standards that come out of the ‘western’ tradition that was so dominant in the past. When setting standards, every effort must be made to draw from the richness of the different paradigms and mindsets found in Africa ... In so doing the standards will be more applicable to an African context and will provide new insights that can be fed into global debates (Corsane et al, 1998:129).

These researchers seem to be focused on issues of colonial hegemony but the point is related.

Developing countries are different from developed countries and the former often need to make adaptations to standards issued by the latter to better suit their unique situations.

Yet despite all the roadblocks to widespread and successful implementation, preservation is an important concern in developing countries. The key is to initiate area-specific research and improve the education options for African professionals.

Preservation and conservation [is] a valid issue in developing countries ... We have read papers about preservation and conservation, but do we really know the needs in tropical countries as far as preservation and conservation are concerned? The answer is no. This is because no systematic research has been undertaken to reveal what the actual problems are, and what measures should be taken in meeting those needs (Wambugo, 1991:76).

Wambugo places the responsibility for increasing education and training options squarely on the shoulders of more developed countries and international organisation such as IFLA and UNESCO. These organisations have made some important inroads towards realising this goal (see chapter 3) but such initiatives must stress capacity building and self-reliance to be successful in the long term (Mazikana, 1995:27; Rhys-Lewis, 2000:21). Coates (2001:7) also stresses that any education or training initiatives in Africa must be carried out “on the ground” by local/national preservation committees to have a fighting chance of succeeding.

2.4.4 CONTINENTAL EUROPE, AUSTRALIA AND ELSEWHERE

Preservation education is ongoing in many other parts of the world. South Africa has strong preservation ties with continental Europe, German-speaking countries in particular. As described in chapter 4, a number of working South African conservators completed internships in these countries as part of their initial hands-on training. However most of these internships were similar to apprenticeships in structure, and not part of an academic degree programme. De Lusenet (1998:464) details several co-operative ventures in Europe including short-term classes at Archivschule Marburg in Germany and the Open Society Archives in Budapest, Hungary. Both programmes encourage participants from the surrounding countries but not necessarily from countries further afield.¹⁷

Library and archive preservation in Australia “as a special field of study, has only recently been acknowledged ... and programmes for teaching library preservation to conservators and librarians are

¹⁷ CoOL’s *Educational Opportunities in Museum, Library, and Archives Conservation/Preservation* web page (<http://palimpsest.stanford.edu/bytopic/education/>) lists a variety of European options for preservation education but few specifically for library and archive preservation.

in the early developmental stages” (Lyll, 1991:64). The Australian experience somewhat parallels that of South Africa in that the acceptance of and commitment to the importance of preservation came late to both countries and few of the LIS and archive degree programmes offer preservation education (see chapter 4). Lyll (1991:66) reports in the late 1980s only two library schools teach preservation courses although “it is hoped within a short period of time, many Australian library schools will be offering training courses in preservation.”¹⁸

Other areas of the world also have interests in preservation education including the former Soviet Union, Eastern Europe, India, South America and the Far East.¹⁹ Like the similar developing countries of Africa, training and education options in these emerging economies are organised largely by international professional organisations like IFLA, ICOM (International Council of Museums) and UNESCO (see chapter 3). Other programmes are organised privately for institutional staff.

¹⁸ In 2002, the Australian Library and Information Association (ALIA) lists 12 ALIA-recognised courses in library and information studies but provides no information about the content of these programmes. Writing in 1986, Lyll (1991:65) noted that a preservation component would be introduced at the Canberra College of Advanced Education (now part of the University of Canberra) in 1988. Yet neither the Graduate Certificate in Records and Archives Management web page nor the Graduate Diploma in Library and Information Management web page lists such a course. Of course, this is not proof that no such course is on offer. However, the University of Canberra is the home of Conservation of Cultural Materials Postgraduate Course, which has a concentration in paper conservation. As mentioned in 2.3.3, however, the School of Information, Library and Archive Studies at the University of New South Wales offers some preservation related courses through distance learning but it is not clear how often these courses are offered and to whom.

¹⁹ These other geographic areas will not be discussed in this paper because South Africa does not have widespread working relationships with institutions or professionals in these areas within the LIS/archive professional communities. However, for information on central and eastern European and the former Soviet Union programmes, see Nyuksha and Leonov (1997), Nyuksha (1994), Kislovskaya (1998), Odvárková (1998) and Kastaly (1998). See Kathpalia (1991) for a description of archivist training in India. In addition, see Wächter (1991) and Nogueira (1991) for education programmes in Austria and Spain respectively.

CHAPTER 3: THE DISSEMINATION OF PRESERVATION INFORMATION

3.1 INTRODUCTION

One of the most important issues in preservation education is the dissemination of preservation information outside the traditional classroom environment. Even highly educated preservation specialists need to keep up with new developments, projects and contacts in the field. This chapter will explore the distribution methods and associated problems surrounding the dissemination of preservation information, both across the global arena and within South Africa.

3.2 METHODS OF DISSEMINATING PRESERVATION INFORMATION

Professional organisations, both international and South African, play a pivotal role in the dissemination of preservation information to professional information workers (Dominy, 1985:155). Some are proactive in taking a dynamic lead; others are less so, by design or default. This section will discuss the track records of some of the major relevant organisations.²⁰ Inter-organisational co-operation is both necessary and common in large-scale preservation projects and as a result, organisational participation often overlaps. It is not the purpose of this section to give an exhaustive recounting of each organisation's history but rather to give a general overview of the organisation's relative success or failure with regards to preservation education in South Africa.

3.2.1 INTERNATIONAL PROFESSIONAL ORGANISATIONS

3.2.1.1 IFLA: International Federation of Library Associations and Institutions

The International Federation of Library Associations and Institutions (IFLA), a large multinational lobbying body, has a noteworthy influence on the dissemination of preservation information in South

²⁰ There are international organisations such as the European Commission on Preservation and Access (ECPA), the International Council of Museums (ICOM), the International Council on Monuments and Sites (ICOMOS) and Ligue des Bibliothèques Européennes de Recherche (LIBER) which have an impact on preservation education in the world at-large but not necessarily within South Africa. Similarly, the scope of South African organisations like SLIG (Special Libraries Interest Group) falls out of the discussion of this paper. Therefore, these organisations will not be discussed in this section.

Africa by publishing the quarterly *IFLA Journal* and more intermittently, the *International Preservation News* (IPN), both of which report on global preservation activities. IFLA also maintains the increasingly valuable *IFLANet* web site and organises training workshops and conferences. However, it must be mentioned that members of IFLA primarily are associations and institutions, not individuals, so the onus is on these organisational members to distribute these resources to their individual members.

Two IFLA components have vested interests in and for South African preservation: the Preservation and Conservation (PAC) Core Programme and the Africa Regional Section.²¹ Launched in 1986, the primary goal of the PAC is “to raise awareness: to make information and heritage professionals, governments and the public conscious of the fundamental position occupied by preservation in the management of an institution” (International Federation of Library Associations and Institutions, 2001). As mentioned in 1.4.1, PAC’s *Principles for the Care and Handling of Library Material* publication, edited by Adcock, is a well respected contribution to the preservation field—and readily available thanks to its recent posting on IFLANet. The Africa Regional Section also has a strong interest in preservation, listing “the promotion of conservation and preservation of library and archival material in Africa” as one of its goals in the 2002-2003 Plan of Action (International Federation of Library Associations and Institutions, 2002a). The 1993 *Report of the IFLA Mission to South Africa* identified the relative isolation of South African LIS professionals from specifically their neighbouring African colleagues (International Federation of Library Associations and Institutions, 1993). Partially to encourage intra-continental discourse, the Africa Regional Section has sponsored the Bart Nwafor Staff Development Programme since 1997 to further networking within Africa in a number of areas, one of which is preservation training.

One of the benchmark moments in the modern history of preservation in continental Africa is the 1993 *Pan-African Conference on the Preservation of Library and Archive Materials* held in Nairobi, Kenya. This cornerstone event was organised by PAC, another IFLA Core Programme named the

²¹ One failing is that neither the PAC nor Africa Regional Section has an electronic mailing list open to general members who are not on the governing boards of these groups. See 3.2.4 for a discussion of electronic mailing lists in the preservation field.

Advancement of Librarianship Programme (ALP), the Africa Regional Section and the International Council on Archives (ICA) with funding from a number of sources including UNESCO and the World Bank (Bergdahl, 1993:464). The resulting conference resolutions had a wide range, from acknowledging the “general lack of awareness of preservation and conservation of library and archival materials ... [and advocating that these] disciplines undertake awareness-raising activities at the institutional and national levels,” to advocating the “establishment in each country of a committee to develop a national preservation policy,” to addressing the lack of standards for Africa and to improving preservation education and training (Bergdahl, 1993:464). As discussed in 2.4.3, many of these resolutions have not been adequately implemented but the conference did have one successful continuing result, the eventual creation of JICPA or the Joint IFLA/ICA Committee for Preservation in Africa (see 3.2.1.4).

3.2.1.2 UNESCO: United Nations Educational, Scientific, and Cultural Organisation

Founded in 1945, the United Nations Educational, Scientific, and Cultural Organisation (UNESCO) has a long but uneven history in preservation education and distributing preservation information. On the positive side, UNESCO has “demonstrated a commitment to developing a libraries-and-archives work force because of shortages of such personnel in many parts of the world” (Cloonan, 1994:31). Cloonan (1994:31) goes on to say that UNESCO has funded numerous “fellowships, scholarships, travel grants, international courses and seminars, teacher exchanges and the establishment of new library schools” in the developing areas of the world. Nonetheless, both Cloonan (1994) and Lancaster (1991) discuss the problems with these UNESCO-sponsored educational activities including the lack of course follow-up (see footnote 10) and the inconsistent background knowledge of participants

One of the major contributions of UNESCO to the dissemination of preservation information is the Memory of the World programme, founded in 1992 in conjunction with IFLA to “protect and promote the world’s documentary heritage” (United Nations Educational, Scientific, and Cultural Organisation General Information Programme, 1994:350). The Memory of the World Register “lists documentary heritage which has been identified by the International Advisory Committee in its meetings ... and endorsed by the Director-General of UNESCO as corresponding to the selection criteria for world significance” (United Nations Educational, Scientific, and Cultural Organisation, 2001). The

programme is based firmly in preservation in that it is “designed to embody a new approach to protecting endangered documentary heritage, democratising access to it and ensuring its wider dissemination” (United Nations Educational, Scientific, and Cultural Organisation General Information Programme, 1994:351).

UNESCO’s second major contribution is in the field of publications. The UNESCO RAMP (Records and Archives Management Programme) Studies cover a wide range of topics including disaster planning, mould treatment in tropical climates, general preservation and conservation for libraries and archives, environmental pollution and its effects on library materials as well as guidelines for training preservation specialists (Buchanan, 1988; Wood Lee, 1988; Clements, 1987; Pascoe, 1988; Kathalia, 1984). Some of the RAMP studies are now available online via the UNESCO Archives Portal with plans in place to add more titles in the future.²²

3.2.1.3 ICA: International Council on Archives

Through its affiliation and co-operation with UNESCO, IFLA and JICPA, the International Council on Archives (ICA) strives to fulfil its mission of “facilitating the training of new archivists and conservators and the continuing education of working archivists and conservators” and “developing relations between archivists of all countries and between all institutions which are concerned with the administration or preservation of records and archives or the professional training of archivists” (International Council on Archives, 2002). Like IFLA, ICA has a number of regional sections or branches with ESARBICA, the Eastern and Southern Africa Regional Branch of the International Council on Archives, being the relevant section for South African professionals. ESARBICA’s constitution was adopted in Nairobi in 1969 and the organisation publishes the *ESARBICA Journal* and

²² For a full list of RAMP studies, see the RAMP Studies web page available through the UNESCO Archives Portal (http://www.unesco.org/webworld/portal_archives/ramp_studies_list.html). There is no doubt that these could be very useful publications---if one were able to get copies of those not yet converted to digital format. Cloonan (1994:32) mentions that UNESCO “does not always respond to written requests, and sometimes the wrong surveys are mailed out.” Research undertaken for this paper tried to obtain copies of various RAMP studies but it was an almost completely unsuccessful frustrating undertaking. Numerous e-mails, letters and faxes to UNESCO were mislaid and misdirected. An eventual response indicated that some of the RAMP studies in question would be online “sooner or later” and suggested the research be postponed! UNESCO, it seems, needs to work on disseminating some of its own information more effectively.

ESARBICA Newsletter. In addition, ICA runs the Committee on Preservation in Tropical Climates (ICA/CPTC), a field of study important for sometimes steamy South Africa (see 2.4.3).

Another preservation education related project in which ICA is involved is the International Committee of the Blue Shield (ICBS or *Blue Shield*). Formed in 1996 by the ICA, ICOM, the International Council for Monuments and Sites (ICOMOS) and IFLA, the purpose of ICBS is “to collect and disseminate information and to co-ordinate action in emergency situations. Its mission is to protect and safeguard cultural heritage” (International Council on Archives, 2002). It describes itself rather heroically but perhaps justifiably as “the cultural equivalent of the Red Cross” (International Federation of Library Associations and Institutions, 2001). ICA and IFLA publish Blue Shield project updates in their publications and on their respective web sites.

3.2.1.4 JICPA: Joint IFLA/ICA Committee for Preservation in Africa

The 1996 creation of the Joint IFLA/ICA Committee for Preservation in Africa (JICPA) is a direct result of the resolutions stemming from the 1993 *Pan-African Conference* in Nairobi (see 3.2.1.1). The aim of JICPA is “to help raise awareness among African professionals of the purpose and importance of preservation. Its aim is also to make professionals aware of all the problems of preservation and to prepare them to deal with these problems” (Joint IFLA/ICA Committee for Preservation in Africa, 2001). Currently JICPA is under the organisational umbrellas of both IFLA and ICA but there is talk that perhaps it should become a project of the IFLA Africa Regional Section alone (International Federation of Library Associations, 2002b:3)

In South Africa, JICPA has recently integrated with SAPCON (see 3.2.2.1). JICPA is still active throughout Africa but not as a separate entity within South Africa. There are current influential South African-based members within JICPA but the JICPA group no longer organises or sponsors initiatives for the South African preservation community. SAPCON has taken over this role.

Although no longer a discrete unit within South Africa, JICPA has made several important contributions to African preservation awareness including completing the *Survey of Preservation Resources in Africa 1999* (compiled by Coates and published in 2001), which as described in 2.4.3,

highlights the overall lack of preservation training in Africa.²³ Training is an important aspect of JICPA's constitution and it has organised and conducted several preservation workshops including the *Safeguarding African Documentary Heritage* workshop in Cape Town South Africa in early 2001.²⁴ In addition, preliminary planning is underway for a JICPA-organised African summit on preservation to be held in Botswana in 2003 (International Federation of Library Associations, 2002b:3).

3.2.1.5 Conclusions about the Role of International Professional Organisations

Clearly some international organisations are making a proactive effort to distribute preservation information to their members and succeeding to varying degrees. The efforts of international professional organisations cannot be counted on as "enough" however. As discussed in 2.3.3 and 2.4, local grassroots-sponsored programmes must balance international efforts in order to have an effective lasting impact. South African professional organisations must take up the reins where the international organisations leave off.

3.2.2 SOUTH AFRICAN PROFESSIONAL ORGANISATIONS

3.2.2.1 SAPCON: South African Preservation and Paper Conservation Group

SAPCON, or the South African Preservation and Paper Conservation Group, is the local professional organisation that deals specifically with the preservation and conservation of cultural heritage collections in South Africa. This includes but is not limited to institutional library and archive collections, as the group has many museum and historical society members as well.

SAPCON's focus has recently changed. Previously known as the South African Paper Conservation Group (under the same acronym SAPCON), the new name emphasises the many aspects of preservation aside from hands-on paper conservation. Simultaneous with the name change, SAPCON recently amalgamated with the South African JICPA members to reduce the overlap between the two similarly focused groups for active members, funding and programmes (see 3.2.1.4). The recent name

²³ Also, JICPA has undertaken several surveys in the preservation field including the *Survey on the Safeguard of Newspapers and Periodicals in Africa*.

²⁴ This workshop was co-sponsored by UNESCO's Memory of the World programme and the National Library of South Africa (NLSA) in co-operation with IFLA PAC. See the IFLA PAC web page (<http://www.ifla.org/VI/4/pac.htm>) for a list of other recent JICPA training initiatives.

change also reflects a desire to attract a wider membership base with more diverse areas of specialities and interests. While SAPCON continues to focus on paper-based materials, the scope of responsibility has broadened to include “works of art, artefacts, library and archival materials and photographs on, or composed of, paper and related materials” (South African Preservation and Paper Conservation Group, 2001). The inclusion of the word *preservation* in the group’s name implies that the group will consider these materials in new formats, such as exploring digitisation projects. The major aim of the revamped SAPCON is “to advance the education of the public in the conservation of all cultural heritage artefacts, paper and related materials for the purpose of maintaining our South African heritage” (South African Preservation and Paper Conservation Group, 2001).

As the main preservation touch-point in South Africa, SAPCON is an important influence on preservation education in the region. As a group, it stresses professional networking, investigation and materials research and outreach projects (South African Preservation and Paper Conservation Group, 2001). Established in 1985, the group is organised into geographic chapters or regional groups under a national executive committee. Each regional group decides its own events, with the scheduled presentations often organised or led by the members of that section. Occasionally, SAPCON chapters organise events in conjunction with other chapters or other organisations. For example, SAPCON West organised the May 2001 *De-Mystifying Digital Imaging: Building a South African Bitmap* workshop in Cape Town, which was partially funded by the Council on Library and Information Resources (CLIR) and immediately followed NEDCC’s *To Film or To Scan* four-day workshop (which was also organised by SAPCON West members). To encourage and promote local expertise, the SAPCON/CLIR digital imaging workshop instructors were all working South African professionals as opposed to the visiting Americans of NEDCC.

As a whole SAPCON is an active progressive organisation and the possibilities for SAPCON in furthering preservation education throughout the country are wide open. Nevertheless, currently the group is not living up to its potential in part due to breakdowns in the communication chain between the national office and local chapters. For example, membership lists are often out-of-date and, at one recent meeting, several attendees admitted to not paying dues in several years because they were never sent a reminder or renewal notice. Unpaid membership fees are not the most pressing issue for this

discussion, but the problem illustrates a key point: in some respects, SAPCON has a difficult time effectively getting information to its members. There are no regular mailings, newsletters, electronic mailing lists, a web site or even a membership directory to keep members in touch with the group and each other. These same communication problems hinder the recruitment of new members, especially from the paraprofessional and student ranks. How can interested parties join if they do not know whom to contact or the benefits of membership or the types of projects in which the organisation is involved? Or perhaps more directly, how could they become members if they do not know the organisation even exists? The invisible college network (see 3.2.3) is basically the only way to find out, and for an established organisation like SAPCON, there perhaps should be a more recognised communication network.²⁵ There are efforts underway to improve intra-organisational communication, including developing a national web site. This may not alleviate the communication problem for all existing and potential members since Internet access is limited for some but it is certainly a move in the right direction.²⁶ As SAPCON moves away from the often self-employed, hands-on, close-knit conservation community towards the larger institution-based preservation community, the group's infrastructure must evolve to meet the demands of the new direction.

3.2.2.2 SASA: South African Society of Archivists

The South African Society of Archivists (SASA) was founded in 1960 and defines the "moral duty to preserve information about the past and present for the future" as the very first responsibility of an archivist (South African Society of Archivists, 2001). Like SAPCON, there are regional chapters or branches. Unlike SAPCON, SASA has a web site, a journal (*S. A. Archives Journal*), a newsletter (*SASA Newsletter*)—in short, an established communication network.

²⁵ In some respects, SAPCON resembles the American organisation, The Guild of Book Workers (GBW) with its national and regional chapter organisation. Like the SAPCON of old, the GBW strictly focuses on paper-based, book format material (and the book arts to some extent) whereas the new SAPCON has a broader preservation scope. The GBW however is far more organised in how it disseminates information to its members. Members have access to a web site, get scheduled national and regional mailings, and have access to an up-to-date membership directory to facilitate networking.

²⁶ The results from the preservation professional survey discussed in chapter 4 show that the overwhelming majority of those surveyed do have at least some access to the Internet although they do not take advantage of the preservation resources on the World Wide Web (see 4.4.3.2.3)

SASA's mission however does not focus on the training of individuals but rather the professional development and conduct of the South African archives field as a whole. SASA nevertheless has made some contributions to preservation education, specifically in the area of establishing professional standards for the archives profession as evidenced by the Standards Generating Body for Archives and Record Management (SGB-ARM) of the South African Qualifications Authority (SAQA) which lists preservation as a primary function of an archivist (South African Qualifications Authority Standards Generating Body for Archives and Record Management, 2001). Aside from this, the organisation has made other efforts to promote and further preservation education in South Africa. One example is the partially SASA-sponsored *Preserving Library and Archival Materials in Africa: Opportunities and Challenges* conference planned to take place in Durban, December 2002.

3.2.2.3 **LIASA: Library and Information Association of South Africa**

The Library and Information Association of South Africa (LIASA) was launched in 1997, taking over from the South African Institute for Librarianship and Information Science (SAILIS) and the African Library Association of South Africa (ALASA) (Library and Information Association of South Africa, 2002). LIASA is *the* professional organisation for South African LIS workers. Organised into regional or provincial branches, members have access to a national web site (although one with some rather seriously out-of-date information) and receive regular national and regional news via mail and/or e-mail.

LIASA's mission focuses on advocacy and is policy-orientated as opposed to providing training for its members.²⁷ There is no organised preservation group or committee in this organisation.²⁸ LIASA does

²⁷ However, LIASA is conducting a survey of both current and lapsed members during late July 2002. Several of the issues addressed in the survey relate to this research project including gauging interest in training courses for shelving, basic book repair and grant-writing. It will be interesting to assess the interest of LIASA members for training in these areas.

²⁸ It should be noted that the membership is free to form a new interest group at any time, following the specific guidelines listed on the *How to Form an Interest Group* web page (<http://home.imagnet.co.za/liasa/howto.html>). Coates (1995:39) interestingly notes that LIASA's predecessor, SAILIS, "started a division for conservation librarians, but it was so bogged down with rules and regulations, it met virtually no support and collapsed at once." The fact that none exists in LIASA as of yet may be telling that the LIASA membership, incorrectly, does not consider preservation to be a major part of their professional responsibility.

hold the occasional disaster preparedness workshop but currently preservation education is not a key focus for this organisation.

3.2.2.4 AMLIB: Association for Archivists and Manuscript Librarians

The objectives of the perhaps defunct Association for Archivists and Manuscript Librarians (AMLIB), a member of ICA and established in 1978, were to “arrange workshops, seminars, conferences and other meetings on a regional and national basis to discuss matters of mutual concern, in order to promote contact among members; and the regular publication of a newsletter” (Fraser, 1999:63).²⁹ In other words, AMLIB’s mission was to further local networking and communication. The organisation published their *AMLIB Newsletter/AMLIB Nuusbnef* regularly and it has a history of organising preservation-themed conferences and seminars. One of the most notable is the *Symposium on Manuscripts in Southern Africa* held in Cape Town in 1984. This successful conference “stimulated interest in conservation issues” and contributed to the organisation of additional conferences in the mid-1980s. One of these follow-up conferences, the 1986 symposium on *The Preservation of Library and Archival Materials in Southern Africa*, is undoubtedly an important event in the history of preservation in South Africa and will be discussed in chapter 4 (Fraser, 1999:63-64).³⁰

AMLIB and its members have made noteworthy contributions to preservation through their research and publications in a number of fields including library architecture, especially in advocating the use of *green architecture* for heritage institutions.³¹ AMLIB seems to have been most active in terms of

²⁹ There is a curious debate if AMLIB currently exists at all. An unpublished intra-organisational memo laments the reality that decreasing membership combined with rising costs and inflation leave the future of the organisation very unhealthy indeed. The memo states plainly: “It is not possible for AMLIB to survive” (Association for Archivists and Manuscript Librarians, 2000). Yet the organisation never officially disbanded and in fact several survey respondents listed current membership (see 4.4.3.2.3). It seems however that for all intents and purposes, AMLIB is out of commission and has been for some time as its last *AMLIB Newsletter* was published in December 2000. In a July 2002 personal e-mail, an optimistic former AMLIB organiser suggested the group might re-emerge in the future “should the economic climate improve for the archival profession and the need is still there” but no specific plans are in place.

³⁰ Fraser incorrectly dates this symposium as November 1985. It was held actually a year later, in November 1986.

³¹ Briefly, *green architecture* is architectural design that takes advantage of the natural external building environment to moderate the interior building environment including temperature and RH. See Rowoldt (1998) and Harris (1993) for descriptions of green architecture in the South African context.

preservation education in the 1980s-early 1990s. One reason perhaps is the general slow-down of the organisation as a whole in the 1990s as a result of the “deteriorating financial situation” of South African library and archive institutions, yielding limited travel funds and fewer meetings in general (Fraser, 1999:66). In later years, AMLIB’s efforts focused on non-preservation issues.

3.2.2.5 SAMA: South African Museums Association

While not an organisation that focuses strictly on the activities of libraries or archives, the South African Museums Association (SAMA) nonetheless has an impact on preservation education in these sectors. Many preservation professions report being members of SAMA and having taken part in SAMA-sponsored training workshops (see 4.4.3.2.2).

Founded in 1979, SAMA’s mission focuses on the “the management of the country’s diverse natural and cultural heritage” in the field of museology which aside from museums proper can include “other educational and kindred institutions” such as “archives, herbaria, conservation institutes, and collections and exhibitions permanently maintained by libraries, universities, colleges and schools” (South African Museums Association, 2001). While SAMA does not specifically list preservation as one of its main objectives, it does focus closely on the issue of professional ethics and conduct, which can follow through to preservation ethics for all types of heritage institutions.

3.2.2.6 Conclusions about the Role of South African Professional Organisations

This section does not mean to suggest that each and every professional organisation has to narrowly focus only on preservation; of course, different organisations have different *raison d’être*. Yet each and every professional organisation does have the responsibility to make sure its members are kept well informed and up-to-date in their respective fields. Perhaps organisations like LIASA, AMLIB and SASA limit their role in preservation education by design while SAMA chooses to take a proactive approach. Perhaps with the existence of SAPCON, these other professional organisations feel the

responsibility for preservation education no longer lies with them.³² If so, to some extent, LIASA, AMLIB and SASA would be justified in thinking this way—if only SAPCON was financially and administratively set up to take on this role. But at this point, SAPCON is somewhat struggling to find its footing in its new expanded environment. The other organisations have a responsibility to their members to continue, or in some cases *to begin*, the preservation education discussion, individually or collectively.

3.2.3 THE INVISIBLE COLLEGE

There are many ways to distribute preservation information aside from the traditional classroom setting and the efforts of professional organisations. The most current information often is passed along informally among peers, through what is known as the *invisible college* or “the elite group of people who work in a particular field and who communicate with each other in an informal way” (Smith, 1992:247). Underwood (1992:14) outlines a synoptic history of the phrase *invisible college* dating back to a 1646 letter written by Irish scientist Robert Boyle, known as the “father of modern chemistry.” Some authors claim this informal small group who “met to discuss the utilitarian aspects of natural philosophy” later evolved into the very formal Royal Society of London in 1660 but others disagree (Underwood, 1992:14). Nonetheless, the phrase has its origins in the communication networks of the constantly evolving fast paced world of science. In short, the invisible college is a well-connected group of those people in the know. They know who is doing what where when why and who is paying for it. The invisible college is basically an informal network of like-minded colleagues, the professional gossip circle in a sense—but with a constructive rather than malicious purpose—and members communicate with each other in person at seminars and conferences, on the phone, via fax and e-mail. In short, they communicate basically any way except through printed professional literature. Cloonan (1994:62) notes that the invisible college connects via specifically oral channels but this definition may be too narrow in today’s online environment where the computer keyboard is the telecommunication

³² There is no hard data to support or deny this theory although the general lack of awareness and participation in preservation issues throughout South Africa as discussed in chapter 4 indicate that preservation simply is not yet considered a primary issue of concern by the LIS and archive sector. Logically, this apathy translates into the mission statements of respective professional organisations. Additional research proposed in chapter 6 on the networking skills and habits of preservation professionals in South Africa would also explore this issue in greater depth.

method of choice. Aside from this person-to-person communication, Smith (1992:241) notes that *gray literature*, defined as material ordinarily not available in library collections like “conference pre-prints, reports of completed studies, reports and recommendations of committees and photocopies of speeches given at conferences,” is an integral aspect of the invisible college. The important point is that information is passed along informal communication channels. Smith (1992:241) asserts that the informal channels of the invisible college are more effective even than professional literature.

But how does one join the gossip circle? By networking or “what the Americans call *schmoosing*” as one fund-raising expert recently described it at a Cape Town grant-writing seminar. But networking or *schmoosing* can be very difficult indeed when one does not have a personal professional network or access to an established one.

3.2.3.1 North-to-South Networking

Because the invisible college is most entrenched in the US, debatably the country with the most preservation-related activity, the same aspects that make it a successful information exchange tool also act as barriers for would-be recruits, especially international ones.

Because the invisible college in the United States preservation community is so saturated with news of itself, there is little motivation and less time for developing international links....The invisible college in the international preservation community is considerably much less developed and consequently much less effective. This is not because the international preservation system is flawed, but rather because it is new. In many areas, the essential critical mass of preservation colleagues hasn't yet developed within national borders, let alone a geographic region (Smith, 1992:247).

In other words, the frenetic pace of the preservation profession in the US leaves the professional community little motivation to become involved with “outsiders” who may be geographically, culturally or institutionally different and/or distant. The same can be said for Europe yet perhaps to a lesser extent. Therefore it is difficult for international colleagues to network with their Northern Hemisphere counterparts on an equal level although it does happen as reported in 4.4.3.2.4..

One example of North-to-South (developed-to-developing nation) networking in the preservation context is the role of international organisations as discussed in 3.2.1. North-to-South networking is effective only to a certain extent due to the inherent hierarchy in the relationship. First the *North* is simply removed from the situation, in many aspects other than geography, some of which the North may not even be cognisant. This is the case with the “international standards” discussed in 2.4.3 which are really only relevant for the *North* countries that made them. Second the *South* do not always appreciate the *North* taking the leadership role, as the relationship is almost always that of teacher-learner, North-South. The more successful projects have a balanced approach of both North-to-South and South-to-South, such as the SAPCON/CLIR workshop piggybacking on the NEDCC workshop (see 3.2.2.1).

3.2.3.2 South-to-South Networking

But just because it may be difficult for South African professionals to develop relationships with their American or European counterparts, that does not mean that a local version of the invisible college could not work as successfully within South Africa. It is key to develop a network within one’s own geographic and economic peer group. This is known as South-to-South, or developing nation to developing nation, networking.

Survey results detailed in chapter 4 show most preservation professionals claim to have a professional network of colleagues in South Africa although the scope and framework of this network is not clear (see 4.4.3.2.4). Aside from the DISA electronic mailing list for digitisation projects and occasional announcements on wider scope electronic mailing lists like LIASASOnline, there are no electronic discussion lists or continuously published newsletters to describe events, projects and problems happening within the country or even the SADC (Southern African Development Community) region.³³ The most obvious choice for intra-national networking is through SAPCON. But as discussed in 3.2.2.1, SAPCON needs to restructure its own distribution network before it can act as a successful information conduit for the LIS and archive community at-large.

³³ DISA is an important successful national preservation initiative that combines both demonstrated results with capacity building. Nonetheless, it is intentionally limited in range to digital imaging.

3.2.4 OTHER METHODS OF INFORMATION DISSEMINATION

There are many other ways in which preservation information is distributed to and within the South African information professional community, some more accessible than others. Imported professional journals and newsletters like *Restaurator* and *The Abbey Newsletter* are relevant but very expensive in constantly fluctuating foreign currency. Few institutions or individuals in South Africa can afford to consistently subscribe (see 4.4.3.2.3). Others like IFLA PAC's *International Preservation News* are more widely received but more sporadically published. The journals and newsletters of local professional organisations and institutions of course are much easier to come by but there is no local journal or column dedicated to preservation issues.³⁴

Electronic mailing lists are another option which have proved quite successful in many LIS/archive specialities. Aside from the appeal of being free of charge and suffering virtually no publishing lag time, electronic mailing lists need not be geographically restricted. One of the most obvious examples in the field is the *Conservation Distribution List* or *Cons DistList* moderated by Walter Henry at Stanford University in the US, which has members from more than twenty countries across a variety of disciplines. Another is the *Encoded Archival Description* (EAD) list run from the University of Virginia also in the US, which discusses metadata encryption for (mostly) archival digital imaging projects. Yet another is ALA's *Preservation Administrators Discussion Group* (PADG) list. But as described in 4.4.3.2.3, very few South African professionals subscribe to these lists despite widespread Internet access. Perhaps one reason for this is that many are not aware of them because they are not using their communication networks effectively.³⁵

³⁴ In fact, there is a rather pronounced void in the professional literature about South African preservation efforts in general. There are exceptions to this of course but outside of the "major players," those several well-known names and places, few preservation professionals seem to make the effort to put pen to paper or finger to keyboard. There is a fair amount of gray literature floating about but this is generally not accessible to the larger community as discussed in 3.2.3.

³⁵ The preservation professional survey discussed in chapter 4 examines only to *which* electronic mailing lists people subscribe, not *why* or *how* they came to know about them. Personal communication however reveals that some professionals are unaware of some of the more recognisable options like Cons DistList or at least unaware of how to subscribe. This unfamiliarity is both an education oversight and networking problem.

3.3 PROBLEMS WITH THE DISSEMINATION OF PRESERVATION INFORMATION

There are universal problems with the dissemination of preservation information regardless of the distribution method.

3.3.1 LACK OF STANDARD VOCABULARY

As demonstrated by the definition discussion in chapter 1, one of the ongoing challenges in the preservation field is the lack of a globally standard professional vocabulary. In brief, regional and language differences make it difficult to communicate effectively across international borders. Smith discusses some of the rather amusing confusion that can result from a non-standard vocabulary in such a cosmopolitan field.

Variables (personality, education, social background, and national origin) play an even larger role in the international community where we also have to communicate across the barrier of language differences. For example, in English, the conservator is a person who performs physical, hands-on treatment of damaged library materials; whereas in French, the conservator is a person who oversees the development and care of a collection, or in American English, the curator. To the British, this person is the keeper. To Americans, a keeper is usually a person who looks after animals, as in 'zoo keeper' (Smith, 1992:240).

Some might be tempted to argue that perhaps the Americans are not too far off the mark since some cultural institutions can be very zoo-like indeed! This is but one humorous example of a very serious issue, the lack of an internationally standard vocabulary.

The differences are not just semantic. The problem points to the fact that, to some extent, the field has not clearly defined its benchmark terms and made them widely understood. Smith (1992:240) asks "what do we mean when we say 'archival,' 'permanent,' or 'acid-free'?" These words are not interchangeable but they are often incorrectly misused as synonyms. And this misuse often leads to confusion. For example, one local South African commercial binder described his binder's board as

“archival but not acid-free.” How can something be *archival* if it contains the very substance known to hasten deterioration, acidic lignin?

Archival is one of those consistently misused terms like *diet* or *cholesterol-free*. Consider the example of the widely used paper document repair tape, Filmoplast P, as described in a major conservation supply catalogue.

An archival quality pressure sensitive, thin, transparent paper tape made from a special wood-free paper. Once burnished down it virtually disappears into the paper, leaving a mend that both looks and feels like the original page. Both the adhesive and paper are buffered with Calcium Carbonate making the tape slightly alkaline (pH ~9.2) to counter any acids in the paper it is applied to ... Suitable for mending tears in pages, hinging light weight photographs and prints and reinforcing folds in maps and other papers (Talas, 2002).

According to this description, the paper substrate is wood-free and both the paper and the adhesive are slightly alkaline—both very good *archival* qualities. But the fact remains that Filmoplast P is a pressure sensitive self-adhesive tape. And no tape is completely reversible—a quality conservators stress is an integral part of the concept of *archival* (Verheyen, 1995). So is Filmoplast P actually *archival*? The answer: yes and no. It has some archival properties but it is not (completely) reversible. Filmoplast P then is as contradictory as the binder’s board that is archival but not acid-free. The confusion would be cleared up if there were a standard definition and clear understanding of the concept of *archival*.

There have been significant inroads into standardisation in recent years however. Some of the notable examples include IFLA’s *Principles for the Care and Handling of Library Material* (Adcock, 1998) and Roberts and Etherington’s *Bookbinding and the Conservation of Books: a Dictionary of Descriptive Terminology* (1982), both of which are available in paper format and electronic format online.

3.3.2 LANGUAGE ISSUES

Most of the “inroads into standardisation” like dictionaries and glossaries however are only in available in the English language. Translation of professional preservation literature into other languages is a slow-moving process and even when material is translated, it is usually only into Spanish, French or occasionally Russian.

What about the unique South African situation with its eleven official languages? Aside from the very occasional home-produced item in Afrikaans, there is no preservation literature available at all in the nine other languages. Most current South African preservation professionals have at least a working knowledge of English and so have access to the professional literature for the most part.³⁶ The situation is tolerable—but only just—from the South African perspective although this language imbalance may inhibit new recruits into the field from outside the English/Afrikaans-speaking populations.

Other countries, especially other developing countries where English fluency is not as prevalent as it is in South Africa, suffer serious gaps in knowledge due to this inequity of translation. A few professional organisations like IFLA and UNESCO are sensitive to this problem and make an effort to translate documents and make them as readily available as the English versions. The American Institute for Conservation of Historic and Artistic Works (AIC) has linked with the Association for the Conservation of the Cultural Patrimony of the Americas (APOYO) group to translate conservation documents into Spanish. But there is still a long way to go. It is doubtful any professional preservation literature will ever be translated into Xhosa or Venda or Sotho or the like unless it is a South African or perhaps SADC initiative.

³⁶ Although most current South African preservation professionals are fluent (or nearly fluent) in English, it is often a second language to Afrikaans as discussed in chapter 1. Some preservation professionals even responded to the English language survey discussed in chapter 4 in Afrikaans.

CHAPTER 4: THE CURRENT STATE OF PRESERVATION EDUCATION IN SOUTH AFRICA

4.1 INTRODUCTION

Previous chapters have explored the issue of preservation education from a variety of viewpoints. This chapter will focus on preservation education specifically in South Africa from two perspectives. First, to what extent do South African LIS and archive degree programmes include preservation coverage in their curricula? What issues are covered in those that do and who are the instructors? Second, how do the South African LIS and archive professionals working in the preservation field come by their education and training? What does this community consider essential for new information workers to know about preservation? This chapter will compare the South African situation against the benchmarks established in the previous chapters. It will also explore how closely the existing preservation education options resemble the perceived needs as determined by the working professionals.

4.2 HISTORICAL OVERVIEW OF PRESERVATION EDUCATION IN SOUTH AFRICA

Before exploring the current situation, it is important to create a historical framework for preservation education in South Africa for comparison.

South African experts agree that preservation awareness and action came late to the country compared to Europe and the United States. Westra (1986:141) says “libraries and archivists have given far less attention to preservation than their colleagues abroad.” He goes on to cite that only a very limited number of articles, eight to be exact, were published in South Africa on the subject between 1942-1968 and he surmises that this “does not indicate a growing local interest” in preservation (Westra, 1986:141).³⁷ Coates (1995:39) describes the preservation situation in the mid-1990s as “quite

³⁷ This echoes the discussion in footnote 34.

disheartening” mainly due to economic constraints. Fourteen years earlier, Maree (1981:1) describes the preservation field in South Africa as “unorganised but exciting.” He goes on to say that “we have to admit that we have not only lost precious time but also irreplaceable items of our collections. We will have to work very hard to rectify the situation but also to see to the problem of training restorers for our own future needs” (1981:1).³⁸ Weiner (1986:7) adds “there is a great need for, and interest in, basic conservation training.” These experts all agree that South Africa needs to play catch-up in both establishing preservation programmes and training and/or educating information professionals about preservation issues.

As mentioned in 3.2.2.4, one of the most influential events in South African preservation and conservation was the November 1986 symposium, *The Preservation of Library and Archival Materials in Southern Africa* (hereafter known as the *Symposium*).³⁹ While the symposium addressed the status and nature of the preservation field in the country as a whole, preservation education was one of the main themes.⁴⁰

Westra gives a thoughtful overview of the ups and downs of the situation in South Africa at the time in his contribution, *Preservation in Southern Africa: the Current Situation*. In it, he comments on the training and education of established “paper restorers.”

At the moment about a dozen qualified paper restorers are working in South African institutions and a further three or four are working privately. Most of

³⁸ As discussed in footnote 3, the terms *restoration* and *restorer* at times have been used instead of the more appropriate terms *conservation* and *conservator*. These misnomers will not be corrected throughout this chapter for improved readability.

³⁹ The South African Library (Cape Town) published the proceedings of this symposium in 1987 under the title *Books in Peril* (edited by Meyer). This institution has since become part of the National Library of South Africa and is currently under the jurisdiction of DACST, the Department of Arts, Culture, Science and Technology.

⁴⁰ It is interesting to realise that many of the contributors to the *Symposium* are still active in the field today, some 15-odd years on. Several of the names, like Maree and Peters, are the major players referred to in footnote 34. Some of course have retired. But what is more noteworthy is that few new names have emerged since then. A decade and a half is sufficient time for some new blood to mix with the old. There is a certain normal rhythm to professions, a recycling of people when someone retires and someone new takes that place. This lack of new blood is also on the minds of current preservation professionals (see 4.4.3.2.5).

them have received their education and training in Great Britain or Germany. Looking at their formal qualifications one is struck by the great variety of diplomas and the apparent lack of standardisation in their education. It is of course a relatively new field, but it seems to me that qualified restorers can have anything from a doctorate in chemistry plus specific training in paper restoration, to matric or even lower basic schooling plus special courses (Westra, 1987a:36-37).

Westra goes on to cite several proposals for introducing courses for hands-on training at various technikons, none of which came to fruition. One reason for this he suggests is that technikons need a minimum intake of students per course and "it would be difficult to find sufficient numbers of students to take such a course" (Westra, 1987a:37) on an annual basis. Not to mention the fact that, as in the UK (see 2.4.2), it would be very difficult to place these students after graduation since the job opportunities are so limited. He suggests that "each qualified restorer in South Africa" assume the responsibility for training as many additional staff as possible (Westra, 1987a:37). Westra (1987b:11) also emphasises that "local library schools should give more time to the teaching of preservation, including basic book production and binding, environmental control, storage techniques, disaster prevention, microfilming and other means of reformatting, as well as the basic principles of restoration."

Twentyman Jones (1987:118) asserts that "in South Africa we have not reached the stage of employing preservation officers, and we are only just realising the need to employ restorers or conservators." She discusses an undated un-referenced survey of all the syllabi of librarianship courses at South African universities, the results of which indicated that "no specific courses are offered on conservation" and very few included any aspects of preservation "such as storage, care and repair or book production and book binding" (Twentyman Jones, 1987:121). She concludes that "it is thus clear that schools of librarianship need to re-examine the courses on offer and incorporate this important aspect of librarianship into their syllabuses" (Twentyman Jones, 1987:121).

Clearly, concern about the state of preservation education in South Africa has a long history. At the time of the Symposium in the mid-1980s, things looked pretty dire as discussed above. What is the current situation in 2002?

4.3 PRESERVATION COURSE SURVEY

4.3.1 GOALS OF SURVEY

A survey was conducted to determine to what extent South African LIS and archive teaching programmes address preservation issues in their curricula. The survey is designed to determine the strength of commitment to preservation education demonstrated by having a dedicated preservation course or a preservation component as part of a larger course. If such courses do exist, the survey seeks to uncover the content of the course and who the instructor is. Equally as informative as establishing where courses do exist is to establish where they do not exist.

4.3.2 SURVEY METHODOLOGY

After the survey questionnaire was reviewed, the form was distributed in late February 2002 by mail to the department heads of 17 institutions in South Africa thought to be offering degrees in librarianship or archival studies (see appendices A and C). The identity of the individuals and institutions in the survey group were identified through a private database listing contact information for all institutions offering any type of LIS and archive education in Africa as of 2001. E-mail reminders (sometimes several reminders) with an electronic version of the survey were sent out to those who did not respond by the initial deadline.

Of the 17 sent out, 11 responded with usable data. Of those with non-usable data, four institutions no longer offer traditional LIS programmes and two institutions did not respond to the survey.⁴¹ The survey data group is therefore 11 institutions.

University of Cape Town

⁴¹ Two of the four had closed their programmes since the 2001 survey. The other two offer programmes in information and/or communications but they are not LIS-oriented. One of the two institutions that did not respond to the survey has a very limited LIS education programme, offering only a Diploma in School Librarianship through its Department of Education. Because this institution does not have a dedicated LIS department, this institution will not be a member of the survey data group for the purposes of this investigation. The second non-responding institution does not list a dedicated preservation course on its 2002 online course list. It is unknown if a preservation module exists.

4.3.3 PRESERVATION COURSE SURVEY RESULTS

	Number of Institutions Offering Dedicated Preservation Course	Number of Institutions Offering Preservation Module	Number of Institutions Not Offering Preservation Options as Part of Regular Curriculum
Number of Institutions	2	6	3
Status of Course			
Core curriculum course	1	6	
Elective course	1	0	
Academic Level of Course			
Undergraduate	0	6	
Post graduate diploma	1	0	
BTech/4th year	1	0	
Honours	0	1	
Course Availability			
Every term	0	2	
Every year	2	4	
Instructor Status			
Adjunct faculty or guest lecturer	2	1	
Full time faculty	0	5	
Continuing education offered	0	1	1

Table 1. Summary of Preservation Course Survey Results

4.3.3.1 Overview of Preservation Education Offerings

The survey determined that out of the 11 institutions offering LIS and archive education in South Africa, two have a separate class dedicated to preservation issues, another six institutions cover some

preservation issues as a unit or module (hereafter referred to as a *module*) in a core curriculum class and three institutions do not cover preservation at all in their curriculum (see table 1).

The first dedicated preservation class at Durban Institute of Technology, taught by Dr. Dale Peters, has been running annually as an elective course for some time.⁴² The other, a new core curriculum class dedicated to preservation issues, will be offered annually starting in July 2002 through the Archives and Records Management programme at the University of Fort Hare. At the time of the survey, the proposed instructor was not yet established but was thought to be an adjunct faculty member. The instructors for the preservation modules are the same faculty members who teach the rest of the course. Five are full time permanent faculty and one is a guest lecturer. None are preservation specialists.

When taught as a module or unit, preservation is covered mostly in introductory courses, such as *Library Administration, Library and Information Practice, Collection Development and Management and Information Services Management*. At two distance learning institutions, the names of the relevant modules clearly incorporate the words *preservation* or *conservation*.

Most of the available education options, both dedicated classes and modules, are offered at the undergraduate and postgraduate diploma/4th year level. At one institution, modules are available at the honours level. There are no options for the master's level. The dedicated classes run annually as do most of the modules. Two institutions run the modules every term.

Neither of the two institutions with dedicated preservation classes offers CPE options for working professionals, nor do most of the institutions with a preservation module. One distance learning institution does make its modules available to working professionals. Another institution that does not

⁴² In accordance with the Department of Education's restructuring as discussed in 1.1, ML Sultan Technikon and the Technikon Natal merged to form the Durban Institute of Technology as of 1 April, 2002 (Department of Education, 2002a). This class was offered at ML Sultan Technikon until then. Now offered through the Durban Institute of Technology, this course, LIS 401: Preservation and Conservation, is unquestionably the most established and thorough preservation course in South Africa, covering a range from the relevance of preservation in South Africa to collections care to the basics of digitisation and preservation strategies. Its syllabus, available on the Internet along with selected lecture notes, is meant to act as a model for other similar courses in the country, when and if they are developed. The University of Fort Hare did not provide a syllabus for their new course but it will be interesting to discover how much or how slightly the two courses resemble one another.

offer a preservation class or module offers a summer school course for non-preservation professionals (although this does not run every year).

On paper, it would appear that South Africa is making a concerted effort in the realm of preservation education, a bit behind the UK and far behind the US (see 2.4.2 and 2.4.1 respectively) but perhaps the situation is not really that bad when compared to the rather dire conclusion of the *Symposium*. There is one established dedicated course, one in the wings waiting to begin and apparently a fair number of overview modules on offer across the country. But do the statistics tell the whole story? With 73% of the LIS and archive training institutions in South Africa including at least some aspects of preservation in their curriculum, it would be reasonable to think that the majority of South African-trained information workers would be preservation-aware if not preservation-proactive. But as the working preservation professionals tell us later in this chapter, the fact remains that preservation is not yet well established outside of major library and archive institutions, and not even in some of those.

These education statistics may raise some eyebrows among the members of the working preservation community as well. When interviewing South African preservation professionals on the status of preservation education in the country, the comment was often “there is Dale’s [Peters] class in KwaZulu Natal, UNISA (University of South Africa) does something and that is it.” When asked, most professionals in the Western Cape—the province with the densest concentration of equipped conservation labs and arguably the highest concentration of trained staff to run them according to Westra (1987a:31)—were unaware of the proposed dedicated class at the University of Fort Hare. It is no easy feat to create a new core curriculum class, especially one concentrating specifically in preservation, and many are curious how this class came to be and who will be teaching it. In addition, few were aware about the seemingly prevalent preservation modules. Perhaps one reason for this lack of knowledge may be the communication and networking issues discussed in 3.2.3.2 but another reason may lie in the preservation topics actually being given syllabus time and the degree of coverage of these topics, especially the self-described preservation modules. The following sections will explore which aspects of preservation are examined in the preservation classes and modules and the qualifications of those who are teaching them.

4.3.3.2 Preservation Course/Module Content

Topic	Percentage of Classes/Modules that Include Topic
Basic book repair	64%
Environmental monitoring/control	55%
Disaster planning/recovery	36%
Binding options/Library binding	36%
Co-operative initiatives	36%
Staff/patron education	36%
Reformatting	27%
Digitisation	18%
Preservation management	9%
Resource sharing	9%
Storage/handling	9%
Grant-writing	0%

Table 2. Preservation Course and Module Content

4.3.3.2.1 Basic Book Repair

One of the most widely taught aspects of preservation is “basic book repair,” included in 64% of all the available options (see table 2). This is both good news *and* bad news. It is good news because, in theory, students are instructed how to correctly perform remedial repairs and lengthen the longevity of their materials. This is bad news as well because, as Pederson (1987:214) says, “a little knowledge is a dangerous thing” when it comes to hands-on repair. An enthusiastic would-be conservator can do far more damage to a book than all the rising floodwater in the world. Maree (1985:175) quotes Darling in this caution for the overeager novice.

Tampering with documents in your collection ... is not a job for an amateur, however sincere. Much of the professional conservator's work consists of undoing the work of well-meaning do-it-yourselfers.

Ratcliffe (1985:87) questions "whether it was true that the [initial inexpert] conservation efforts in the aftermath of the [Florence] flood had been more damaging to the books than the flood itself" (see 2.3.1).

Since only one of the instructors is an established preservation expert, how is "basic book repair" defined by the other instructors? What types of repairs are the students advised to perform on their own? What materials are used? Are condition, age and value considerations covered? Are the limitations of the instructor's book repair/conservation knowledge clearly understood by both the students and instructor? Are the students taught when to consult a trained conservator, and how to find one?

As discussed in 2.3.2.2 and 2.3.2.3, hands-on physical repair should be de-emphasised in overview modules and even in dedicated classes for generalists. But this may not be practical in South Africa where there are so few trained conservators to go around and information professionals may need to undertake some remedial repairs on their own. As Cameron (1985:177) notes, some collections "have to wait for a considerable time" before they receive "proper attention" due to the lack of available staff and facilities. Interestingly, only 16% of working professionals clamour for more hands-on repair training for LIS and archive students (see 4.4.4.5). But since some members of this group are bench-skilled conservators, they may not want to encourage too much experimentation by the untrained masses.

In summary, including instruction on "basic book repair" is not decidedly a positive or negative thing. It depends on what is being taught and who is teaching it. A cataloguing specialist who has never set foot in a conservation lab other than a guided tour advocating phased or box treatment for deteriorating serials is reasonable and appropriate; this same person however advocating lamination for torn manuscript pages is something completely different. Anything beyond remedial treatment should be left for the experts.

4.3.3.2.2 Environmental Monitoring and Control

Only a little more than half (55%) of the classes/modules cover environmental monitoring and control, a topic considered essential for both introductory and generalist courses (see 2.3.2.2 and 2.3.2.3) as well as by a proportion of working professionals (see table 9). It is a well-established fact that monitoring and controlling the library and archive environment can greatly increase the life span of the materials.⁴³ The challenges of environmental monitoring and control in South Africa, with its diverse and sometimes extreme climate as well as limited financial resources, is acknowledged fully by a number of respected local experts (Weiner, 1987; Maree, 1988; Harris, 1993; Peters, 1996a; Peters, 1996b). The issue of the relevancy of “international standards” in South Africa as discussed in 2.4.3 continues but nonetheless information workers need to understand the fundamentals of the key issues and the impacts they can have on collections. At the very least, they need to be aware of the dangers of wide temperature or RH fluctuations and how to deal with them at the most basic level.

4.3.3.2.3 Disaster Planning and Recovery

Only 36% of the available options cover disaster planning and recovery (see table 2). While not specifically outlined as essential material for overview preservation modules (see 2.3.2.2), a disaster can strike any institution at any time. Learning from the lessons of the Florence flood, the collective staff of every library and archive should know how to respond and minimise damage. It is not enough to have one designated “disaster” person—what if that person is off site when the disaster strikes?

It is unfortunate that institutional staff often learn about the advantages of emergency preparedness through hard experience, but an emergency does not have to become a full-fledged disaster. ... An increasing number of professionals know that small-scale emergencies can be contained if staff members are prepared to react quickly (Patkus and Motylewski, 1999).

Disaster preparedness and recovery is one of the core topics of preservation. A basic knowledge of what to do and whom to call in the case of an emergency is important for all information workers,

⁴³ See Patkus (1999) for a summary of the issue and supportive references.

professional and paraprofessional alike. Almost one-third of those surveyed are involved with disaster/emergency response and recovery in their current jobs (see table 3). All library and archive professionals should be aware of this concept as an integral part of their responsibility for the health and well-being of their collections.

4.3.3.2.4 Binding Options

Almost every library and archive gets items bound or rebound at one time or another. Some institutions, like UCT, are fortunate enough to have a private library bindery on campus. Regardless of who does the binding work, library and archive staff need to know what binding options are available, what are the criteria for deciding what types of binding are appropriate for different types of material and how to establish benchmarks for quality binding. Basically, professionals need to realise how to get the biggest bang from their binding buck.

As discussed in 2.3.2.2, “criteria and decision making for binding” (Feather, 1986:499) should be included in all levels of preservation education, from the most introductory to specialist. Yet only 36% of the current education options cover library binding options in their curricula. This is one topic where a guest lecturer from a local commercial bindery or even a visit to a bindery facility/plant could be very successfully integrated into the existing syllabi.

4.3.3.2.5 Staff and User Education

It is disappointing to learn that only approximately one-third (36%) of the options cover staff and user preservation education even though it is listed as a must-have for even the introductory level preservation courses (see 2.3.2.2). In addition, close to half of those working professionals surveyed are involved in staff and user education at their institution (see table 3) making this topic very relevant in South Africa.

As discussed in 2.2, preservation is the responsibility of all personnel at all levels. All staff “must be trained with confidence to contribute to the preservation and/or conservation of the repository’s materials; otherwise, they will be in effect, working counterproductively against the efforts of a

program” (De Stefano, 2000:8). Peters also lists staff and user education as an “important strategy” in an overall preservation plan (Peters, 2002).

4.3.3.2.6 Reformatting

With increased interest in and funding for digital projects, traditional reformatting options like microfilm, microfiche and photocopying may seem a bit unfashionable, a bit boring even. They may not be as “cutting edge” as digitisation but they are still very viable options with proven track records for long term preservation (Dalton, 1999). Yet, only three options (27%) covered this topic considered vital for generalist education as described in 2.3.2.3. One reason might be that there are very few original institutional microfilming projects currently underway in South Africa.⁴⁴ Most institutions instead purchase the user copies of titles from local and international commercial vendors. But even if individual institutions are not currently involved in the filming aspect, most have shelves of film and fiche in their collections. And they continue to purchase new film to augment, replace or sometimes even *in lieu of* paper-based collections.

However, the lack of original filming does not justify lack of knowledge of the processes involved. Microforms as it turns out are not so boring after all—in fact they can be downright dangerous! Nitrate film bases can be “highly flammable, prone to releasing hazardous gases over time, and subject to natural decomposition” (Dalton, 1999). Each different type of film has specific storage requirements for both safety and longevity. Library and archive professionals need to recognise what they have and how to store it to safeguard both their collections and their personnel.

In addition, information professionals need to be able to recognise and negotiate acceptable quality levels from commercial vendors for their new microform purchases. There are many established standards for reformatting including ALA’s *Guidelines for Preservation Photocopying of Replacement Pages* (1990), the National Library of Australia’s *Policy on Preservation Microfilming* (2001) and any number of appropriate ANSI/NISO (American National Standard Institute/National Information Standards Organisation) or ISO (International Organisation for Standardisation) standards. Again not

⁴⁴ One notable project at the National Library of South Africa is described by Drijfhout (1999).

all these international standards may be appropriate in South Africa but they can act as valuable guidelines.

4.3.3.2.7 Digitisation

South Africa has been somewhat slow to embrace the digital revolution but it has most definitely arrived.⁴⁵ Unfortunately reminiscent of Feather's accounting of the situation in the UK (see 2.4.2), only very few of South African institutions (18%) are giving curriculum time to this increasingly important resource. Some practising South African preservation professionals are quick to point out that digitisation should not be seen as the panacea of all preservation problems (see 4.4.3.2.5) but more are asking for much needed additional exposure and training.⁴⁶ There can be no doubt that this emerging discipline will continue to expand its influence within libraries and archives and those that work in them need to be prepared for this fast-approaching reality. Therefore, a basic background in all aspects of digitisation, including issues such as selection criteria, image quality, metadata encoding and rights management, is a must for future professionals.

⁴⁵ See the DISA web site for more information on this important South African digital imaging project (<http://disa.nu.ac.za/index.html>). For other South African digital imaging projects, see the University of the Western Cape Robben Island Mayibuye Archives *Builders of the Nation Poster Exhibit* (<http://www.mayibuye.org/posters/>) and the University of Cape Town's Manuscripts and Archives *The San (Bushman) Photographs of Dorothea Bleek* (<http://www.lib.uct.ac.za/mss>) on their respective web sites.

⁴⁶ It is important to remember that digitisation is an *access-for-preservation* tool. Digitising a fragile collection will make it more accessible to scholars, via the Internet or another format such as CD (compact disk), without further damage to the originals through handling. Non-fragile collections are often digitised as well, to make them more accessible to a wider audience. Nonetheless, as some practising preservation professionals point out (see 4.4.3.2.5), digitising a collection is not an excuse for ignoring the physical demands of the collection in its original format. Nor does it mean that the original format collection necessarily could or should be de-accessioned. Digitising an item allows for the preservation of the intellectual content rather than addressing the needs of the physical item. This same argument often plays out when discussing traditional microform reformatting as well.

On a related note, novelist Nicholson Baker tackles this issue, to keep or discard reformatted originals, in his popular book *Double Fold: Libraries and the Assault on Paper*. In this most-definitely-not-a-novel work, he puts forth an almost conspiratorial take on the issue. Librarians in the US, especially preservation specialists, were understandably torn in their reviews of his findings but nevertheless, he was an invited speaker at the ALA 2001 Annual Conference. What is even more remarkable than Baker making it out of the conference venue in one piece perhaps is the fact that the book itself received a huge amount of coverage in the mainstream press, with reviews in the *New York Times Book Review*, *The New York Review of Books*, *The Washington Post* and a lengthy excerpt in *The New Yorker*. The preservation of library and archives materials it would seem is on the minds of the general public although many in the field might argue that Baker's book is an unlikely catalyst for this realisation.

The digital revolution will both affect and effect increasing numbers of institutions in the months and years to come. The new generation of information professionals will need to be conversant in both the policy and technology issues of digital libraries.

4.3.3.2.8 Preservation Management

Only one class (9%) addresses the management aspects of preservation, despite the fact that certain management skills are recommended for all levels of preservation education (see 2.3.2.2-2.3.2.4). Moreover, working professionals consider preservation management first on the list of essential skills to have in the future (see table 10). One consolation is that the one available class is thorough in its coverage of the subject including such issues as “selection for preservation in relation to collection development and archival appraisal, arrangement and description, access restrictions, the selection of treatment options: repair, reformatting, enclosure, library binding and other conservation treatment” (Peters, 2002). So basically, those that have access to this class are well poised to develop and oversee a preservation programme; everyone else however is missing a big piece of the puzzle. As discussed in 4.4.3.2.1, trained and informed managers can help anchor preservation in the library and archive institutional environment. They are the ones who set up projects and programmes, hire and fire staff and do the required institutional schmoozing. Until information professionals have an understanding of the managerial issues associated with preservation programmes, it may continue to be difficult to consider preservation on an equal footing with other library and archive disciplines.

4.3.3.2.9 Co-operative Initiatives, Resource Sharing and Grant-writing

Only 36% of the classes/modules address “co-operative initiatives,” a mere 9% cover “resource sharing” and absolutely none cover grant-writing, all of which are increasingly important in the library and archive sector but especially in the preservation field. Conversely, the working preservation professionals listed these skills as need-to-know for new programme graduates (see 4.4.3.2.5 and table 10).

As discussed in 3.2, preservation is a co-operative discipline. Many successful projects involving collections from more than one institution are funded by a conglomeration of agencies.⁴⁷

In her 2001 paper, *Digital Libraries: Preserving Information Resources for Contemporary South African Scholarship*, Peters emphasises the growing need for co-operation among trained professionals in the areas of digital technology and preservation.

There is an ongoing need to work together as a community to establish measures to build capacity and increase expertise with issues of digital technology in higher education. A strong voice is needed to express the need for high quality education and information access to all people. A collaborative effort will most efficiently drive the development of needed products, to grow a demand for commercial services and to build technically sustainable solutions that support international standards to meet the needs of digital preservation that will effectively secure long-term access to digital information resources (Peters, 2001).

While preservation funds and expertise are so limited, not only in South Africa but in other parts of the world as well, it is important that both institutions and individuals work together to bring down costs and reduce duplicated work because. Coates (1995:37) agrees that the “co-ordination of which items are to be restored is ... absent. For instance several libraries may restore copies of the same book at great expense while no-one spends time on some other deserving item.” Coates is writing specifically about conservation efforts but the same is true for the various types of reformatting and digitisation as well. Co-operative initiatives and resource sharing really come down to networking to discover what resources exist where—in terms of collection holdings, finances, expertise and availability (see 3.2.3).

⁴⁷ One successful South African example of this is the DISA project, headquartered at the University of Natal. Phase One of the project is funded by the US-based Andrew W. Mellon Foundation and its mission includes a commitment to South African capacity building and improved international and local networking for the purpose of developing expertise in digital imaging technology (Digital Imaging Project of South Africa, 2001.).

Grant-writing is not strictly a preservation skill but much of the funding for preservation efforts in South Africa comes from grants—both national and international. In a recent unpublished survey on the education and training of preservation administrators in the US, 48% of working preservation administrators said grant-writing was important in their current job. De Stefano considers the importance of grant-writing in preservation education.

Grant-writing and fund-raising are essential skills and are important to the profession as well. Without [trained professionals] in the field equipped to raise money, write grants and build programs, new programs may not be established and existing programs may be in danger of collapsing ... It may be wise ... to infuse instruction with ways to effectively lobby for increased funding for preservation (De Stefano, 2000:9).

Each of these skills is important to further establish additional and continued preservation programmes.

4.3.4 QUALIFICATIONS FOR TEACHING PRESERVATION

The qualification of instructors is a long considered issue in preservation education. Who is qualified to teach? Even long-established experts like Helmut Bansa (1991:56) are reluctant to propose specific credential standards.

Russell (1991:82) says that “almost any qualified faculty member” is the appropriate choice for teaching preservation modules in existing courses. Of the six modules available in South Africa, five are taught by full time faculty members and the sixth by a guest lecturer/adjunct faculty member. None of the instructors specialise in preservation issues, not that this is necessarily cause for concern. On paper, they all meet Russell’s watermark but the key issue to consider is this: Do the instructors keep up-to-date on preservation issues? For example, can they inform students about emerging technology and trends, like using digitisation as a tool for preservation and access or using Dublin Core metadata for preservation information? Can they direct students where to go for additional preservation training and advice? Are they aware of preservation funding programmes and local ongoing projects that could involve the participation of interested institutions and students?

In short, if the instructor is interested in preservation and stays current on the main issues, then he or she is a suitable selection. If the instructor is not interested in preservation, then he or she may not be the best choice and a more preservation-friendly guest lecturer perhaps should be considered.

While Russell is somewhat relaxed on qualifications for teaching introductory preservation modules, she is more stringent when describing the appropriate candidate for leading the dedicated preservation courses. This type of more in-depth instruction, she insists, should be taught by “a conservation [or preservation] professional who had actual library preservation experience” (Russell, 1991:82). Of the two dedicated preservation courses, one is taught by a full time preservation administrator/conservator, the other by an as yet unannounced adjunct faculty member. Obviously the former is a highly qualified preservation expert and a logical choice as an instructor while only time can tell about the latter since the class has not yet run.

4.3.5 CONCLUSIONS ABOUT PRESERVATION EDUCATION IN SOUTH AFRICAN LIS AND ARCHIVE DEGREE PROGRAMMES

After considering all the variables then, what can be concluded about the state of preservation education in South Africa? In short, there is the good, the bad and the ugly. The *good* includes the one running dedicated course (since the second class has not yet run, judgement is reserved), the *bad* includes those courses which give preservation only the most perfunctory passing mention and do not address the core issues of the topic, and the *ugly* includes those institutions which offer no preservation education opportunities at all. The lesson learned should be it is quality that matters, not quantity. Of the eight institutions that indicate they include preservation as part of their curricula, few really give it full consideration and cover the essential issues. At least two institutions with preservation modules admit that the module occupies only a “small part” of syllabus time. In addition, few of the instructors have a background in preservation. Moreover, for the most part, the collective syllabi—especially for the modules—do not accurately reflect the real-world needs of new professionals as established by both preservation professionals overseas (see 2.3.2.1-2.3.2.4) and within South Africa (see 4.4). In summary, although there has been much progress since the *Symposium* in 1986, preservation is not yet a successful established component of LIS and archive degree programmes.

4.4 PRESERVATION PROFESSIONAL SURVEY

It is difficult to find “preservation experts” to serve as instructors in South Africa partially because there is a dearth of experienced preservation professionals in general. Maree (1985:169) points out that “trained conservation [and preservation] staff in South Africa is ... scarcer than air conditioning plants.” Nonetheless, a small community of working preservation professionals is scattered about the country. This section will explore the present and future challenges faced by this community.

4.4.1 GOALS OF SURVEY

The goal of the *Preservation Professional Survey* is to define the common threads running through the group of library and archive workers involved in preservation and to extract their views on preservation education in South Africa. The participants in this survey actively participate in South African preservation projects (or have recently retired from the field). They are on the front lines so to speak, working in and with institutions and collections of all descriptions. As established in 1.1, their insight into the past and present of preservation education in South Africa is invaluable in shaping its future.

The aims of this survey are

- to establish how and where the members of the preservation community received their education and training,
- to clarify how they keep aware of current issues,
- to determine what these working professionals think are the most important issues for South African preservation in the future,
- to find out what this experienced community thinks all information professionals need to know in terms of preservation.

4.4.2 SURVEY METHODOLOGY

After the survey questionnaire form was reviewed, it was distributed in early 2002 via mail and e-mail to a total of 41 individuals known to be involved with library and archives preservation in South Africa

(see appendices B and D).⁴⁸ The composition of the survey group is derived from a variety of sources including personal networking, SAPCON and AIC membership, attendance at DISA, NEDCC and other relevant workshops, inclusion in the *JICPA Survey of Preservation Resources in Africa 1999* (Coates, 2001), subscription to *Cons DistList* and finally, referrals from other survey participants. In lieu of completing survey forms, several participants were interviewed.

From the survey group of 41, 43% (19 people) responded with usable data. While this is a respectable return rate for a mail survey, it may not represent the full range of opinions. First, to whom a survey is sent will affect the returned answers. Although every effort was made to obtain the views of the key people in South African preservation, some may have been inadvertently skipped over.⁴⁹ Second, with this as with almost all surveys, not everyone responded to the call. Gentle reminding quickly can become irritating nagging so “please return survey” pleas must cease at some point. The often-extended final deadline eventually does become truly *final* and whatever responses are in before it become the survey data group, with or without those much-sought-after opinions still at-large.

Can the survey provide an exact definition of the preservation community in South Africa? No, nor could any similar survey for exactly the reasons outlined above and in 1.3. Nevertheless, those who did respond to the survey supplied valid data from which a panoramic portrait of the South African preservation community can be drawn.

⁴⁸ At least one respondent voiced her valid opinion that the printed survey form is not necessarily the most successful method of LIS research, referring to it as “an obsolete research methodology of data capture.” She was more satisfied with the electronic e-mailed version however. Many of her colleagues might disagree as a number had a great deal of difficulty working with the electronic e-mailed version of the form due to software incompatibility and general technical unfamiliarity. A number simply printed out the electronic version, hand-wrote their answers and returned the form by mail thereby negating all the convenience of technology! Others filled in and filed the form electronically without difficulty. Three submitted detailed *curriculum vitae* in conjunction with or in place of the survey form.

⁴⁹ By far, the most difficult part of this survey was compiling a list of contacts to survey. The fact that it was so problematic to determine who is a *preservation professional* in South Africa and how one gets hold of them points to professional networking issues (see 3.2.3.2 and 4.4.3.2.4).

4.4.3 PRESERVATION PROFESSIONAL SURVEY RESULTS

4.4.3.1 Snapshot of the South African Preservation Community

In a nutshell, the local preservation community is comprised of self-starters for the most part, trained in South Africa on the job, through workshops or short courses. The vast majority have attended or presented at preservation-related continuing professional development opportunities since 1997.⁵⁰ Many perform or supervise hands-on conservation work and participate in staff/user training. About one-fifth are involved in some aspect of preservation programme management and almost half define themselves as *supervisors* of one sort or another. Most have access to the Internet to varying degrees of availability but the overwhelming majority do not subscribe to or read preservation-related electronic discussion groups or online journals. They are almost all members of various professional organisations including SAPCON, LIASA and SAMA.⁵¹ Although they read a huge variety of professional journals ranging from the expected (*International Preservation News*) to the obscure (*Textile History* and *Nederlandse Archieveblad*), they do not read the same titles to any significant degree. Close to half teach preservation-related short courses or workshops, mostly to non-information and/or non-preservation professionals. Over three-quarters say they have a network of professional preservation colleagues in South Africa, but few network with colleagues in other African countries. In addition, the current preservation professional community has strong and diverse opinions on the future of the South African preservation field including the compelling need for additional and more developed preservation education.

4.4.3.2 South African Preservation Community in Detail

The results of the survey as outlined above show a community unified in some ways, extremely disparate in others. The following sections examine an in-depth profile of the community as demonstrated by the survey responses.

⁵⁰ It should be noted that the survey participant list was partially compiled from attendance at recent workshops so this statistic may be pre-determinably high.

⁵¹ Again, SAPCON membership rolls were used to partially determine survey participants, which may influence this finding.

4.4.3.2.1 Job Description of a Preservation Professional

No one actually has the term *preservation professional* in his or her job description. Those who are responsible for preservation activities in South Africa answer to other titles (see table 3).

Job Description of a Preservation Professional	Percent
Job Title	
Supervisor	47%
Conservator	47%
Archivist	21%
Head/director of preservation	16%
Curator	16%
Librarian	21%
Information specialist	5%
Type of Institution	
Museum library/archive	42%
Academic library	21%
Government library	16%
Academic archive	11%
Government archive	5%
Self-employed	5%
Responsibilities	
Overall preservation programme management	21%
Storage and handling	53%
Hands-on conservation	47%
Policy development	42%
Staff training	42%
Collection processing	32%

Job Description of a Preservation Professional	Percent
Digitisation	32%
Disaster management	32%
Environmental monitoring and control	32%
Archival duties	26%
Exhibits	21%
Conservation supervision	21%
Reference	21%
Reformatting/microfilming	16%
Stacks management	11%
Bindery supervision	5%

Table 3. Job Titles, Institution Types and Responsibilities of Preservation Professionals

A large percentage of survey respondents define themselves as *conservators*, meaning that they do some degree of hands-on conservation work.⁵² Those who described themselves as conservators most often confine themselves (or perhaps are confined by circumstances) to bench-work as opposed to management responsibilities. A fair number of conservators participate in relevant activities such as staff training and disaster planning although the physical repair and well-being of the collection in its current format is the main responsibility of this group. Many members of the conservator group teach basic book-repair workshops to (mostly) non-conservation professionals in their local area.

The geographic location and degree of training has a large impact on the networking and professional activities of this group. In general, those who enjoy national and international reputations were trained abroad at some time in their career. They also actively participate in a variety of professional

⁵² In the US, the title *conservator* has a certain professional status. In an institutional setting, the American conservator has substantial education and training, works on the older and/or more valuable material and often supervises the *conservation technicians* who do the less complicated or batch-process repairs on less valuable material. There are certainly highly skilled South African conservators who fit the rather elitist American definition of the term but there are others who, by the nature of their training and level of work, might be described more accurately as conservation technicians. Nonetheless, this distinction between *conservator* and *conservation technician* is not applied in this research project.

organisations, present at conferences, publish papers, have international networking contacts and read the established international bookbinding/conservation professional literature. Those trained on the job in South Africa are not as involved on a large-scale although they may be active within their individual institution or local region.

To return to Twentyman Jones' 1986 observation about the lack of preservation officers in South Africa (see 4.1), it seems that not much has changed in the interim fifteen years. There are still very few preservation programme administrators in South Africa and in fact only three people defined themselves as such.⁵³ Their responsibilities have a wider field of view as opposed to the item-by-item (or batch-by-batch) concern of the conservator group. As one respondent explains, the responsibilities of this small group is to "plan, direct and implement department wide programmes" encompassing preventative preservation measures. They write grants and administer budgets. They supervise reprographic, reformatting and digital services. They organise disaster plans and drills. They hire, train and supervise different levels of staff. They keep an eye on security issues and bindery problems, and keep abreast of new technology. Members of this small group come from a variety of backgrounds, some have hands-on conservation experience; others are librarians or archivists who grew into their responsibility over time.

The third group of survey respondents are professional librarians, archivists and "information specialists" for whom preservation is not their main responsibility but rather something in which they are interested or is an assigned responsibility. They may be involved in a digitisation project or supervise exhibits or update the institution's disaster plan or even just feel strongly about preserving their collections. This group does not tend to read the professional preservation literature or have any further training beyond an occasional workshop or what they learned in their professional degree training in South Africa or even investigated on their own. The members of this group however are anxious for more training and interaction with the wider international preservation community. They

⁵³ In fact, one of these "preservation programme managers" is now retired. However, this person was a member of the South African preservation community for many years and is still an active member of several professional organisations. It is justified therefore to include this person's comments in the survey responses.

often submitted comments on the need for further training, more funding for projects and overall increased preservation awareness on the part of the public, their professional peers and institutional directors. This group is generally passionate about preservation and frustrated with the lack of options available to them.

4.4.3.2.2 Training of Preservation Professionals

Most people involved with preservation activities in South Africa have in fact learned what they know in South Africa, through inservice training, independent reading or through workshops (see table 4).

Training	Percent
Short courses/workshops	84%
Professional LIS/archives degree	58%
Inservice training	37%
Reading	26%
Informal internships	16%
Self taught	11%
Bookbinding/Fine binding degree programmes	11%
Formal internships	11%
Location of Training	Percent
South Africa	89%
UK	11%
US	11%
Switzerland	11%
Netherlands	11%
Germany	5%
Austria	5%

Table 4. Training of Preservation Professionals

The high percentage of workshop-based learning is not surprising. In fact it is heartening to realise that the preservation education and training efforts of JICPA, SAPCON, SAMA, DISA and others have some lasting impact in that some of the people who attend these sessions continue to be involved with preservation efforts.⁵⁴

The most highly trained conservators without exception have trained outside of South Africa at some point in their career. This is to be expected considering there is no option for furthering bench skills in South Africa. The rest of the conservator group receives the bulk of their training inservice, sometimes under the direction of an overseas-trained colleague. The preservation programme administrators have generally grown into their positions on the job after completing a higher LIS degree in South Africa (one is also a foreign-trained conservator as well a programme administrator).

4.4.3.2.3 Staying Current

The vast majority of the survey group makes a concerted effort to stay current in the field since a full 84% have attended some form of continuing professional development in the preservation field since 1997.⁵⁵ The options range from the NEDCC, SAMA, SAPCON and DISA workshops to the Guild of Book Workers (GBW) seminars overseas (see table 5). Those with more experience and training often act as conference/workshop presenters both locally and abroad.

Since so many participate in continuing professional development programmes, many of which are sponsored by professional organisations, it is not surprising that the overwhelming majority (95%) of the preservation community are members of a wide variety of relevant organisations (see table 5).

⁵⁴ Again, a reminder that SAPCON, NEDCC and DISA workshop participant lists were used to partially establish the survey group and this may influence this result.

⁵⁵ See footnote 54.

Name of Professional Organisation	Percent
Total Who Are Members of Any Organisation	95%
SAPCON	86%
LIASA	32%
SAMA	37%
SASA	26%
AMLIB ⁵⁶	16%
ESARBICA	5%
GBW	5%
IFLA	5%
IIC (The International Institute for Conservation of Historic and Artistic Works [UK])	5%
IPC (Institute of Paper Conservation [UK])	5%
JICPA	5%

Table 5. Membership in Professional Organisations

As mentioned before, those with overseas training are members of international organisations. It is interesting to note that many of those who work in museum-based libraries and archives are members of SAMA but not members of LIASA or SASA. It seems that the *type of institution* in which one is employed takes preference over the *type of work* performed. This partially could be explained by the reporting of *institutional* rather than *personal* memberships.⁵⁷

While the preservation community may use conferences and workshops to network and stay up-to-date, they do not use the many reputable resources on the World Wide Web, despite the fact most (79%)

⁵⁶ This organisation may no longer exist as explained in footnote 29.

⁵⁷ As discussed in 3.2.1.1, members of some professional organisations are also members of others by default, such as LIASA members being automatic members of IFLA. This is not registered in these statistics however. Only memberships specified on the survey forms are recorded.

have Internet access. Only a very few subscribe to dedicated preservation-themed electronic mailing lists and discussion groups (see table 6).

Preservation Electronic Mailing Lists and Discussion Groups Subscriptions	Percent
Total Who Subscribe to Any Mailing List or Discussion Group	32%
Cons DistList	16%
DISA Listserv	11%
PADG (Preservation Administrators Discussion Group)	5%
PresEd-L (Preservation Educators List)	5%

Table 6. Online Preservation Networking

Although they do not use the Internet to stay current, many (74%) read or subscribe to a huge variety of professional journals, some strictly preservation/conservation focused, others with a broader agenda (see table 7).

Professional Journals	Percent
Total Who Read Professional Journals	84%
International Preservation News (IPN)	16%
Paper Conservator	16%
Studies in Conservation	16%
Abbey Newsletter	11%
Guild of Book Workers Newsletter	11%
Institute of Paper Conservation (IPC) Journal	11%
International Institute of Conservation (IIC) Journal	11%
Restaurator (Germany)	11%
AIC News, Alexandria, American Archivist, Archives News, Ariadne, Australian Library Journal, Canadian Heritage Information Network, Conservation, D-Lib Magazine, ICOM Newsletters, Innovation, Journal of Conservation and Museum Studies, Journal of Documentation, Mousaion, Museum International, Museum Journal, Museum Management and Curatorship, Museum News, Museum Practice, Nederlandse Archievenblad, Paper Conservation News, Papier Restauriering, Quarterly Bulletin of the South African National Library, Restauro (Germany), RLG DigiNews, South African Archives News, South African Journal of Information Management, Textile History	5% each

Table 7. List of Regularly Read Professional Journals

While the list of professional journals reported by the survey group is impressive indeed, there is very little overlap. Almost no two people are reading the same thing. This means it is difficult to get information to and dispersed within this group of people through the professional literature route, hampering South-to-South communication attempts. It seems that people are reading about their own niche interest and not attempting to expand to journals that give a different viewpoint or discuss different but related disciplines.

4.4.3.2.4 Networking

It appears to some extent the time spent at continuing professional development opportunities is being used to build up a network of preservation-minded colleagues (see table 8). Logically, those who were trained abroad or are active in international organisations have contacts overseas.

Do You Have a Network of Professional Colleague with Whom You Discuss Preservation Issues?	Percent
Yes	79%
No	11%
Did not answer	11%
Location of Networked Colleagues	
South Africa	79%
Europe	37%
USA	26%
Other African countries	16%
Australia	16%

Table 8. Professional Preservation Network

However, the ostensibly prevalent information network among South African preservation professionals as shown by the survey responses may not represent the true-life reality of the situation. In fact, every respondent who ticked the *Yes* box next to the “Do you have a network of professional preservation colleagues with whom you discuss preservation issues?” question on the survey form (see appendix D) also indicated that these professional preservation colleagues are based in South Africa. According to these statistics, it would seem then that there is a developed network, an invisible college as discussed in 3.2.3, already well established and running smoothly in the country. But this is simply not the case when discussing the issue one-on-one. In interviews and personal communications, preservation professionals have expressed a certain amount of frustration about the lack of communication between both individuals and institutions in the country. One person said in a personal conversation that people are “literally desperate” for a South African-based forum such as an electronic

discussion list to communicate with one another about preservation issues and queries. And yet on the survey form, a stunning 79% said they have a professional network.

In trying to reconcile the real with the reported in this question, the issue seems to be that certainly the majority of respondents may have a set of contacts across the country or even internationally but they may not actually make use of them professionally. In other words, what exactly is the *nature* of these professional networks? Who are these contacts? How do people exchange information? What kind of information is exchanged? How often? Are people actually using their full range of contacts on a regular basis? Or is everyone contacting the same two or three well-known people over and over again for every query? It is one thing to meet someone from another area of the country at a conference tea break and, for example, discover a common interest in rehousing glass plate negative collections. It is something else entirely to make use of that meeting in a professional capacity to communicate with each other after the conference and discuss the housing and storage options for those collections. Without the post-conference contact, could one count this person as a member of a personal professional network in a survey such as this? Or to paraphrase Bishop Berkeley's famous musing, if no one is actually networking, does the network even exist in any workable form?⁵⁸ Additional research is needed to uncover more about the professional networking habits of this group.

4.4.3.2.5 Perspectives on the Future

Because the majority of the preservation community is "home-schooled" in a sense, it is not surprising that the majority of them list additional and sustained preservation education as a main priority for South Africa in the 21st century (see table 9).

⁵⁸ Irish clergyman and philosopher Bishop George Berkeley (1685-1753) is the author of the *Treatise Concerning the Principles of Human Knowledge* and it is to him that the famous quandary of the existence of the tree falling unobserved in the forest is attributed (New School for Social Research, 2001).

Preservation Issues for 21st Century	Percent
Increased preservation education	58%
Increased preservation awareness	42%
Increased preservation funding	42%
Lack trained staff/expertise	32%
Co-operative efforts	16%
Digitisation: increase	16%
Cost of imported materials	11%
Integrate preservation in organisational structure	11%
Preservation and access issues	11%
Preservation as cultural tourism	11%
Preservation management	11%
Reformatting: increase	11%
Climate/environment	5%
Digitisation pros and cons	5%
Networking within Africa	5%
Non-paper format preservation	5%
Preservation ethics	5%
Preventative preservation/conservation	5%
Prioritising preservation projects	5%
Professional recognition for preservation	5%

Table 9. South African Preservation Needs for the 21st Century

Aside from the recognised need for additional training and funding, the community calls for recognition of the importance of preservation itself. They want their directors, colleagues and the public to be more aware of the preservation problems rampant in libraries and archives. They want to increase South-to-South resource sharing through broadening their African contacts and furthering

research into the African situation (see 2.4.3). Some lament the fact that so few new people are coming into the field. They want more money for additional training and seed funds for new projects. And they have a love/hate relationship with digitisation (as discussed in 4.3.3.2.7). For some it is the great hope for the future but others strongly feel the need to temper this enthusiasm, alarmed that “digitisation will supersede preservation of original documents.”

Aside from insisting preservation should be included in all LIS and archive curricula, these working professionals also have advice about what the next generation of information workers should know (see table 10).

University of Cape Town

Preservation Education Topics for Future South African LIS and Archive Students	Percent
Preservation management	26%
Preventative preservation/conservation	26%
Digitisation	21%
Environmental controls	21%
Disaster recovery/planning	16%
Hands-on repair	16%
Housekeeping/maintenance issues	16%
Increase preservation awareness	16%
Storage and handling	16%
“African” needs	11%
Architecture/building requirements	11%
Continuing education	11%
Prioritising work/conducting surveys	11%
Emphasise practical skills	5%
Exhibits	5%
Fund-raising/grant-writing	5%
Non-paper format preservation	5%
Reformatting	5%
Relevance of preservation in South African culture	5%

Table 10. Priorities for Future South African LIS and Archive Students

Many are concerned with moving preservation to the next level, of incorporating management skills into the curriculum and moving beyond the “paste pot and scissors” image Maree (1981:4) warns against.

Working professionals are acutely aware of the limited funds and expertise available and feel strongly that *prevention* rather than *correction* is a better use of both. They emphasise issues such as environmental monitoring and control, disaster planning, housekeeping, storage and handling for future professionals.

4.4.54.4.4 CONCLUSIONS ABOUT THE TRAINING OF PRESERVATION PROFESSIONALS WITH REGARDS TO LIS AND ARCHIVE DEGREE PROGRAMMES

The survey results indicate that the great majority of information professionals feel that their real-world needs are not met by the current preservation education offerings. Even after completing a professional degree programme, many feel ill prepared to fulfil the responsibility for preservation that they now, often unexpectedly, hold. The consensus is that a much greater commitment (in terms of both more options and more thorough coverage of the subject in existing options) by LIS and archive degree programmes is needed.

CHAPTER 5: PRESERVATION COURSE OUTLINE

5.1 INTRODUCTION

Previous chapters have established the need for increased preservation options for LIS and archive professionals and students in South Africa. This chapter will outline a syllabus for a dedicated “Introduction to Preservation” course.⁵⁹ The course will include the issues highlighted by working professionals as well as cover the specifically African concerns discussed in 2.4.3.

5.2 COURSE OBJECTIVES

The purpose of this self-contained course is to introduce students to the general concepts, issues and challenges of preservation in South African library and archival environments. The content will provide a broad foundation in the historical, theoretical, managerial, ethical, analytical and practical aspects of preservation.

5.3 COURSE SYLLABUS OUTLINE

TOPIC 1: INTRODUCTION TO LIBRARY AND ARCHIVE PRESERVATION IN SOUTH AFRICA

Aim: To introduce the basic concepts of preservation and the importance of preservation in both the global and national library and archive sector.

- Historic overview of the preservation field both internationally and in South Africa
- Concepts and basic definitions
- Professional responsibility and preservation
- Importance of preservation in a multicultural society

⁵⁹ As discussed in 4.3.3.1, the Durban Institute of Technology course outline is meant to act as a model for future South African options. The proposed syllabus included in this research project gratefully acknowledges this status and simply offers an alternative perspective.

TOPIC 2: DETERIORATION OF PAPER-BASED COLLECTIONS

Aim: To introduce the concepts of permanence and durability in library and archival collections.

- History of papermaking
- History of the book
- Permanence and durability of library and archival materials

TOPIC 3: ENVIRONMENTS / CARE, HANDLING AND STORAGE

Aim: To establish the impact of macro- and microenvironments on library and archival collections.

- Environmental monitoring and control: temperature, relative humidity, light and pollution levels
- Technology and equipment
- International standards and local perspectives
- Building remodelling and design: green architecture
- Microclimates
- Integrated pest management
- Shelving and handling library and archival materials
- Circulation issues
- Stacks management
- Housekeeping
- Security measures
- Exhibit guidelines

TOPIC 4: DISASTER PREPAREDNESS AND RESPONSE

Aim: To identify potential disasters and prepare for disaster recovery and response.

- Identifying potential disasters
- Preventative measures
- Developing a disaster plan
- Establishing priorities
- Recovery techniques
- Health and safety issues
- National and international resources

TOPIC 5: LIBRARY BINDING

Aim: To introduce the appropriateness of the binding options available and to encourage quality control checks with vendors.

- Binding styles and types
- Terminology
- International standards
- Optional: visit to bindery and/or guest speaker from a bindery facility

TOPIC 6: PHYSICAL TREATMENT

Aim: To introduce the criteria for choosing appropriate repair options and to learn basic non-invasive remedial repair techniques.

- Selection criteria
- Ethics and physical treatment: minimal intervention
- “Collections care”: conservation for general/circulating collections
- Conservation for special and rare collections
- Basic repair techniques for non-rare collections: limited hands-on exercises
- Protective enclosures
- Finding and working with a conservator
- Optional: visit to conservation facility and/or conservator guest speaker

TOPIC 7: REFORMATTING AND REPLACEMENT OPTIONS

Aim: To introduce the pros and cons of the various reformatting options.

- Reformatting and replacement options: microfilm, microfiche and preservation photocopying/facsimiles
- Advantages and disadvantages of microform and preservation facsimiles
- Intellectual content vs. original format
- Quality control issues
- Evaluating vendor products
- National and international standards and projects

TOPIC 8: DIGITISATION

Aim: To introduce the technology and concepts of digitisation for preservation projects.

- Digital preservation vs. preservation of digital information
- Introduction to concepts of image/data capture and storage
- Introduction to metadata concepts and standards
- Technology: hardware and software needs
- Hardware and software obsolescence: migration
- Opportunities for collaboration
- International standards
- National and international projects
- National and international resources

TOPIC 9: PRESERVATION OF NON-PAPER FORMAT COLLECTIONS

Aim: To introduce the physical characteristics and storage requirements of non-paper collections.

- Photographic materials: overview of materials and preservation issues
- Magnetic and electronic formats: overview of materials and preservation issues
- Resources for more information

TOPIC 10: PRESERVATION PROGRAMMES AND ACTIVITIES

Aim: To introduce the basic concepts for developing and managing institutional preservation programmes.

- Conducting surveys and assessing needs
- Planning preservation activities: Short term goals and long term planning
- Preservation policy formation
- Managing preservation programmes
- Collection management issues: selection for preservation, restricting access
- Training needs and ideas for staff and users
- Public relations and education for preservation activities and programs
- Understanding institutional needs
- Grant-writing and fund raising skills
- Budgeting

TOPIC 11: PRESERVATION IN CONTEXT

Aim: To examine the current and future trends in preservation in the global library and archive sector.

- Co-operative preservation initiatives
- International and local policies, procedures and activities
- Advocating for preservation at institutional and governmental levels
- Continuing education for professional librarians and archivists
- Professional organisations
- Professional literature options and online resources
- Networking
- Future directions

5.4 COMMENTS ABOUT THE PROPOSED COURSE SYLLABUS CONTENTS

How does this course syllabus compare with or differ from the many other preservation courses offered worldwide? First, it emphasises the need for and importance of preservation in a rapidly modernising multicultural society—a society in which very often the past is thought best forgotten and the emphasis is on the new and progressive. Second, the course content addresses the environmental concerns specific to Sub-Saharan Africa including the climate extremes, the prevalence of dust and dirt and the often very limited resources available to deal with these issues. Third, the class strives to highlight the management issues of preservation, as requested by the survey respondents, including selection criteria, fund-raising and grant-writing and project oversight. Fourth, the syllabus highlights what is being done in South Africa by calling on local experts and businesses to share in the education process by acting as guest lecturers and offering site tours. Sharing the wealth of knowledge already available in the country will only strengthen the field for both other working professionals as well as commercial vendors. Finally, the class stresses the role of South Africa in the global preservation community and demonstrates opportunities for increased resource sharing, knowledge exchange and networking. The course objectives aim to celebrate the progress of preservation education in South Africa thus far and strongly encourage continued local, national and international participation and collaboration in the field.

CHAPTER 6: RESEARCH PROJECT CONCLUSIONS

6.1 PROPOSALS FOR ADDITIONAL RESEARCH

The investigations of this research project establish the need for additional exploration in

- the networking patterns of preservation professionals (see 4.4.3.2.4),
- the evolving role of professional organisations including SAPCON's information dissemination techniques (see 3.2.2.1),
- the results of the LIASA survey on interest in limited preservation training (see 3.2.2.3),
- the curriculum of the University of Fort Hare dedicated preservation course (see 4.3.3.1).

6.2 CONCLUSIONS ABOUT THE FINDINGS OF THE RESEARCH PROJECT

In conclusion, this research project has established that preservation education for LIS and archive professionals and students is not yet an established priority in South Africa, but the situation clearly has improved in the fifteen years since the *Symposium*. In some ways South Africa's experience with preservation education parallels the pattern revealed in more developed countries like the UK and Australia in that more options for both students and working professionals are being established over time. In other ways, South Africa has more in common with its developing country neighbours in that the preservation ethos is still struggling to find its place within the realm of professional responsibility and in the LIS and archive sectors as a whole.

There are at least some available options for students in the established LIS and archive teaching departments, although in some respects these do not meet the needs as expressed by current working professionals. Several institutions offer quality options but for the most part, the current offerings do not cover all the essential topics of the field, leaving graduates unprepared for the responsibilities they increasingly will be held accountable for in the working world. South African professional degree programmes need to incorporate preservation into their core curricula as an overarching philosophy as

opposed to a third tier afterthought. The syllabus outline proposed for this project addresses both the topics suggested by working professionals as well as the specific needs of the African situation.

In addition, South African professional organisations need to analyse their commitment to preservation education for their members through training options, improved access to professional literature resources and regular reporting on preservation activities and personalities. Preservation's profile needs to be raised to make more information workers aware of their professional responsibility for the preservation of the unique heritage and culture of South Africa.

Moreover, information professionals and professional organisations need to be more proactive in their approach to preservation issues. For example, the LIASA membership could form a preservation special interest group and liaise with SAPCON to establish a series of provincial training sessions. SAPCON could establish a much-desired local forum for preservation discussion, like an electronic discussion group or message board on a web site. Furthermore, working preservation professionals should subscribe to and read relevant electronic discussion groups and take further advantage of the abundant reliable information resources on the Internet. Networking skills in general should be strongly encouraged at both the individual and organisational levels. Preservation is a highly co-operative field and South Africans can benefit both themselves and others through more North-to-South and South-to-South interaction.

Preservation education for LIS and archive professionals and students has come a long way since the problem was addressed in depth at the Symposium in 1986. But there is still much to be done to bring the South African preservation knowledge and experience base on par with the rest of the world.

**APPENDIX A:
PRESERVATION COURSE SURVEY GROUP LIST**

This list details the original survey group. Not all members of this group returned valid survey data.

Survey Group

Cape Technikon: Dean, Library and Information Systems
Durban Institute of Technology (*formerly* ML Sultan Technikon): Ms. Wendy Gordon
Port Elizabeth Technikon: Mr. H S Fourie
Rand Afrikaans University: Prof. Pieter A. van Brakel
Technikon Pretoria: Head of Department
Technikon SA: Dr. Albert Kloppers
University of Cape Town: Prof. Peter Underwood
University of Fort Hare: Head of Department
University of Pretoria: Prof. TJD Botha
University of South Africa: Head of Department
University of Stellenbosch: Prof. Johann Kinghorn
University of the Free State: Prof. FH Terblanche
University of the North: Dr. M E Macpa
University of the Western Cape: Prof. George Fredericks
University of Transkei: Prof. Gbade Alabi
University of Venda: Prof. ELM Bayona
University of Zululand: Prof. Dennis Ocholla

**APPENDIX B:
PRESERVATION PROFESSIONAL SURVEY GROUP LIST**

This list details the original survey group. Not all members of this group returned valid survey data.

Survey Group

Block, Otwin: self employed
Calitz, Letitia: National Archives of South Africa
Coates, Peter: *retired* National Library of South Africa
Condy, Gillian Sara: National Botanical Institute
Drijfhout, Douwe: National Library of South Africa (Cape Town)
Dwyer, John: National Library of South Africa (Cape Town)
Fourie, Talita: Northern Flagship Institution National Cultural History Museum
Gilder, Mandy Boatamitse: National Archives of South Africa
Harmse, Nico: University of Pretoria
Hart, Lesley: University of Cape Town
Jenkins, Bronwyn: University of Natal, Pietermaritzburg
Jugdav, Suren: Technikon Witwatersrand
Kirkwood, Clive: National Archives of South Africa
Letts, Alba: Roodepoort Museum
Liebenberg-Barkhuizen, Estelle: Voortrekker Museum
Lüdemann, Dieter: Library of Parliament
Luyt, Rob: Local History Museum
Malkgraat, Sandra: Northern Flagship Institution National Cultural History Museum
Maree, Johann: University of Cape Town
Middeljand, Jan F.: Northern Flagship Institution National Cultural History Museum
Minicka, Mary: Library of Parliament
Motsi, Alexio: *formerly at* South African National Library
Nel, Tina: National Library of South Africa (Pretoria)
Nene, E.M.: National Archives of South Africa, Pretoria
Peters, Dale: Campbell Collections, University of Natal
Phayane, Leah: Mayibuye Centre, University of the Western Cape
Pieterse, Antoinette: National Library of South Africa (Pretoria)
Ramdhani, Narissa: University of Durban-Westville
Reid, Huntly: Western Cape Museum Service
Rowoldt, Sandy: *retired* Cory Library, Rhodes University
Seafort, Keith: University of Cape Town

Survey Group

Tichmann, Paul: Local History Museum

Torlesse, Ann: National English Literary Museum

Truman-Baker, Jacqueline: South African Museum Library

van der Merwe, Jaco: Cape Town Archives

Visser, T.J.: National Archives of South Africa (Pretoria)

Way-Jones, M.F.: Albany Museum

Wirth, Henri: Stellenbosch University

University of Cape Town

**APPENDIX C:
PRESERVATION COURSE SURVEY QUESTIONNAIRE FORM**

- 1. Does your institution have a course dedicated to preservation issues?**
- Yes No
- If yes, what is the status of this course?
- Core curriculum Elective course
- What is the academic level of the course?
- Undergraduate Postgraduate diploma
- Honours Masters
- Certificate Other: _____
- How often is this course taught?
- Every term Every year
- Every two years Other: _____
- 2. If there is no separate preservation course, is there a preservation component in another course?**
- Yes No
- If yes, what is the name of the course? _____
- What is the status of this course?
- Core curriculum Elective course
- What is the academic level of the course?
- Undergraduate Postgraduate diploma
- Honours Masters
- Certificate Other: _____
- How often is this course taught?
- Every term Every year
- Every two years Other: _____
- 3. What aspects of preservation are covered in the course or component? Please tick all that apply.**
- | | | | |
|--------------------------------|--------------------------|--------------------------|--------------------------|
| Library binding | <input type="checkbox"/> | Reformatting | <input type="checkbox"/> |
| Digital imaging | <input type="checkbox"/> | Environmental controls | <input type="checkbox"/> |
| Staff/patron education | <input type="checkbox"/> | Co-operative initiatives | <input type="checkbox"/> |
| Disaster planning and recovery | <input type="checkbox"/> | Grant writing | <input type="checkbox"/> |
| Basic book repair/conservation | <input type="checkbox"/> | Resource sharing | <input type="checkbox"/> |
| Local/international standards | <input type="checkbox"/> | Other: _____ | <input type="checkbox"/> |
- 4. Who teaches the preservation course or component?**
- Preservation administrator Conservator
- Full time faculty member Part-time/adjunct faculty member
- Guest lecturer Other: _____
- 5. Does your institution offer continuing education classes in preservation or conservation?**
- Yes No
- 6. Please include any additional comments here. Use additional paper if necessary.**
- 7. Please tick here if you would like your responses to be confidential.**

**APPENDIX D:
PRESERVATION PROFESSIONAL SURVEY QUESTIONNAIRE FORM**

1. Name:

Institution:

Job Title:
2. Briefly describe your duties and responsibilities.
3. Briefly describe how and where you received your training in preservation or conservation.
4. Have you attended any preservation-related continuing education in the last five years? If so, please list in as much detail as possible.
5. Do you have Internet access?
Yes No
6. Do you subscribe to any preservation-related electronic discussion groups? If so, please list them.
7. Are you a member of any library, archives or preservation-related professional organisations? If so, please list.
8. Do you have a network of professional preservation colleagues with whom you discuss preservation issues?
Yes No

If yes, where are these colleagues located? Please tick all that apply.

Within South Africa	<input type="checkbox"/>	Other African countries	<input type="checkbox"/>
Europe	<input type="checkbox"/>	United States	<input type="checkbox"/>
Australia	<input type="checkbox"/>	Other: _____	<input type="checkbox"/>
9. What professional journals do you read regularly?
10. What do you see as the critical issues for preservation in South Africa in the 21st century?
11. In your opinion, what types of issues need to be addressed in preservation education for South African LIS/archives students and professionals?
12. Do you teach courses or workshops in preservation or conservation/restoration? If so, please list the courses taught.
13. Please include any additional comments here. Use additional paper if necessary.
14. Please tick here if you would like your responses to be confidential.

**APPENDIX E:
LIST OF SELECTED PRESERVATION TRAINING OPPORTUNITIES FOR SOUTH
AFRICAN PROFESSIONALS**

Date	Title	Location	Sponsor/Organiser
2000			
15-16 March	Preservation Management	Cape Town	SAPCON/NEDCC
July	Digital Technologies Training Workshop	Durban	DISA
4-8 December	Digital Technologies as a Preservation Management Strategy	Durban	UNESCO/JICPA
2001			
26 February – 2 March	Safeguarding African Documentary Heritage	Cape Town	UNESCO/JICPA
22-24 May	Preservation Options in a Digital World: To Film or To Scan	Cape Town	SAPCON/NEDCC
25 May	Demystifying Digitisation	Cape Town	SAPCON/CLIR
23-25 October	Digitisation Standards Workshop	Durban	DISA
2002			
8-12 April	Seminar on the Preservation of Paper and Photographs for Museums, Archives and Libraries	Grahamstown	NEDCC/SAMA
2003			
Autumn	Preservation of Photographs (in planning)	Undecided	SAPCON/NEDCC
Undecided	Summit on Preservation in Africa (in planning)	Botswana	UNESCO/JICPA

REFERENCES

- Adcock, E.P. ed. 1998. Principles for the care and handling of library material. IFLA Professional Reports 8. Paris: IFLA PAC, Washington DC: CLIR. [Online]. Available: <http://www.ifla.org/VI/4/news/pchlm.pdf> [27 April 2002].
- Alegbeleye, B. 1991. The problems of teaching conservation and preservation in developing countries: Nigeria. A case study within Africa. In Education and training for preservation and conservation: Papers of an international seminar on 'The teaching of preservation management for librarians, archivists and information scientists.' sponsored for IFLA, FID, and ICA, Vienna, April 11-13, 1986. IFLA Publications 54. edited by J.R. Fang and A. Russell. Munich: K.G. Saur. 67-72.
- American Heritage Dictionary of the English Language. 2000. American heritage dictionary of the English language, 4th ed. New York: Bartleby.com. [Online]. Available: <http://www.bartleby.com/61/> [31 January 2002].
- American Institute for Conservation of Historic and Artistic Works. 2000. Definitions of conservation terminology. [Online]. Available: <http://aic.stanford.edu/geninfo/defin.html> [07 March 2002].
- American Library Association. 1990. Guidelines for preservation photocopying of replacement pages. ALCTS. [Online]. Available: <http://www.ala.org/alcts/publications/guidelines/photocopying.html> [14 June 2002].
- American Library Association. 2002. Directory of accredited LIS master's programs. [Online]. Available: <http://www.ala.org/alaorg/oa/lisdir.html#33> [28 April 2002].
- American Statistical Association. 1997. More about mail surveys. ASA series: what is a survey? American Statistical Association section on survey research methods. [Online]. Available: <http://www.amstat.org/sections/srms/brochures/Mail.pdf> [29 June 2002].
- Asmal, K. 2002. The restructuring of the higher education system in South Africa. Department of Education. [Online]. Available: http://education.pwv.gov.za/Policies%20and%20Reports/2001_Report/Restructuring%20HE/index.htm [12 May 2002].
- Association for Archivists and Manuscript Librarians. 2000. The future of AMLIB. (Unpublished).
- Australian Library and Information Association. 2002. ALIA-recognised courses in library and information studies 2002. [Online]. Available: <http://www.alia.org.au/education/courses/librarianship.html> [16 May 2002].
- Axer, P. 1997. Conservation at the South African library. Quarterly bulletin of the South African Library. 51(3):86-92.
- Baker, J.P. 1993. Conservation and preservation of library materials. In ALA world encyclopaedia of library and information services. edited by R. Wedgeworth. Chicago: American Library Association. 224-228.
- Banks, P.N. 1979. Education for conservators. Library journal. May 1:1014-1017.
- Bansa, H. 1986. The awareness of conservation: reasons for reorientation of library training. Restaurator. 7:36-47.

- Bansa, H. 1991. Evaluation of teaching methods in conservation and preservation. *In* Education and training for preservation and conservation: Papers of an international seminar on 'The teaching of preservation management for librarians, archivists and information scientists,' sponsored for IFLA, FID, and ICA, Vienna, April 11-13, 1986. IFLA Publications 54. edited by J.R. Fang and A. Russell. Munich: K.G. Saur. 54-56.
- Barnes, M. 1987. In-house conservation education. *In* Conservation in crisis. Proceeding of a seminar at Loughborough University of Technology 16-17 July 1987. National Preservation Office seminar papers 1. London: National Preservation Office, British Library. 35-43.
- Barrow, W.J. 1974. Physical and chemical properties of book papers, 1507-1949 (Permanence/Durability of the Book, VII). Richmond, VA: W.J. Barrow Research Laboratory.
- Bergdahl, B. 1993. Pan-African conference on the preservation and conservation of library and archives material, Nairobi, 20-25 June 1993. *IFLA journal*. 19(4):464-466.
- Berrada, L. 1995. Co-operation in the area of preservation of library and archival materials. *In* Proceeding of the pan-African conference on the preservation and conservation of library materials. Nairobi, Kenya 21-25 June 1993. IFLA Professional Reports 43. edited by J.M. Arnoult, V. Kremp and M. Musembi. The Hague, Netherlands: IFLA. 163-164.
- Buchanan, S. 1988. Disaster planning, preparedness and recovery for libraries and archives, with a bibliography by Toby Murray: a RAMP study with guidelines. PGI-88/WS/6. Paris: UNESCO.
- Buchanan, S. and Esserman, M. 1994. Staff and user education. *Wilson library bulletin*. October:63-64.
- Cameron, E. 1985. Conservation and restoration of manuscript material. *In* Proceedings of the symposium on manuscripts in southern Africa 21-23 November 1984. Cape Town: South African Library. 177-182.
- Chartered Institute of Library and Information Professionals. 2002. CILIP: Chartered Institute of Library and Information Professionals. [Web site]. Available: <http://www.cilip.org.uk/> [09 July 2002].
- Clements, D.W.G. 1986. Preservation and library school education programmes. *Library association record*. 88(3):136-137.
- Clements, D.W.G. 1987. Preservation and conservation of library and archival documents: a UNESCO/IFLA/ICA inquiry into the current state of the world's patrimony: a RAMP study. PGI-87/WS/15. Paris: UNESCO. [Online]. Available: <http://www.unesco.org/webworld/ramp/html/r8715e/r8715e00.htm> [10 July 2002].
- Cloonan, M.V. 1994. Global perspectives on preservation education. IFLA Publications 69. Munich: K.G. Saur.
- Cloonan, M.V. 1997. Preservation without borders. *Libri*. 47:180-186.
- Coates, P. 1995. Preservation in South Africa. *In* Proceeding of the pan-African conference on the preservation and conservation of library materials. Nairobi, Kenya 21-25 June 1993. IFLA Professional Reports 43. edited by J.M. Arnoult, V. Kremp and M. Musembi. The Hague, Netherlands: IFLA. 37-39.
- Coates, P. 2001. JICPA survey of preservation resources in Africa 1999. Cape Town: JICPA.

- Coleman, C.D.G. 1995. Preservation education directory. 7th ed. Education Committee of the Preservation of Library Materials Section, ALCTS. [Online]. Available: <http://www.ala.org/alcts/publications/presed.html> [25 January 2002].
- Conservation Online. 2002. Educational opportunities in museum, library, and archives conservation/preservation. [Online]. Available: <http://palimpsest.stanford.edu/bytopic/education/> [28 April 2002].
- Conway, P. 1989. Archival preservation: definitions for improving education and training. Restaurator. 10:47-60.
- Corsane, G. et al. 1998. National strategy for heritage training: a working document January 1998. S.A. archives journal. 40:124-146.
- Dalton, S. 1999. Microfilm and microfiche. NEDCC technical leaflet, section 5, leaflet 1. [Online]. Available: <http://www.nedcc.org/plam3/tleaf51.htm> [14 April 2002].
- Darling, P.W. 1981. Creativity vs. despair: the challenge of preservation administration. Library trends. Fall:179-188.
- Darling, P.W. and Ogden, S. 1981. From problems perceived to programs in practice: the preservation of library resources in the U.S.A., 1956-1980. LRTS. Jan/March:9-27.
- De Lusenet, Y. 1998. The case of the Dutch hamster: promoting awareness and preservation management training in Europe. Liber quarterly. 8(4):458-471.
- De Stefano, P. 2000. Preservation and conservation studies program: 1999 survey. (Unpublished).
- Department of Education. 2002a. Higher education act, 1997 (act no. 101 of 1997) merger of public higher education institutions: the Technikon Natal and the M L Sultan Technikon. Government Gazette. 4 January (23001). [Online]. Available: <http://www.gov.za/gazette/notices/2002/23001b.pdf> [28 June 2002].
- Department of Education. 2002b. Higher education: for comment. [Online]. Available: http://education.pwv.gov.za/DoE_Sites/Higher_Education/Higher_Education_Index.htm [04 May 2002].
- Digital Imaging Project of South Africa. 2001. DISA: digital imaging project of South Africa. [Web site]. Available: <http://disa.nu.ac.za/index.html> [28 June 2002].
- Dominy, G.A. 1985. The education and training of staff responsible for manuscript collections. *In Proceedings of the symposium on manuscripts in Southern Africa 21-23 November 1984*. Cape Town: South African Library. 155-164.
- Dosa, M. and Katzer, J. 1991. Electronic networking in support of south-to-south co-operation. Journal of education for library and information science. 32(1/2):84-96.
- Drijfhout, D. 1999. Surveying newspaper collections: a quantitative methodology. International preservation news. 19:12-14.
- Ecole for Patrimoine Africain. 2002. Ecole for Patrimoine Africain. [Web site]. Available: <http://www.epa-prema.net/epaGB/> [09 August 2002].
- Ellenport, S. 1993. The future of hand bookbinding. The books arts web. [Online]. Available: <http://www.philobiblon.com/FutureOfHandBookbinding.htm> [23 May 2002].

- Feather, J. 1986. Curriculum for the teaching of conservation. Library Association record. 88(10):499-501.
- Feather, J. 1990. Staff training for preservation. Library management. 11(4):10-14.
- Feather, J. 2000. The role of library and archives schools. *In* Training for preservation management: the next step. Proceedings of the National Preservation Office annual seminar 1999, edited by. S. Thebridge. London: National Preservation Office. 19-23.
- Fraser, M. 1999. Some highlights in AMLIB's 21 years of existence. African research and documentation. 81:63-67.
- Harris, V. 1993. Going for green: public archive buildings in South Africa and the prospects for natural climate control. AMLIB newsletter. 53:12-18.
- Harris, V. 1997. Exploring archives: an introduction to archival ideas and practice in South Africa. Pretoria: National Archives of South Africa.
- International Council on Archives. 2002. The mission of ICA. [Web site]. Available: <http://www.ica.org/eng/mb/projets.htm> [09 July 2002].
- International Federation of Library Associations and Institutions. 1993. Report of the IFLA mission to South Africa, June 1993. The Hague, Netherlands: IFLA.
- International Federation of Library Associations and Institutions. 2001. Core Programme for Preservation and Conservation (PAC). [Online]. Available: <http://www.ifla.org/VI/4/pac.htm> [28 January 2002].
- International Federation of Library Associations and Institutions. 2002a. IFLA Africa section strategic plan, 2002-2003. [Online]. Available: <http://www.ifla.org/VII/s25/annual/sp25.htm> [09 July 2002].
- International Federation of Library Associations and Institutions. 2002b. Minutes of the IFLA/Africa regional section standing committee meeting held in Dakar, Senegal from 5-7 February 2002. (Unpublished).
- Joint IFLA/ICA Committee for Preservation in Africa. 2001. Joint IFLA/ICA Committee for Preservation in Africa. [Web site]. Available: <http://epa-prema.net/jicpa/> [10 July 2002].
- Kastaly, B. 1998. Training of book conservators in Hungary. *In* Library preservation and conservation in the '90s. Proceedings of the satellite meeting of the IFLA section on preservation and conservation, Budapest, August 15-17, 1995. IFLA Publications 84. edited by J.I. Whiffin, and J. Havermans. Munich: K.G. Saur. 177-181.
- Kathalia, Y.P. 1984. A model curriculum for the training of specialists in document preservation and restoration: a RAMP study with guidelines. PGI-84/WS/2. Paris: UNESCO.
- Kathalia, Y.P. 1991. Curriculum guidelines for archivists. *In* Education and training for preservation and conservation: Papers of an international seminar on 'The teaching of preservation management for librarians, archivists and information scientists,' sponsored for IFLA, FID, and ICA, Vienna, April 11-13, 1986. IFLA Publications 54. edited by J.R. Fang and A. Russell. Munich: K.G. Saur. 41-42.

- Kerkham, A.S. 1987. Education of paper restorers: curriculum and training possibilities at technikons. *In* Books in peril: proceedings of the symposium on the preservation of library and archival materials in southern Africa held at the South African Library, Cape Town, 19-21 November 1986. Cape Town: South African Library. 136-143.
- Kislovskaya, G. 1998. Preservation in Russian libraries: current situation, tendencies, aspirations for the future. *In* Library preservation and conservation in the '90s. Proceedings of the satellite meeting of the IFLA section on preservation and conservation, Budapest, August 15-17, 1995. IFLA Publications 84. edited by J.I. Whiffin and J. Havermans. Munich: K.G. Saur. 156-162.
- Kremp, V. 2001. New lease of life for African written heritage. International preservation news. 24(May):32-33. [Online]. Available: <http://www.ifla.org/VI/4/news/ipnn24.pdf> [13 July 2002].
- Kufa, J.C. 1998. Preservation education: a pilot project on preservation awareness training at the University of Botswana library. Restaurator. 19:108-114.
- Kukubo, R.J. 1995. A review of areas of actual and potential co-operation in preservation and conservation efforts in eastern and southern Africa. *In* Proceeding of the pan-African conference on the preservation and conservation of library materials, Nairobi, Kenya 21-25 June 1993. IFLA Professional Reports 43. edited by J.M. Arnoult, V. Kremp and M. Musembi. The Hague, Netherlands: IFLA. 157-161.
- Lancaster, F.W. 1991. What has UNESCO achieved in education and training for the information professions. Journal of education for library and information science. 32(1-2):69-76.
- Library and Information Association of South Africa. 2002. Library and Information Association of South Africa. [Web site]. Available: <http://www.imagnet.co.za/liasa/> [14 March 2002].
- Lyall, J. 1991. Developing education programs for library preservation in Australia. *In* Education and training for preservation and conservation: Papers of an international seminar on 'The teaching of preservation management for librarians, archivists and information scientists,' sponsored for IFLA, FID, and ICA, Vienna, April 11-13, 1986. IFLA Publications 54. edited by J.R. Fang and A. Russell. Munich: K.G. Saur. 64-66.
- Marcum, D.B. 1990. Preservation education institute final report. Commission on Preservation and Access. [Online]. Available: <http://palimpsest.stanford.edu/byauth/marcum/educinst.html> [28 April 2002].
- Maree, J.C.N. 1981. Some thoughts on conservation. Jagger journal. 2:1-4.
- Maree, J.C.N. 1985. Conservation and restoration of manuscript material. *In* Proceedings of the symposium on manuscripts in Southern Africa 21-23 November 1984. Cape Town: South African Library. 165-176.
- Maree, J.C.N. 1988. Integrated pest management is not a new concept: a return to basics. Jagger journal. 9:12-19.
- Martyn, J. and Lancaster, F.W. 1981. Investigative methods in library and information science: an introduction. Arlington, VA: Information Resources Press.
- Matthews, G. and Thebridge, S. 2001. Preservation management training and education: developing a cross-sectoral approach. New library world. 102(1170/1171):443-451.

- Matthews, G. 2000. Preservation management training in libraries. *In Training for preservation management: the next step. Proceedings of the National Preservation Office annual seminar held on 26th October 1999 at the British Library.* edited by S. Thebridge. London: National Preservation Office. 13-18.
- Mazikana, P.C. 1995. An evaluation of preservation and conservation programmes and facilities in Africa. *In Proceeding of the pan-African conference on the preservation and conservation of library materials. Nairobi, Kenya 21-25 June 1993.* IFLA Professional Reports 43. edited by J.M. Arnoult, V. Kremp and M. Musembi. The Hague, Netherlands: IFLA. 21-29.
- Meadows, A.J. 1987. Conservation and preservation: some questions answered. *In Conservation in crisis. Proceeding of a seminar at Loughborough University of Technology 16-17 July 1987.* National Preservation Office seminar papers 1. London: National Preservation Office. 19-22.
- Meyer, P.S. ed. 1987. Books in peril: proceedings of the symposium on the preservation of library and archival materials in southern Africa held at the South African Library, Cape Town, 19-21 November 1986. Cape Town: South African Library.
- Mnjama, N.M. 1996. National archives and the challenges of managing the entire life cycle of records. S.A. archives journal 38:24-32.
- National Library of Australia. 2001. Policy on preservation microfilming. [Online]. Available: <http://www.nla.gov.au/policy/micro.html#stan> [14 June 2002].
- National Preservation Office. 2001. National Preservation Office. [Web site]. Available: <http://www.bl.uk/services/preservation/national.html> [28 April 2002].
- New School for Social Research. 2001. History of economic thought: Bishop George Berkeley, 1685-1753. [Online]. Available: <http://cepa.newschool.edu/het/profiles/berkeley.htm> [10 July 2002].
- Noguera, C.C. 1991. Conservation/preservation training in Spain. *In Education and training for preservation and conservation: Papers of an international seminar on 'The teaching of preservation management for librarians, archivists and information scientists,' sponsored for IFLA, FID, and ICA, Vienna, April 11-13, 1986.* IFLA Publications 54. edited by J.R. Fang and A. Russell. Munich: K.G. Saur. 35-36.
- Nyuksha, J.P. and Leonov, V.P. 1997. Preservation of collections at the Russian academy of sciences library. Restaurator, 18:201-217.
- Nyuksha, Y.P. 1994. Conservation of library collections: a concept based on experience in the former Soviet Union. Restaurator, 15:55-63.
- Odvárková, J. 1998. Main steps to improve the care of book collections in the national library of the Czech Republic. *In Library preservation and conservation in the '90s. Proceedings of the satellite meeting of the IFLA section on preservation and conservation, Budapest, August 15-17, 1995.* IFLA Publications 84. edited by J.I. Whiffin and J. Havermans. Munich: K.G. Saur. 163-166.
- Ogden, S. 1979. The impact of the Florence flood on library conservation in the United States of America: a study of the literature published 1956-1976. Restaurator, 3:1-36
- Pascoe, M.W. 1988. Impact of environmental pollution on the preservation of archives and records: a RAMP study. PGI-88/WS/18. Paris: UNESCO. [Online]. Available: <http://www.unesco.org/webworld/ramp/html/r8818e/r8818e00.htm> [10 July 2002].

- Patkus, B.L. 1999. Monitoring temperature and relative humidity. NEDCC technical leaflet, section 2, leaflet 1. [Online]. Available: <http://www.nedcc.org/plam3/tleaf22.htm> [13 April 2002].
- Patkus, B.L. and Motylewski, K. 1999. Disaster planning. NEDCC technical leaflet, section 3, leaflet 3. [Online]. Available: <http://www.nedcc.org/plam3/tleaf33.htm> [14 June 2002].
- Pederson, A. ed. 1987. Keeping archives. Sydney: Australian Society of Archives Inc.
- Peters, D. 1987a. Conservation at the Campbell Collections of the University of Natal. SAMAB. 17(5):205-209.
- Peters, D. 1987b. Training of restorers. In Books in peril: proceedings of the symposium on the preservation of library and archival materials in southern Africa held at the South African Library, Cape Town, 19-21 November 1986. Cape Town: South African Library. 129-135.
- Peters, D. 1996a. Climates and microclimates: a new attitude to the storage of archival materials. AMLIB newsletter. 60:8-13.
- Peters, D. 1996b. Our environment ruined? Environmental control reconsidered as a strategy for conservation. Journal of conservation and museum studies. [Online]. Available: <http://palimpsest.stanford.edu/jcms/issue1/peters.html> [13 April 2002].
- Peters, D. 2001. Digital libraries: preserving information resources for contemporary South African scholarship. [Online]. Available: <http://khozi2.nu.ac.za/papers/Digital%20Libraries.htm> [14 April 2002].
- Peters, D. 2002. LIS 401: preservation and conservation. study guide. Durban Institute of Technology. [Web site]. Available: <http://khozi2.nu.ac.za/mlsultan/LIS401.curriculum.htm> [28 June 2002].
- Ratcliffe, F.W. 1985. The current situation in the United Kingdom. Journal of librarianship. 17(2):85-91.
- Ratcliffe, F.W. 1986. Education in preservation for librarians and conservators. Library Association record. 88(10):493-497.
- Ratcliffe, F.W. and Patterson, D. 1985. Preservation policies and conservation in British libraries: report of the Cambridge University conservation project. Library and information research report 25. Wetherby, West Yorkshire: British Library.
- Resource: the Council for Museums, Archives and Libraries. 2001. Preserving the past for the future: towards a national framework for collections management. [Online]. Available: <http://www.resource.gov.uk/action/stewardship/preserv01.asp> [28 April 2002].
- Rhys-Lewis, J. 2000. National archives of Uganda: determination is all that it takes. International preservation news. 22-23:19-21.
- Roberts, M.T. and Etherington, D. 1982. Bookbinding and the conservation of books: a dictionary of descriptive terminology. Washington, DC: Library of Congress. [Online]. Available: <http://palimpsest.stanford.edu/don/don.html> [07 March 2002].
- Rosenberg, D. 1995. Everyday care of books in libraries. In Proceeding of the pan-African conference on the preservation and conservation of library materials. Nairobi, Kenya 21-25 June 1993. IFLA Professional Reports 43. edited by J.M. Arnoult, V. Kremp and M. Musembi. The Hague, Netherlands: IFLA. 77-87.

- Rowoldt, S. 1998. Going archivally green: implications of doing it naturally in southern African archives and libraries. South African journal of library and information science. 66(4):141-147.
- Russell, A. 1991. Qualifications of teachers for library preservation courses: cooperation between librarians and conservators. *In* Education and training for preservation and conservation: Papers of an international seminar on 'The teaching of preservation management for librarians, archivists and information scientists,' sponsored for IFLA, FID, and ICA, Vienna, April 11-13, 1986. IFLA Publications 54, edited by J.R. Fang and A. Russell. Munich: K.G. Saur. 82-85.
- Saleh, R. 1998. Introduction. S.A. archives journal. 40:102-104.
- Schonlau, M., Fricker, R.D. and Elliot, M.N. 2001. Conducting research surveys via e-mail and the web. Rand Organisation. [Online]. Available: <http://www.rand.org/publications/MR/MR1480/> [17 July 2002].
- Shakespeare, W. n.d. Sonnet LIX. The Works of the Bard. [Online]. Available: <http://www.it.usyd.edu.au/~matty/Shakespeare/texts/poetry/sonnets> [24 April 2002].
- Smith, M. 1992. The dissemination of preservation information. *In* Managing the preservation of serial literature: an international symposium. Conference held at the Library of Congress, Washington D.C., May 22-24, 1989. IFLA Publications 57, edited by M. Smith. Munich: K.G. Saur. 239-249.
- Society of American Archivists. 2002. Directory of archival education. [Online]. Available: <http://www.archivists.org/prof-education/edd-arched.asp> [28 April 2002].
- South African Society of Archivists. 2001. South African Society of Archivists. [Web site]. Available: <http://www.archives.org.za/home.html> [18 July 2002].
- Sonnet-Azize, R.G. 1995. Preservation and conservation measures in central Africa: proposals for training programmes. *In* Proceeding of the pan-African conference on the preservation and conservation of library materials. Nairobi, Kenya 21-25 June 1993. IFLA Professional Reports 43, edited by J.M. Arnoult, V. Kremp and M. Musembi. The Hague, Netherlands: IFLA. 165-168.
- South African Museums Association. 2001. South African museums association. [Web site]. Available: <http://sama.museums.org.za/index.html> [14 March 2002].
- South African Preservation and Paper Conservation Group. 2001. Constitution. (Unpublished).
- South African Qualifications Authority Standards Generating Body for Archives and Records Management: SGB ARM. 2001. Main purpose of ARM. [Web site]. Available: <http://www.archives.org.za/SGBwebsite/purposes.html> [09 August 2002].
- Talas. 2002. TalasOnline. [Online]. Available: <http://talasonline.com/> [10 July 2002].
- Tendeng, A. 1995. Proposals for training programmes in conservation and preservation. *In* Proceeding of the pan-African conference on the preservation and conservation of library materials. Nairobi, Kenya 21-25 June 1993. IFLA Professional Reports 43, edited by J.M. Arnoult, V. Kremp and M. Musembi. The Hague, Netherlands: IFLA. 151-155.
- Thebridge, S. and Matthews, G. 2000. Review of preservation management training in the UK and abroad: main findings from the Library and Information Commission. Research reports 48. London: National Preservation Office.

- Theron, J.C. 1998. Proposed education of archivists at the University of South Africa (UNISA). S.A. archives journal. 40:110-117.
- Twentyman Jones, L. 1987. Preservation officers and their training. *In* Books in peril: proceedings of the symposium on the preservation of library and archival materials in southern Africa held at the South African Library, Cape Town, 19-21 November 1986. Cape Town: South African Library. 118-128.
- Twomey, J.E. 1989. Descriptive analysis of a conservation awareness program. Journal of education for library and information science. 29(3):197-207.
- Underwood, P.G. 1992. Devices and desires: the temptations of an information manager. University of Cape Town inaugural lecture. New series no. 173. 3 June, 1992. Cape Town: University of Cape Town.
- United Nations Educational, Scientific, and Cultural Organisation General Information Programme. 1994. Memory of the world programme. IFLA journal. 20(3):350-356.
- United Nations Educational, Scientific, and Cultural Organisation. 2000. UNESCO archives portal: list of RAMP studies. [Web site]. Available: http://www.unesco.org/webworld/portal_archives/ramp_studies_list.html [10 July 2002].
- United Nations Educational, Scientific, and Cultural Organisation. 2001. Memory of the world programme: preserving documentary heritage. [Online]. Available: http://www.unesco.org/webworld/mdm/index_2.html [04 May 2002].
- University of Cape Town. 2002a. Centre for Popular Memory. [Web site]. Available: <http://www.uct.ac.za/depts/cfpm/home.htm> [12 May 2002].
- University of Cape Town. 2002b. The San (Bushman) photographs of Dorothea Bleek. Manuscripts and Archives Department. [Web site]. Available: <http://www.lib.uct.ac.za/mss/existing/DBleekXML/website/index.htm> [17 July 2002].
- University of the Western Cape. 2001. Builders of the nation poster exhibit. Robben Island Mayibuye Archives. [Web site]. Available: <http://www.mayibuye.org/posters/> [17 July 2002].
- Varlamoff, M.T. and Kremp, V. 2000. Annual report 1999 of the IFLA PAC core programme. IFLA journal. 26(3):223-226.
- Verheyen, P. 1995, November 11. No subject. Book Arts-L. [Online]. Available: <http://palimpsest.stanford.edu/byform/mailling-lists/bookarts/1995/11/msg00126.html> [10 July 2002].
- Wächter, O. 1991. The role of national libraries in providing conservation education for librarians. *In* Education and training for preservation and conservation: Papers of an international seminar on 'The teaching of preservation management for librarians, archivists and information scientists', sponsored for IFLA, FID, and ICA, Vienna, April 11-13, 1986. IFLA Publications 54, edited by J.R. Fang and A. Russell. Munich: K.G. Saur. 43-53.
- Walters, T.O. 1995. Breaking new ground in fostering preservation: the Society of American Archivists' preservation management training program. LRTS. 39(4):417-426.

- Wambugo, C.K. 1991. Special needs in education and training in the non-industrialised countries: Kenya. *In* Education and training for preservation and conservation: Papers of an international seminar on 'The teaching of preservation management for librarians, archivists and information scientists,' sponsored for IFLA, FID, and ICA, Vienna, April 11-13, 1986. IFLA Publications 54. edited by J.R. Fang and A. Russell. Munich: K.G. Saur. 76-78.
- Wears, D. 2000. The knowledge and skills agenda: the role of the national training organisations. *In* Training for preservation management: the next step. Proceedings of the National Preservation Office Annual Seminar 1999. edited by S. Thebridge. London: National Preservation Office. 3-8.
- Weiner, M. 1986. AMLIB conservation workshop. AMLIB newsletter. 31(August): 6-9.
- Weiner, M. 1987. If not now, when? A management approach to environmental and pest control. *In* Books in peril: proceedings of the symposium on the preservation of library and archival materials in southern Africa held at the South African Library, Cape Town, 19-21 November 1986. Cape Town: South African Library. 62-70.
- Westra, P.E. 1986. Preservation of library and archive material: developments in South Africa and abroad. *In* Bibliophilia Africana V: Proceedings of the fifth South African conference of bibliophiles. South African Library, Cape Town 19-22 November 1985. Cape Town: South African Library. 137-146.
- Westra, P.E. 1987a. Preservation in southern Africa: the current situation. *In* Books in Peril: Proceedings of the Symposium on the Preservation of Library and Archives Materials in Southern Africa. South African Library, Cape Town. 19-21 November 1986. Cape Town: South African Library. 26-38.
- Westra, P.E. 1987b. The current state of preservation of library and archive material in South Africa. S.A. archives journal. 29:3-11.
- Wiesel, E. 1986. Hope, despair and memory. Nobel lecture, December 11, 1986. The International Forum for Literature and Culture for Peace. [Online]. Available: <http://home.online.no/~kanda/wiesel2.htm> [10 May 2002].
- Wood Lee, M. 1988. Prevention and treatment of mold in library collections with an emphasis on tropical climates: a RAMP study. PGI-88/WS/9. Paris: UNESCO. [Online]. Available: <http://www.unesco.org/webworld/ramp/html/r8809e/r8809e00.htm> [10 July 2002].

ADDITIONAL READING

- Baker, N. 2002. Double fold: libraries and the assault on paper. New York: Vintage Books.
- Banks, P.N. 1981. Education in library conservation. Library trends. Fall:189-201.
- Bansa, H. 1992. Selection for conservation. Restaurator. 13:193-197.
- Battin, P. 1992. Information and resource sharing for preservation in the global context. *In* Managing the preservation of serial literature: an international symposium. Conference held at the Library of Congress, Washington D.C., May 22-24, 1989. IFLA Publications 57. edited by M. Smith. Munich: K.G. Saur. 215-223.
- Buffalo State College. 2002. Art conservation program. [Web site]. Available: <http://www.buffalostate.edu/current/index.asp?sub=current&sub2=deptlist&subint=department&department=ARTC&submit=get+page> [1 September 2002].
- Clements, D.W.G. 1985. The current work of the British Library and its possible future contribution. Journal of librarianship. 17(2):91-94.
- Cloonan, M.V. 1991. Preservation education in American library schools. Journal of education for library and information science. 31(Winter):187-203.
- Cornell University. 2001. Moving theory into practice: digital imaging tutorial. Department of Preservation and Conservation. [Online]. Available: <http://www.library.cornell.edu/preservation/tutorial/contents.html> [1 September 2002].
- Council on Library and Information Resources. 2002. Council on Library and Information Resources. [Web site]. Available: <http://www.clir.org/> [10 July 2002].
- European Commission on Preservation and Access. 2002. European Commission on Preservation and Access. [Web site]. Available: <http://www.knaw.nl/ecpa/> [10 July 2002].
- Fang, J.R., Stuart, R.D, and Tuamsuk, K., eds. 1995. World guide to library archives and information science education. 2nd ed. IFLA Publications 72/73. Munich: K.G. Saur.
- Gould, S. and Varlamoff, M.T. 2000. IFLA/UNESCO survey on digitisation and preservation: ultimate considerations. International preservation news. 21:22-25.
- Hamilton, C. 1998. Advance archival module. S.A. archives journal. 40:137-138.
- Harris, V. 1989. The preservation and utilisation of non-manuscript material in the state archive service, part 3. AMLIB newsletter. 41:21-3.
- Harrison, H.P. 1995. Education and training of audiovisual archivists: a report for the round table on audiovisual records. S.A. archives journal. 37:96-99.
- Havermans, J., Marres, P. and Defize, P. 1999. The development of a universal procedure for archive assessment. Restaurator. 20:48-55.
- Ibrahimah, M.Z. 1988. The teaching of preservation and conservation at Bayero University, Kano, Nigeria. Restaurator. 9:51-60.

- International Council of Museums. 2002. International Council of Museums. [Web site]. Available: <http://www.icom.org> [10 July 2002].
- International Council on Archives. 2002. Blue Shield: the International Committee of the Blue Shield. [Web site]. Available: <http://www.ica.org/eng/mb/projets.html> [09 July 2002].
- International Council on Monuments and Sites. 2002. International Council on Monuments and Sites. [Web site]. Available: <http://www.international.icomos.org> [10 July 2002].
- International Organisation for Standardisation. 2002. International Organisation for Standardisation. [Web site]. Available: <http://www.iso.org/iso/en/ISOOnline.frontpage> [18 July 2002].
- Jenkins, D. and Rhys-Lewis, J. 2000. Preservation management training for archivists. *In Training for preservation management: the next step. Proceedings of the National Preservation Office Annual Seminar 1999*, edited by S. Thebridge. London: National Preservation Office. 9-12.
- Kangulu, C.M. 1998. Records management and archives: an introductory paper taught at the University of Transkei. S.A. archives journal. 40:122-123.
- Kaplan, H.A. and Banks, B.S. 1990. Archival preservation: the teaming of the crew. American archivist. 53:266-273.
- Khayundi, F.E. 1995. An overview of preservation and conservation programmes in eastern and southern Africa. *In Proceeding of the pan-African conference on the preservation and conservation of library materials. Nairobi, Kenya 21-25 June 1993*, IFLA Professional Reports 43, edited by J.M. Arnoult, V. Kremp and M. Musembi. The Hague, Netherlands: IFLA. 31-35.
- Kirkwood, C. 1998. Archival education and training: the needs of the National Archives. S.A. archives journal. 40:118-121.
- Kloppers, A. 1998. The Technikon South Africa's involvement in the education and training of archivists. S.A. archives journal. 40:105-107.
- Large, A. 1991. Curriculum development: some reflections on UNESCO's role. Journal of education for library and information science. 32(1/2):77-83.
- Lwehabura, M.J.F. 1999. User education and information skills: a need for a systematic programme in African university libraries. African journal of library, archives and information science. 9(2):129-141.
- McCrank, L.J. 1981. Conservation and collection management: educational problems and opportunities. Journal of education for librarianship. 22(1-2):20-43.
- McIlwaine, J. 1999. The work of the IFLA section on preservation and conservation. International preservation news. 20:6-9.
- McKeon, D.B. 1984. Conservation for libraries and archives 1981-2001: considerations of future developments and personnel. Restaurator. 6:139-146.
- Minister of Arts, Culture, Science and Technology. 1998. The National Library of South Africa bill, B 106-98. Republic of South Africa. [Online]. Available: <http://www.gov.za/bills/1998/b106-98.pdf> [26 June 2002].
- National Information Standards Organisation. 2002. Preservation and storage. [Online]. Available: http://www.niso.org/standards/std_preserv_store.htm [14 June 2002].

- New York University. 2002. Conservation center. Institute of Fine Arts. [Web site]. Available: <http://www.nyu.edu/gsas/dept/fineart/> [1 September 2002].
- Ojo-Igbinoba, M.E. 1993. Practice of conservation of library materials in sub-Saharan Africa. Monographs on African Librarianship. African Studies Program. Bloomington, IN: Indiana University.
- Powell, R.R. 1985. Basic research methods for librarians. Norwood, NJ: Ablex Publishing Corp.
- Preservation Administration Discussion Group. 2002. Preservation administration discussion group list archives. [Online]. Available: <http://palimpsest.stanford.edu/byform/mailling-lists/padg/> [16 May 2002].
- Ritzenthaler, M.L. 1989. Holdings maintenance at the National Archives of the United States. Restaurator. 10:151-159.
- Rutgers University. 2001. School of Communication, Information and Library Studies Preservation Management Institute. [Web site]. Available: <http://scils.rutgers.edu/programs/pds/pmi.jsp> [10 July 2002].
- Shahani, C.J., Hengemihle, F.H. and Weberg, N. 1995. The effect of fluctuations in relative humidity on library and archival materials and their ageing within contained microenvironments *In Proceeding of the pan-African conference on the preservation and conservation of library materials. Nairobi, Kenya 21-25 June 1993*. IFLA Professional Reports 43, edited by J.M. Arnoult, V. Kremp and M. Musembi. The Hague, Netherlands: IFLA. 61-70.
- Simmons College. 2001. Graduate School of Library and Information Science. [Web site]. Available: <http://www.simmons.edu/programs/gslis/programs/ms/preservation.html> [10 July 2002].
- Smith, M. 1986. The IFLA core programme on preservation and conservation (PAC). IFLA journal. 12(4):305-306.
- Special Libraries Interest Group. 2002. Special Libraries Interest Group. [Web site]. Available: <http://slig.sabinet.co.za/> [14 March 2002].
- Stehkämper, H. 1988. Natural air conditioning of stacks. Restaurator. 9:163-177.
- University of Canberra. 2001. Conservation of cultural materials postgraduate course. [Online]. Available: <http://science.canberra.edu.au/rehs/programs/culturalmaterialsPG.htm> [28 April 2002].
- University of Canberra. 2001. Graduate certificate in records and archives management. [Online]. Available: <http://www.canberra.edu.au/handbook2002/comedu-Graduate-11.html0> [28 April 2002].
- University of Canberra. 2001. Graduate diploma in library and information management. [Web site]. Available: <http://www.canberra.edu.au/handbook2002/comedu-Graduate-20.html0> [28 April 2002].
- University of Delaware. 2000. Art conservation department. [Web site]. Available: <http://seurat.art.udel.edu/ArtConHP.html> [28 January 2002].
- University of Glasgow. 1999. MPhil in digital management and preservation. The Humanities Advanced Technology and Information Institute. [Web site]. Available: <http://www.hatii.arts.gla.ac.uk/Courses/DigitalMPhil/> [28 April 2002].

- University of New South Wales. 2002. The School of Information, Library and Archive Studies. [Web site]. Available: <http://www.silas.unsw.edu.au/silas/cesched.htm#PresAdmin> [16 May 2002].
- University of Pittsburgh. 2001. Department of Library and Information Science preservation management specialisation. [Web site]. Available: <http://www.sis.pitt.edu/~lsdept/preservationmanagement.html> [10 July 2002].
- University of Texas at Austin. 2002. Graduate School of Library and Information Science Preservation and Conservation Studies programme. [Web site]. Available: <http://www.gslis.utexas.edu/~pcs/> [10 July 2002].
- Venter, J.S.M. 1967. Ageing and preservation of paper. S.A. archives journal. 9:11-16.
- Vine, M.G. and Hollinger, W.K. 1993. Active archival housing. Restaurator. 14:123-130.
- Wiseman, C. and Darby, S. 2001. Preservation workshop evaluation. LRTS. 45(2):95-103.
- Zyska, B.J. and Jarosz, A.W. 1992. The awareness of conservation: ten years of experience at the Silesian University, Katowice, Poland. Restaurator. 13:138-147.