

Proposal to
UNESCO

for an
International Guide for the Creation of ETDs
(Electronic Theses and Dissertations)

on behalf of
and with additional activities by
NDLTD
(Networked Digital Library of Theses and Dissertations)

by
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with
ADT: Australian Digital Theses Project
ISTEC: Ibero-American Science Technology Education Consortium
VIDYANIDHI: Indian Digital Library of Electronic Theses

and
editing by
Joseph Moxley, Professor of English
University of South Florida, USA

1. Budget

In response to UNESCO's Call and subsequent directions, NDLTD proposes to undertake a project to develop the *International Guide for the Creation of ETDs* (hereafter, the *Guide*). Though most of the proposed work will be undertaken at no charge to UNESCO, the following subsections detail and explain those items to be paid for through a contract between UNESCO and Virginia Tech, acting as agent for NDLTD.

1.1 Budget Breakdown

Direct costs:

- \$2000 for VIDYANIDHI: Indian Digital Library of Electronic Theses
 - Shalini Urs (Director, from University of Mysore) will coordinate work to ensure suitability of the *Guide* for developing countries.
- \$4000 for ISTECH to handle Spanish and to ensure suitability for Ibero-America
 - Johann van Reenen (Director, Library Linkages, ISTECH), will coordinate work on a Spanish version and ensure suitability for Ibero-America.
- \$1500 for Australian Digital Theses Project
 - Marian Bate (Project Leader) will coordinate work to ensure suitability for Australasia and the Pacific Rim.
- \$1500 for Joseph Moxley, Professor of English, to edit the *Guide*
- \$3375 wages plus \$1055 tuition for ½ time graduate research assistant at Virginia Tech to handle the French translation and assist in other phases of project, Fall 2000
- \$640 for travel, to ensure integration of the *Guide* in all 3 languages
- Subtotal of direct expenses: \$14,070

Indirect costs: \$5922 indirect cost, based on 45.5% charge on direct costs

Total: \$19,992

1.2 Budget Explanation

Funds are requested largely (\$9K direct out of \$14K total direct) to allow work by the teams from Australia, India, and Ibero-America. Virginia Tech costs are limited to a small amount of travel plus funding of a ½ time graduate research assistant.

Work by the co-principal investigators at Virginia Tech and their staffs will be contributed as cost sharing to the project, as will many other efforts by NDLTD members and supporters around the globe.

2. Project Team

Each partner will play a unique role in helping develop the *International Guide for the Creation of ETDs* (the *Guide*). Overall project coordination will take place at Virginia Tech (see Section 2.1), with guidance from the NDLTD Steering Committee (see Appendix A.1).

The UNESCO-specified topics:

- establishment of budget,
- model workflow,
- legal requirements, and
- proposals for funding,

by their very nature, may require different treatment in each nation. Accordingly, for these topics, the various partners (especially those discussed in Sections 2.2-2.5) will each contribute information that will be integrated by the Virginia Tech team. The resulting synthesis of representative international partners will provide other ETD initiatives with pragmatic perspectives on actual implementation models. Thus, the *Guide* will show the range of options as well as best practices.

Additional partners (see Section 2.6) involved in NDLTD also will contribute to the *Guide*, preparing versions in other major languages (e.g., German, Portuguese, Russian) and providing extra assistance (at no cost to UNESCO).

The project team was assembled in accordance with the recommendations of the September 1999 meeting on ETDs that UNESCO ran in Paris [1 – see <http://www.unesco.org/webworld/etd/>], as reported by the representative of the National Library of Canada and IFLA [2]. Partners were invited from all of the groups identified as appropriate for an Executive Committee on ETDs. (Note, incidentally, that all of those groups serve on the Steering Committee of NDLTD, see Appendix A.1). All of those groups are represented in our project team, except Université de Montréal / Université Lumière Lyon, which chose not to participate in this proposal (other than through their individual roles on the NDLTD Steering Committee).

2.1 Virginia Tech

The Virginia Tech team, which has been working together on ETDs (Electronic Theses and Dissertations) since 1992, is lead by project director Edward Fox. Fox has directed NDLTD since its inception in 1996, and began work on ETDs in 1987. For more information on his qualifications see Appendix A.2, which includes selected information on ETD-related activities, grants/contracts, publications, and presentations. Fox has experience in project management, writing, computer and information science, digital libraries, information storage and retrieval, multimedia systems and standards, hypertext and hypermedia, electronic publishing, networking, internet technology, human-computer interaction, and other areas.

Gail McMillan, Director of the department of Digital Library and Archives, University Libraries, Virginia Tech, will serve as co-PI. She has run the library-side of all ETD operations at the university since 1992, and traveled and spoken extensively (including Switzerland, Canada, and

Australia). Her staff includes Anthony Atkins, developer of the software for handling ETDs that is used at Virginia Tech and has been widely adopted throughout the world. They have the greatest experience of any library group in the world on ETDs, having supported required submission of ETDs at Virginia Tech since Jan. 1, 1997, and having assisted scores of library groups around the globe to implement their ETD programs. For more information on her qualifications, see Appendix A.2.

John Eaton, Associate Provost for Graduate Studies, in charge of Graduate School activities at Virginia Tech, also will serve as co-PI. Dr. Eaton has the greatest experience of any graduate dean in the world on ETDs, having promoted ETDs since the mid-1990s by encouraging and assisting graduate programs around the globe to implement their ETD programs. He is uniquely qualified to address issues regarding the role and nature of theses and dissertations in higher education [3] and how ETDs add value. For more information on his qualifications see Appendix A.2.

These three co-PIs were the first funded to work on ETDs and are the founders of NDLTD. In 1988 Virginia Tech funded development of an SGML Document Type Definition (DTD) for ETDs, along with SoftQuad of Toronto, Canada. A pilot effort for converting works continued through 1995 [4]. They have developed four WWW sites to support ETDs:

- <http://www.ndltd.org> (the home site for NDLTD, also providing software and guidance for groups interested in establishing an ETD program, including about hardware, software, and networking);
- <http://www.theses.org> (the home site for the growing collection of ETDs worldwide, supporting federated search as well as other options on access);
- <http://etd.vt.edu> (the home site for students interested in creating ETDs, providing: tutorial information, instructions on authoring/formatting/submission, and guidance on standards/copyright – maintained by McMillan's department);
- <http://scholar.lib.vt.edu> (the home site for McMillan's department, including library-related information for authors of ETDs as well as those implementing ETD projects).

These sites already have preliminary versions of all the information requested for the UNESCO *Guide*. With UNESCO's support and encouragement, Virginia Tech will not only update these materials but will expand and adapt them for multi-cultural and multi-lingual users through partnerships with India, Latin America, and Australia. Existing documentation can serve as the basis for the content of the *Guide*, supplemented by the additions, comments, and multilingual assistance of project partners. Because of the extensive documentation begun at Virginia Tech, the *International Guide for the Creation of ETDs* can be accomplished within the timeframe required by UNESCO.

In particular, the Virginia Tech team will use its extensive experience in the following topics and will draft sections of the *Guide* regarding:

- workflow,
- user access (including tools, outreach, etc.),
- author training and skill development,
- hardware and software requirements,
- network requirements,

- data formats,
- metadata and cataloging,
- archiving.

They also will:

- coordinate the work of project partners,
- ensure continuity and integration of parts and versions,
- work with other groups to reach consensus on best practices,
- prepare Web and printed versions,
- report progress and submit project deliverables to UNESCO for review and approval.

2.2 VIDYANIDHI: Indian Digital Library of Electronic Theses

Representing VIDYANIDHI is its Director, Professor Shalini R. Urs, Ph.D., Chairperson of the Department of Library and Information Science, University of Mysore, India. With regard to ETDs, she and her collaborator, Professor K.S. Raghavan, have been focusing on the following:

- problems of developing countries, especially:
 - multi-language and multi-script requirements,
 - other diversities in ETD content;
- developing search interfaces in regional languages;
- issues relating to metadata in the languages and scripts of the item.

The plan is that Mysore University should evolve into a National Centre for ETDs. The Centre at Mysore will eventually develop guidelines for all the above issues.

Dr. Urs brings to the project key perspectives:

- coming from a country
 - which is the world's second most populous nation;
 - having the largest higher education system in the world – over 250 universities and 15,000 colleges;
 - having a very large scientific manpower;
 - where IT is believed to stand for India Tomorrow, resulting in a very fast growing IT infrastructure;
- experience with a country that speaks hundreds of languages and dialects in addition to English;
- expertise as a teacher and researcher in library and information science;
- recent familiarity in launching a national program for ETDs in a developing country.

Dr. Urs will arrive at Virginia Tech late in the summer of 2000 for a six-month sabbatical as a Fulbright Scholar. Her focus is on digital libraries, ETDs and work with NDLTD, so she will spend a considerable amount of her time on the *Guide*, collaborating closely with the Virginia Tech team. Please see Dr. Urs' support letter in Appendix A.4.

2.3 ISTE: Ibero-American Science, Technology, Education Consortium

ISTEC is engaged in a number of projects throughout Latin America related to libraries, and is now preparing a small booklet on digital libraries for the region, supported in part by the Organization of American States. Editor for that booklet, and director of ISTE library-related initiatives, is Johann van Reenen, also of University of New Mexico. He will coordinate efforts on the *Guide* related to the Spanish language, with assistance from other colleagues such as in Mexico (e.g., Alfredo Sanchez) and Spain (e.g., Pablo de la Fuente and Jose H. Canos Cerda). ISTE will translate the *Guide* into Spanish and promote the concept in Latin America and Spanish-speaking countries. For more information on ISTE, see Appendix A.4.

2.4 ADT: Australian Digital Theses Project

Marian Bate is Project Leader for ADT. An early version of Virginia Tech ETD software was adapted to support both university and national level ETD programs. McMillan met with the ADT team in Melbourne on Feb. 16, 2000. For the *Guide*, the ADT group will focus on documenting their software adaptations and workflow practices for ETDs. They also will focus on issues relevant to multi-university/library collaborations and they will help make the *Guide* suitable for the needs of Australasia and the Pacific Rim.

2.5 Joseph Moxley, University of South Florida

Dr. Moxley, a Professor of English, is uniquely qualified to help in this project through:

- experience as Chair of the 3rd International Symposium on ETDs, St. Petersburg, FL, March 2000, the largest conference on the subject (with 225 people from 13 countries) ,
- his knowledge of the writing-related problems connected with ETDs through direct observation as well as literature review [5-8],
- his involvement in preparing a number of proposals to support work on ETDs, and his current Microsoft-supported efforts to assist ETD-authors with helpful tools (see <http://etd.eng.usf.edu/tools>).

Dr. Moxley will add content to the *Guide*, especially information resulting from his Microsoft-supported project, and provide the bulk of the editorial help required.

2.6 Additional Support from NDLTD

NDLTD has many members working on related activities that will assist with the *Guide*. All members of its Steering Committee (see Appendix A.1) will be asked to review the *Guide* and to provide any additional assistance they can. For example, OCLC is currently supporting McMillan's work on document best practices for libraries with ETD projects. NDLTD members also will be invited to contribute. The following paragraphs describe extra NDLTD commitments already made to international ETD efforts that directly support work on the *Guide*.

Brazil: Professor Ana Pavani directs “Biblioteca digital” at PUC Rio. Their efforts include work on SGML/XML and templates. See <http://www.maxwell.lambda.ele.puc-rio.br/>. This project has the desirable property that ETDs are in English, Spanish, and Portuguese, so that multilingual versions of the *Guide* can be tested. Dr. Pavani will cooperate with the Portuguese team to prepare a version of the *Guide* in that language.

Germany: The national project on ETDs, Dissertationen Online [9], will continue its efforts in a number of directions:

- helping identify resources (persons, institutions, materials) related to ETDs for NDLTD at the clearinghouse site <http://www.eduserver.de/unesco/>;
- helping complete the work on a metadata standard for ETDs, extending the discussions from the DC-7 meeting in Frankfurt of October 1999 and the Berlin ETD standards meeting of May 2000;
- documenting its XML Document Type Definition for ETDs and the tools and processes developed so authors and universities can prepare and manage such structured documents;
- helping develop and disseminate standards for ETDs, building on work to assist all interested institutions to prepare and make accessible theses and dissertations in physics [10] – with support from DFG on a matching project from NSF that funds related work at Virginia Tech;
- translating the *Guide* into German.

These activities will be coordinated by Prof. Dr. Peter Diepold (Humboldt University) and Prof. Dr. Dr. Eberhard R. Hilf (University of Oldenburg).

Mexico: Alfredo Sanchez leads work on a digital thesis library and a collection of associated services. This is a project of the Digital Libraries Department, a unit of the Library at the Universidad de las Americas-Puebla, Mexico, see <http://biblio.udlap.mx/iid/tesis/index.html>. Dr. Sanchez will review the English and Spanish versions of the *Guide* and provide additions, corrections, and suggestions.

Portugal: José Luis Borbinha of the National Library of Portugal, Director of “DTD - Dissertações e Teses Digitais / Digital Thesis and Dissertations”, will release and support a software system for ETDs (building on Dienst technology from Cornell University) – a publicly available package that will run on inexpensive Unix/Linux servers. This will make it possible to set up a centralized or distributed architecture of servers, configure its metadata structure, export in any format desired, handle any document format, configure the interface for several languages, etc. Further work will be to build interfaces for UNIMARC systems (export in ISO2709...), Z39.50, and RDF – and to coordinate efforts with the Open Archives initiative, etc. In connection with work on the *Guide*, documentation will be prepared so that users in developing countries will know exactly how to apply this software to develop their own ETD programs. Further, a Portuguese version of the *Guide* will be prepared in collaboration with the group in Brazil. There is particular interest in future work on ETDs with Brazil, Mozambique, Angola, Cabo Verde, etc.

Russia: Alexander Plemnek, Director, Library Automation Program, Pushkin Library Megaproject, Open Society Institute, will coordinate activities. He will translate the *Guide* to

Russian and create a mirror web site in Russian at St. Petersburg State Technical University. He will carry out activities on disseminating ETD technologies in Russian universities.

3. Cooperation

The groups described in Section 2 will interact primarily through email and listservs. It is possible that some discussions will proceed using videoconferencing systems, or video over IP. Phone conversations and conferences also will occur. Further, drafts will be posted on a new part of the NDLTD Web site that will be dedicated to the *Guide*, and, using version control mechanisms, these will be critiqued and refined during the course of the project.

Regarding face-to-face discussions, there will be a number of opportunities. First, the NDLTD Steering Committee will meet in Fall 2000 to comment on progress and plans. Second, at ECDL'2000 in Lisbon, there will be an NDLTD meeting. Third, Shalini Urs will come to Virginia Tech during August 2000 and stay for the rest of the project period in connection with her Fulbright efforts. Finally, members of the project team will travel as needed to complete the *Guide*.

Many of the activities of the groups are summarized in the next two tables. Table 1 focuses on the preparation of those sections of the *Guide* called for by UNESCO, while Table 2 highlights the 6 language versions we will prepare of the *Guide*. The key to values in the cells is:

- L indicates leading.
- I indicates integrating.
- C indicates contributing.

Note that Professor's Moxley's editing is not shown, since he will edit the entire English version.

Table 1. Responsibility for sections						
UNESCO-requested section	VT	VIDYANIDHI	ISTEC	ADT	Germany	Portugal
Hardware/software requirements	L		C			C
Network requirements	L		C	C		
Legal requirements	I	C	C	C		C
Data formats	I	C	C	C	C	
Metadata	I	C	C	C	C	C
Archiving	I	C	C	C	C	
Access tools	I	C	C	C		C
Model workflow	I			C	C	C
Establishment of budget	I	C	C	C	C	
Proposals for funding for projects	I	C	C	C	C	C

In Table 1, the distinction between L, I, and C aims to explicate the cooperation. “C” is used to identify partners that will contribute to the work. As can be seen from Section 6, the Virginia Tech team has written about each of the topics in the outline, so will either play lead role (i.e., doing most of the work, for situations where there is extensive experience and a fairly clear cut set of options) or an integrating role (i.e., drawing as many perspectives as possible from the other partners, integrating those to ensure clarity and to highlight best practices as well as the breadth of options).

Table 2. Responsibility for versions in different languages						
Team	English	French	Spanish	German	Portuguese	Russian
VT	L	L				
VIDYANIDHI	C					
ISTEC			L			
ADT	C					
Moxley	C					
Brazil					C	
Germany				L		
Mexico			C			
Portugal					L	
Russia						L

4. Project Implementation Calendar (assuming funding will begin on Sept. 1, 2000)

4.1 Project Kick-Off: by Sept. 1, 2000

Initially there will be a virtual meeting and teleconference(s) so that project partners can feel a sense of community and the enthusiasm and urgency for doing a lot in a short amount of time, including partners sharing comments, questions, and answers.

Bibliography: by Sept. 16, 2000

The first phase of the project will involve collecting all relevant materials related to ETDs, and building a comprehensive bibliography. This information will be entered into the clearinghouse service mentioned above and administered by Professor Diepold of Berlin. The initial bibliography will be completed by the middle of September with the assistance of Prof. Urs.

There are many works that will be examined. The soon-to-be-completed *Sourcebook* [11] (see Appendix A.3) brings together a broad overview on the field and will be translated into various languages; Professor Pablo de la Fuente from Spain has already largely completed a Spanish translation. *Transforming Libraries 7: Issues and Innovations in Electronic Theses and Dissertations*, published by the Association of Research Libraries with editorial assistance from McMillan [12], also provides a number of perspectives (<http://www.arl.org/transform/etd/>). Many other references will be collected for the comprehensive bibliography.

This effort will extend the current bibliographic database that includes the large number of publications prepared by the Virginia Tech team, e.g., [13-41].

4.2 Draft Guide: by Oct. 23, 2000

The second phase will lead to a draft of the entire *Guide* in English. This will be preliminary, aimed to help collect comments and additions. Partners will contribute their respective parts by October 2. The full first draft will be compiled, with distribution to the project team by October 23. Preliminary versions in French, Spanish, Russian will begin from this compilation.

4.3 Comprehensive International Guide: by Dec. 31, 2000

Resulting from the above, and including comments received on or before November 6, the second draft will be distributed on November 13 for two more weeks of review. This will give the project partners the opportunity to see the compiled parts and give the NDLTD Steering Committee the opportunity for input. By December 4, the *Guide* will have its final editing in English. Translations into French and Spanish will be completed and both paper and Web versions prepared by the end of the year and made available through <http://www.ndltd.org>.

5. Outline of Guide

5.1 Philosophy

The *Guide* will be a next generation version of WWW pages and other content that has evolved over the last four years by groups around the world that are connected with NDLTD. Some is targeted toward various individuals:

- students (preparing ETDs),
- staff (assisting students, or handling systems and services),
- faculty (guiding students, and discussing issues such as copyright).

At another level, *Guide* content addresses campus infrastructure:

- campus decisions and plans regarding working with ETDs,
- engineering compromises such as between training/assisting students with standards like XML or incurring higher costs for long-term archiving,
- organizational issues such as what to undertake vs. what to outsource or collaborate on.

In general, the approach will be to:

- motivate students, faculty, staff, campuses, and nations to work with ETDs;
- make it easy to establish a program on a campus;
- clarify choices by showing the implications of each alternative, and which ones work.

The NDLTD philosophy has been to enable cooperation and sharing of tools, software, and best practices, as well as documentation, training materials, and WWW information. In addition to developing the *Guide*, we also will continue to encourage communication among campuses, since experience and mentoring has been shown to be more effective in helping launch ETD programs than large volumes of information. It is crucial that:

- campuses select approaches they consider locally feasible;
- programs follow an evolutionary path, from prototype to pilot to option to requirement;
- local “champions” are encouraged to pursue approaches they are excited about;

- broad-ranging support emerges as well as enlightened leadership of top administrators.

We will summarize the various technical issues (e.g., markup of structured documents such as with SGML or XML vs. page descriptions languages like PDF or other rendered versions, authoring, metadata, submission, linking, classification/categorization/cataloging, searching, browsing, watermarking, and organization of multimedia-rich documents). We view the ETD initiative as an ongoing activity that helps with the training of graduate students in fundamental concepts as well as current technology, thus helping large numbers of the world's future leaders, while enhancing the infrastructure of universities worldwide. We are pleased that the growth in interest in ETDs has led to a diversity of effective solutions and friendly international cooperation that can be even more broadly extended.

5.2 Sections

The *Guide* will have at least the following sections, drawing upon prior work (illustrated by the URLs given below). These sections include those requested in the Call plus others we consider valuable. A final outline will be prepared by the time of the first draft of the *Guide* (see Section 4.2).

- Equipment: hardware and software requirements
 - <http://lumiere.lib.vt.edu/ETD-db/developer/require.html>
 - <http://scholar.lib.vt.edu/about/server1.html>
 - <http://lumiere.lib.vt.edu/ETD-db/developer/install.html>
- Network requirements
 - Inter-campus connectivity (e.g., among members of a consortium of universities)
 - Intra-campus connectivity: offices, classrooms, labs, libraries
 - Special: work at home, distance education, multimedia applications
- Data formats
 - <http://www.ndltd.org/workflow/workflow.htm> (on SGML)
 - <http://www.ndltd.org/xml/index.htm> (on XML)
 - <http://www.ndltd.org/standards/metadata/current.html> (metadata – version .01)
- Workflow
 - <http://www.ndltd.org/workflow/workflow.gif> (overview)
 - <http://www.ndltd.org/workflow/etdlife.htm> (life of an ETD: creation to dissemination)
- The Library <http://scholar.lib.vt.edu/theses/presentations/LibIssues.pdf>
 - <http://scholar.lib.vt.edu/theses/data/setup.html> (Staffing)
 - Cataloging: keywords and controlled vocabulary
 - <http://www.ndltd.org/metadata/> (metadata: crosswalk)
 - Processing changes: binding, shipping, circulation, shelving and storage, microfilming, cataloging; effects on bound theses/dissertations, online reference
 - Programmed applications
 - Notifications; Students, advisor(s), UMI
 - Availability levels
 - Submission information to metadata to bibliographic record for online catalogs
- Access and management of information
 - <http://www.openarchives.org> (harvesting, interoperating with archives)

- <http://jin.dis.vt.edu/fedsearch/ndltd/support/search-catalog.html> (federated search)
- human-computer interaction, usability, visualization, browsing, link services, ...
- System administration <http://lumiere.lib.vt.edu/ETD-db/>
 - Resources for ETD project managers, database applications, etc.
 - Customizing the distribution for your site (e.g., customize language files)
 - <http://lumiere.lib.vt.edu/ETD-db/developer/custom.html>
- Security and archiving issues
 - Authentication and authorization
 - Migrating content between media; conversions across versions of software
 - Detecting plagiarism
 - Replication, copies, watermarking
- Graduate Student Authors
 - <http://lumiere.lib.vt.edu/ETD-db/help/> (author help pages)
 - <http://etd.vt.edu/booklet/booklet.pdf> <http://etd.vt.edu/howto/> (training)
 - <http://etd.vt.edu/workshop/tape.htm> (workshop videos)
 - Word processing to online access: Consider the readers, keywords, etc.
 - Software tools: Use to full advantage
 - <http://etd.vt.edu/howto/slides/vanilla/2.htm> (word processing)
 - <http://etd.vt.edu/howto/slides/distill/0.htm> (Adobe)
 - <http://www.ndltd.org/workflow/workflow.htm> (SGML)
 - <http://www.ndltd.org/xml/index.htm> (XML)
 - HTML
 - Research instruction? (from the library, from other sources)
 - <http://lumiere.lib.vt.edu/ETD-db/ETD-submit/login> (submission demonstration)
- Legal Requirements and Intellectual Property (<http://etd.vt.edu/issues/>)
 - <http://etd.vt.edu/issues/index.htm> (US Copyright: Same laws, new awareness)
 - <http://etd.vt.edu/submit/letter.htm> (rights of authors/creators)
 - Publishers
 - <http://www.ndltd.org/info/pubs.htm>
 - <http://www.ndltd.org/info/request.htm>
 - <http://www.ndltd.org/pubshrs/index.htm> (Publishers and the NDLTD)
- Workflow: Graduate School (<http://www.ndltd.org/workflow/gs/index.htm>)
 - Approving works, notifications: online
 - http://lumiere.lib.vt.edu/ETD-db/ETD-review/manage_etds (staff and online management)
- Outreach: within the university (colleges, departments, program areas, centers)
 - <http://scholar.lib.vt.edu/theses/ETDprepFlier.pdf> (to Faculty, to Graduate Students)
 - <http://scholar.lib.vt.edu/theses/crightflier.pdf>
- Paper or Online?
 - Approval form
 - <http://scholar.lib.vt.edu/theses/approval.htm>
 - <http://etd.vt.edu/submit/approval.htm>
 - Electronic signatures
- Evaluation
 - http://lumiere.lib.vt.edu/surveys/take_survey.php3?set_ID=ETDfall99author (author/graduate student surveys)

- http://lumiere.lib.vt.edu/surveys/take_survey.php3?set_ID=etduser (reader/user surveys)
- <http://scholar.lib.vt.edu/staff/gailmac/presentations/GL99ETDpaper.pdf> (others)
- Establishment of budget <http://scholar.lib.vt.edu/theses/data/setup.html>
 - Independent operation vs. multi-institution consortia
 - Tradeoffs of cost, amount of access, reliability
 - Expenses for publicity, training, workshops, assistance
- Proposals for funding for projects – building on funded projects such as
 - NSF: Open Archives: Distributed services for physicists and graduate students (OAD), \$315,259 for 9/1/2000 – 8/31/2003. Project director: E. Fox, with co-PI R. Zia (and DFG support of German portion led by E. Hilf, U. Oldenburg).
 - NSF: Core Research for the Networked University Digital Library (NUDL), \$79,997 for 4/1/2000-3/31/2002. Project director: E. Fox.
 - OCLC: SiteSearch software license: \$50,000 for 1997-1999 for electronic thesis and dissertation research. Project director: E. Fox.
 - U.S. Dept. of Education, FIPSE Program P116B61190: Improving Graduate Education with a National Digital Library of Theses and Dissertations: \$208,040 for 9/1/96-8/31/99. Principal investigators: E. Fox, J. Eaton, G. McMillan. In-kind cost sharing by SURA, and supporting software donations from Microsoft and Adobe, worth over \$200K.
 - SURA: Development and Beta Testing of the Monticello Electronic Library Thesis and Dissertation Program: \$90,117 for 1/1/96 - 12/31/97. Principal investigators: E. Fox, J. Eaton, G. McMillan.
- Statistics and ETD usage
 - <http://scholar.lib.vt.edu/theses/data/datahp.htm>
 - <http://scholar.lib.vt.edu/theses/data/somefacts.html>
- Archiving and Preservation: Issues, practices, goals
<http://scholar.lib.vt.edu/theses/archive.html>

6. References

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<http://www.unesco.org/webworld/etd>
- [2] I. Parent, "Electronic Theses and Dissertations", email report: IFLA-PB@INFOSERV.NLC-BNC.CA, 21 October 1999.
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- [35] G. McMillan, "Managing Digital Content: The Scholarly Communications Project," in *The Evolving Virtual Library II: Practical and Philosophical Perspectives*, L. M. Saunders, Ed. Medford, NJ: Information Today, 1999, pp. 39-60.
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- [37] G. McMillan, "Perspectives on Electronic Theses and Dissertations," presented at New Frontiers in Grey Literature: 4th International Conference, Kellogg Center, Gallaudet University, Washington, D.C., 1999.
<http://scholar.lib.vt.edu/staff/gailmac/presentations/GL99ETDpaper.pdf>,
<http://scholar.lib.vt.edu/staff/gailmac/presentations/GL99ETDslides.pdf>
- [38] G. McMillan, "What to Expect from ETDs: If you build it, they will use it," presented at Digital Library Symposium, Cleveland, OH, 1999.
<http://scholar.lib.vt.edu/staff/gailmac/presentations/CWRUGMc1.pdf>
- [39] G. McMillan, "What to Expect from ETDs: Library Issues and Responsibilities," presented at Digital Library Symposium, Cleveland, OH, 1999.
<http://scholar.lib.vt.edu/staff/gailmac/presentations/CWRUGMc2.pdf>
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- [41] G. McMillan, "The digital library - without a soul can it be a library?," presented at Books and Bytes: Technologies for the Hybrid Library, VALA 2000 Conference, Melbourne, Australia, 2000.
<http://scholar.lib.vt.edu/staff/gailmac/presentations/VALA.pdf>

Appendix

Appendix A.1: Members of NDLTD Steering Committee

Adobe – Ron Richard (Web & Dynamic Media)
African Virtual University and World Bank – Cécile Fruman
Association of Research Libraries and SPARC – Julia Blixrud (Director of Information Services)
Australian Digital Theses Project – Marian Bate (Project Leader)
Center for Research Libraries – Marjorie Bloss (Vice President for Library Operations)
Chairs of International Symposia on ETDs –
 Joseph Moxley (from USF, for 2000)
 Eric F. Van de Velde (from Caltech, for 2001)
Committee on Institutional Cooperation (CIC, academic consortium of the Big Ten Universities plus U. of Chicago) – Thomas A. Peters (Director, Center for Library Initiatives)
Coalition for Networked Information – Joan K. Lippincott (Associate Executive Director)
Council of Graduate Schools – Peter Syverson (Vice President for Research)
CSGS (Conference of Southern Graduate Schools) – Sandra Terrell (President)
Dissertations Online (Germany) – Peter Diepold (from Humboldt University)
IBM (Almaden Research Center) – Henry Gladney
ISTEC (Ibero-American Science & Technology Education Consortium) – Ramiro Jordan (Executive Director)
Microsoft – Roberto Bamberger
National Agricultural Library / US Department of Agriculture – John Kane
National Library of Canada – David Balatti (Director, Bibliographic Services)
National Library of Portugal – José Luis Borbinha (Director de Serviços)
 DTD - Dissertações e Teses Digitais / Digital Thesis and Dissertations
National Science Foundation – Stephen Griffin (Program Director, Digital Library Initiative)
OCLC – Terry Noreault (Vice President, Office of Research)
OhioLINK – Tom Sanville (Executive Director)
Organization of American States – Alexandra Barrantes
SOLINET (Southeastern Library Network) – Keith Belton (Manager, Digital Library Services)
St. Petersburg State Technical University (Russia) – Alexander Plemnek (Director, Library Automation Program, Pushkin Library Megaproject, Open Society Institute)
SURA (Southeastern Universities Research Association) – Hugh Loweth
UMI (Bell & Howell Information and Learning Company) – Delphine S. Lewis (Product Manager, Dissertations and Books on Demand)
UNESCO – Mohsen Tawfik (Paris)
Université Lumière, Lyon 2 – Jean-Paul Ducasse
University of Montreal – Jean-Claude Guédon
University Thesis Online Group (UTOG, UK) – Fred Friend (Chair)
VIDYANIDHI: Digital Library of Indian Electronic Theses (India) – Shalini Urs (Director, from University of Mysore)
Virginia Tech – founders of NDLTD: John L. Eaton, Edward A. Fox, Gail McMillan
VTLS Inc. – Vinod Chachra (President)

Appendix A.2

Resumes

- **Edward A. Fox, Project Director**
- **Gail McMillan, co-PI**
- **John Eaton, co-PI**
- **Joseph M. Moxley, Editor**
- **Marian E. Bate, Principal Librarian, Univ. of New South Wales, Australia**
- **José Luis Brinquete Borbinha, Biblioteca Nacional, Portugal**
- **Ana Pavani, Pontifícia Universidade Católica do Rio de Janeiro (PUC-Rio), Brazil**
- **Shalini R. Urs, University of Mysore, India**

Edward A. Fox

fox@vt.edu <http://fox.cs.vt.edu/>

ACTIVITIES RELATED TO ETDs (Selected):

- Director, Networked Digital Library of Theses and Dissertations (<http://www.ndltd.org>)
- Co-Chair, 2nd ETD/NDLTD Workshop, Virginia Tech, Blacksburg, VA, May 16-18, 1999
- Co-Chair, ETD/NDLTD Workshop, MECCA Conf., Memphis, TN, June 10-11
<http://www.mecca.org/mecca-itec-conf/conftopics.html>
- Chair of Joining the National Digital Library of Theses and Dissertations, half-day pre-conference seminar for CAUSE/CNI regional conference, Univ. of Del., May 21, 1997
- Chair, Workshop on Electronic Theses and Dissertations in the Southeast, sponsored by SURA, hosted by UNC Charlotte, Charlotte, NC, Aug. 1-2, 1996.
- Chair, Workshop for Working Group on Theses, Technical Reports, and Dissertations, in Monticello Electronic Library Initiative, sponsored by SURA and SOLINET, Aug. 12-13, 1994, Virginia Tech, Blacksburg, VA
- Co-chair, Working Group on Theses, Technical Reports, and Dissertations, in Monticello Electronic Library Initiative, sponsored by SURA and SOLINET, 1993-1997
- Member, Design Team, The Capture and Storage of Electronic Theses and Dissertations, sponsored by Coalition for Networked Information (CNI), VPI&SU, Council of Graduate Schools, and University Microfilms Int., including Information Technology group leader for 11 Oct. 1992 Design Meeting, Washington, D.C., speaker at 2 sessions of the CNI 1993 Spring Meeting, March, San Francisco (and at many later CNI meetings)
- Invited participant, AAP/UMI Workshop on Dissertation Markup, April 15, 1987, Ann Arbor, MI
- Speaker, trainer, demonstrator about ETDs at hundreds of meetings around the world

EDUCATION:

8/83	Ph.D.	Computer Science, Cornell University
1/81	M.S.	Computer Science, Cornell University
2/72	B.S.	Electrical Engineering (Computer Science Option), M.I.T.

RECENT EMPLOYMENT:

1/98-	Director, Digital Library Research Laboratory, VPI&SU (Virginia Tech)
6/90-	Associate Director for Research, VPI&SU (Virginia Tech) Computing Center
4/95-	Professor, Dept. of Computer Science, VPI&SU (Virginia Tech), 660 McBryde Hall, Blacksburg VA 24061-0106 USA
5/88-4/95	Associate Professor, Dept. of Computer Science, VPI&SU
9/83-5/88	Assistant Professor, Dept. of Computer Science Virginia Polytechnic Institute and State University

PROFESSIONAL SERVICE:

CURRENT (Selected):

Chair, First Joint Conference on Digital Libraries (ACM, IEEE-CS), Roanoke, VA, Summer 2001
Director, Internet Technology Innovation Center at Virginia Tech
Director, Curriculum Resources in Interactive Multimedia (<http://ei.cs.vt.edu/~crim/>)
Co-Principal Investigator, Computer Science Teaching Center (<http://www.cstc.org>)
Program committee member, ACM DL'2000, Multimedia'2000, ACM SIGIR'2000, ECDL'2000, ICDE'2000, IDM'2000, Web9 Conference

Member: SIGMM Education Committee (co-chair); ACM Content Steering Committee; Advisory Board for D-Lib Forum; Curriculum 2001 Review Committee; NRC Committee to prepare "On Being a Researcher in the Digital Age"; Governing Board Internet Technology Innovation Center Co-Editor-in-Chief, ACM Journal of Educational Resources in Computing (JERIC)
Editor, Morgan Kaufmann Publishers, Inc. Series on Multimedia Info. and Systems
Editorial boards: Electronic Publishing - Origination, Dissemination and Design Journal; IEEE Multimedia; Information Processing & Management; Journal of Educational Multimedia and Hypermedia; Journal for Universal Computer Science; Multimedia Systems; Multimedia Tools and Applications

RECENT (Selected):

Program chair, 1999 Virginia Internet Week, Blacksburg, VA, September 13-17, 1999
Program chair, ACM Digital Libraries '99, Berkeley CA, August 11-14, 1999; ACM Digital Libraries '96, Bethesda MD, 3/20-23/96; ACM SIGIR '95, Seattle WA, 7/9-13/95
Member: OCLC Research Advisory Council; SIGIR Education Committee, SIGMM Education Committee (co-chair); Networked CS Technical Reference Library (NCSTRL, <http://www.ncstrl.org>) working group
Chair, ACM SIGIR (Special Interest Group on Information Retrieval), 1991-95
Vice Chair, ACM SIGIR (Special Interest Group on Information Retrieval), 1987-91
Editor-in-chief ACM Press Database and Electronic Products, 1988-91
Founder/Chair ACM: DL Conf. Steering Comm., 1995-98; Multimedia Conf. Steering Comm., 1992-94
Program committee member: ACM DL 1996-2000; ACM Multimedia '93-96, 98-99; ACM SIGIR '89-00; ASIS 1999 Midyear; CIKM'99-00; CoLIS 3 (1999); ICON'99; ICSC'99; MIS'99; ...

GRANTS/CONTRACTS: Over 60 proposals funded for over \$8M since 1983, with ETD related ones:

NSF: Open Archives: Distributed services for physicists and graduate students (OAD), \$315,259 for 9/1/2000 – 8/31/2003. Project director: E. Fox, with co-PI R. Zia (and DFG support of German portion led by E. Hilf, U. Oldenburg).
NSF: Core Research for the Networked University Digital Library (NUDL), \$79,997 for 4/1/2000-3/31/2002. Project director: E. Fox.
IBM: SUR Program Equipment Donation valued at approximately \$120K for various computers for digital library research, Fall 1998. Project director: E. Fox.
OCLC: SiteSearch software license: \$50,000 for 1997-1999 for electronic thesis and dissertation research. Project director: E. Fox.
IBM: SUR Program Equipment Donation valued at approximately \$400K for various computers for digital library research, Dec. 1996. Project director: E. Fox.
U.S. Dept. of Education, FIPSE Program P116B61190: Improving Graduate Education with a National Digital Library of Theses and Dissertations: \$208,040 for 9/1/96-8/31/99. Principal investigators: E. Fox, J. Eaton, G. McMillan. In-kind cost sharing by SURA, and supporting software donations from Microsoft and Adobe, worth over \$200K.
SURA: Development and Beta Testing of the Monticello Electronic Library Thesis and Dissertation Program: \$90,117 for 1/1/96 - 12/31/97. Principal investigators: E. Fox, J. Eaton, G. McMillan.
National Science Foundation CISE Grant NSF-CDA-9308259: Wide Area Technical Report Server: \$22,736 for 1993. Principal investigators: K. Maly (ODU), E. Fox, J. French (UVA), and A. Selman (SUNY Buffalo). Awarded to Maly (ODU) with \$4200 subcontract to VPI&SU.

TUTORIALS: Over 35: digital libraries, hypertext, information retrieval, multimedia, ...

ORAL PRESENTATIONS: Over 150 besides those with publications

PUBLICATIONS AND PRESENTATIONS (Selected):

- E. Fox, Joseph M. Moxley, and Christian R. Weisser, eds., *The ETD Sourcebook: Theses and Dissertations in the Electronic Age*, in preparation for publication late 2000 or early 2001
- The 5S Framework for Digital Libraries and Two Case Studies: NDLTD and CSTC, NIT99, Taipei, Taiwan, Aug. 18, 1999
- Constantinos Phanouriou, Neill Kipp, Ohm Sornil, Paul Mather, and Edward A. Fox, *A Digital Library for Authors: Recent Progress of the Networked Digital Library of Theses and Dissertations*, in *Proceedings ACM Digital Libraries '99*, Berkeley, CA, Aug. 11-14, 1999.
- Electronic Theses, Dissertations, and Courseware. Sole keynote for 15th Workshop on Digital Library (DLW15), Nara Inst. for Sci. Tech. (NAIST), Japan, July 19, 1999
- From Theory to Practice in Digital Libraries: 5S and Educational Applications (NDLTD, CSTC), Keynote at NSF-CONACyT Workshop on Digital Libraries, Albuquerque NM, July 7-9, 1999
- G. Marchionini and E. Fox. Progress toward digital libraries: augmentation through integration. Guest editors' introduction to Special Issue: Progress Toward Digital Libraries, *Information Processing & Management*, 1999, 35(3): 219-225.
- Rekha Kengeri, Cheryl D. Seals, Hope D. Harley, Himabindu P. Reddy, Edward A. Fox: Usability study of digital libraries: ACM, IEEE-CS, NCSTRL, NDLTD. *Int J Digit Libr* 2 (1999) 2/3, 157-169, <http://link.springer.de/link/service/journals/00799/bibs/9002002/90020157.htm>
- E. Fox, G. McMillan, J. Eaton, "The Evolving Genre of Electronic Theses and Dissertations", in *Proceedings Digital Documents Track of HICSS-32, Thirty-second Annual Hawaii International Conference on Systems Sciences (HICSS)*, Maui, HI - January 5-8, 1999
<http://scholar.lib.vt.edu/theses/presentations/Hawaii/ETDgenreALL.pdf>
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- J. Powell and E. Fox. Multilingual Federated Searching Across Heterogeneous Collections, *D-Lib Magazine*, Sep. 1998, <http://www.dlib.org/dlib/september98/powell/09powell.html>
- Networked Digital Library of Theses and Dissertations: A Framework for East-West Collaboration, keynote talk, Proc. First Asian Digital Library Workshop, "East meets West," August 5-7, 1998, Hong Kong, hosted by University of Hong Kong. <http://www.ndltd.org/talks/Asia.htm>
- Digital Libraries: The Networked Digital Library of Theses and Dissertations (NDLTD) and the Computer Science Teaching Center (CSTC). Keynote for Computer Science Workshop, sponsored by CONACyT and NSF, Puebla, Mexico, June 10-12, 1998.
<http://www.ndltd.org/talks/CONACyTNSF.pdf>, <http://www.ndltd.org/talks/CONACyTNSF.ppt>
- E. Fox and G. Marchionini. Toward a Worldwide Digital Library. Guest Editors' Introduction to special section (pp. 28-98) on Digital Libraries: Global Scope, Unlimited Access. *Commun. of the ACM*, Apr. 1998, 41(4): 28-32. <http://purl.lib.vt.edu/dlib/pubs/CACM199804>
- E. Fox. "Update on the Networked Digital Library of Theses and Dissertations (NDLTD)." In Proc. 35th Annual Clinic on Library Applications of Data Processing, GSLIS 98, DPC98, U. Illinois Urbana-Champaign, March 22-24, 1998, ISSN 0069-4789, <http://edfu.lis.uiuc.edu/dpc98/>
- E. Fox. "A Scalable Digital Ecology for a Networked Digital Library of Theses and Dissertations (NDLTD)." Winter Workshop of the Human-Computer Interaction Consortium (HCIC), Fraser, Colorado, March 4-8, 1998
- E. Fox. Networked Digital Library of Theses and Dissertations: An International Collaboration Promoting Scholarship. ICSTI Forum, Quarterly Newsletter of the International Council for Scientific and Technical Information, No. 26: 8-9, Nov. 1997. <<http://www.icsti.nrc.ca/icsti/>>
- E. Fox, Robert Hall, Neill A. Kipp, John L. Eaton, Gail McMillan, and Paul Mather. NDLTD: Encouraging International Collaboration in the Academy. In Special Issue on Digital Libraries, *DESIDOC Bulletin of Information Technology (DBIT)*, 17(6): 45-56, Nov. 1997.
- E. Fox, R. Hall, and N. Kipp. NDLTD: Preparing the Next Generation of Scholars for the Information Age. *The New Review of Information Networking (NRIN)*, 3: 59-76, 1997.

- E. Fox, J. Eaton, G. McMillan, N. Kipp, P. Mather, T. McGonigle, W. Schweiker, and B. DeVane. Networked Digital Library of Theses and Dissertations: An International Effort Unlocking University Resources. *D-Lib Magazine*, Sep. 1997.
- J. Eaton, E. Fox, G. McMillan. Electronic Theses and Dissertations (ETDs) and Their Contribution to Graduate Education. *Proc. 53rd Annual Meeting Midwestern Association of Graduate Schools, MAGS*, 1997, 73-78
- E. Fox. Digital Libraries and Virtual Universities, invited presentation for "Information research for designing and planning virtual universities" Seminar at Centro Universitario de Investigaciones Bibliotecolgicas Universidad Nacional Autnoma de Mexico Cd. Universitaria, Mexico, D.F. (Library and Information Research Center, National University of Mexico), Aug. 11-15, 1997, <http://fox.cs.vt.edu/talks/Mexico97.html>
- M. Kirschenbaum, E. Fox. 1997. Electronic Theses and Dissertations in the Humanities. In *Proc. Joint Annual Conf. of the Association for Computers and the Humanities and the Association for Literary and Linguistic Computing, ACH-ALLC'97*, June 3-7, 1997, Queen's Univ., Kingston, Ontario.
- E. Fox, J. Eaton, G. McMillan, N. Kipp, L. Weiss, E. Arce, S. Guyer. National Digital Library of Theses and Dissertations: A Scalable and Sustainable Approach to Unlock University Resources. *D-Lib Magazine*, Sep. 1996.
- S. Chen and E. Fox. Guest Editors' Introduction to Special Issue on Digital Libraries, *Journal of Visual Communication and Image Representation*, 7(1), March 1996, Academic Press.
- E. Fox and L. Kieffer. Multimedia Curricula, Courses and Knowledge Modules. *ACM Computing Surveys*, Dec. 1995, 27(4): 549-551.
- E. Fox, R. Akscyn, R. Furuta, and J. Leggett. Guest Editors' Introduction to Digital Libraries. *Commun. ACM*, Apr. 1995, 38(4):22-28
- E. Fox. World-Wide Web and Computer Science Reports. *Commun. ACM*, Apr. 1995, 38(4): 43-44.
- J. French, E. Fox, K. Maly, and A. Selman. Wide Area Technical Report Service --- technical reports online. *Commun. of the ACM*, Apr. 1995, 38(4):45.
- L. Heath, D. Hix, L. Nowell, W. Wake, G. Averboch, and E. Fox. Envision: A User-Centered Database from the Computer Science Literature. *Commun. of the ACM*, Apr. 1995, 38(4):52-53.
- E. Fox. Digital Libraries ("hot topics" section), *IEEE Computer*, Nov. 1993, 26(11): 79-81.
- E. Fox and L. Lunin. Introduction and Overview to Perspectives on Digital Libraries. *J. American Society for Info. Science (JASIS)*, Sept. 1993, 44(8): 441-443. (Guest editor's intro. to special issue)
- E. Fox, D. Hix, L. Nowell, D. Brueni, W. Wake, L. Heath, and D. Rao. Users, User Interfaces, and Objects: Envision, a Digital Library. *JASIS*, Sept. 1993, 44(8): 480-491.
- E. Fox. Advances in Interactive Digital Multimedia Systems. *IEEE Computer*, Oct. 1991, 24(10): 9-21. Also in *Readings in Groupware and Computer Supported Cooperative Work*, ed. Ron Baecker, Morgan Kaufmann, San Mateo, CA, 1993, 342-354 and Ch. 1 of *Multimedia Computing: Preparing for the 21st Century*, ed. Sorel Reisman, Idea Group Publishing, Harrisburg, PA, 1994, 3-33.
- E. Fox. Standards and the Emergence of Digital Multimedia Systems. *Commun. of the ACM*, Apr. 1991, 34(4):26-29. Guest ed. intro., Special Section on Digital Multimedia.
- E. Fox. How to Proceed Toward Electronic Archives and Publishing. *Psychological Science*, Nov. 1990, 1(6): 355-8.
- E. Fox. The Coming Revolution in Interactive Digital Multimedia Systems. *Commun. of the ACM*, 1989, 32(7): 794-801. Guest ed. intro. Spec. Section on Interactive Technologies.

Gail McMillan
Associate Professor, University Libraries
Virginia Polytechnic Institute and State University
Director, Digital Library and Archives
including Scholarly Communications and Special Collections

EDUCATION

MLS University of Maryland, College Park, 1981
MA University of Maryland, College Park, 1981
BA University of California, Riverside, 1972

RECENT EMPLOYMENT

University Libraries, Virginia Polytechnic Institute and State University
Associate Professor, 1993 to date; Assistant Professor, 1986-1993; Instructor, 1982-1986

July 1999 to date	Director, Digital Library and Archives
July 1995 to date	Head, Special Collections Department
Jan. 1994 to date	Director, Scholarly Communications Project
Oct. 1991-Aug. 1994	Team Leader, Serials Cataloging/Maintenance
Dec. 1986-Sept. 1991	Team Leader, Online Maintenance, Bibliographic Svcs.
July 1985-Dec. 1986	Interim Head, Bibliographic Svcs. Dept.
Jan. 1983-July 1985	Coordinator, Serials Retrospective Conversion Project
Aug.-Dec. 1982	Assistant Serials Cataloger, Serials Department
Jan.-July 1982	Library Clerk, Special Collections Division

Smithsonian Archives, Washington, D.C.
Jan.-Dec. 1981 Assistant Archivist

University of Maryland, College Park, McKeldin Library, Special Collections Department,
Oct. 1979-Jan. 1981 Graduate Student Assistant

University of Oregon Library, Eugene, Special Collections Division,
Aug. 1977-July 1979 Library Administrative Assistant,

SELECTED PUBLICATIONS: DIGITAL EIBRARIES AND *ELECTRONIC THESES AND DISSERTATIONS*

McMillan, Gail. "The Digital Library: Without a soul can it be a library?" *Books and Bytes: Technologies for the Hybrid Library*, Victoria Association for Library Automation, Melbourne: VALA, 2000: p. 255-271.
<http://www.vala.org.au/vala2000/2000pdf/McMillan.PDF>

McMillan, Gail. "Managing Digital Content: The Scholarly Communications Project," invited chapter in *The Evolving Virtual Library II: Practical and Philosophical Perspectives*, edited by Dr. Laverna M. Saunders, Medford, NJ: Information Today, 1999 (39-60).

McMillan, Gail. "[Digital] Libraries Support [Distributed] Education" in *Racing Toward Tomorrow: Conference Proceedings Association of College and Research Libraries 9th National Conference*, Washington, DC: ARL, 1999. <http://www.ala.org/acrl/mcmill.html>

*McMillan, Gail, with Ed Fox, John Eaton. "Evolving Genre of Electronic Theses and Dissertations" *32nd Hawaii International Conference on System Sciences*, 1999, <http://dlib.computer.org/conferen/hicss/0001/pdf/00012004.pdf>

*McMillan, Gail, ed. advisor. George J. Soete. *Transforming Libraries 7: Issues and Innovations in Electronic Theses and Dissertations*, Association of Research Libraries, October 1998,

McMillan, Gail. "Libraries Address the Challenges of Asynchronous Learning," *Journal of Asynchronous Learning*, Vol. 2, issue 1, March 1998; with Joanne Eustis.
http://www.aln.org/alnweb/journal/vol2_issue1/eustis.htm

*McMillan, Gail. "Electronic Theses and Dissertations: Merging Perspectives," invited chapter in *Electronic Resources: Selection and Bibliographic Control*, Pattie, Ling-yuh W. (Miko), and

- Bonnie Jean Cox, eds. New York: Haworth, 1997 (105-125). [Simultaneously published in Cataloging and Classification Quarterly, 22(3/4)]
- McMillan, Gail. "A New Service from Libraries: Electronic Publishing," in *Continuity & Transformation: The Promise of Confluence: Proceedings of the Seventh National Conference of the Association of College and Research Libraries*, Richard AmRhein, ed. Chicago: ACRL, 1995; p. 257-266). [Based on a paper presented for "Technology and the Service-Centered Library," March 30, 1995, Pittsburgh]
- McMillan, Gail. "Scholarly Communications Project: Publishers and Libraries," *Filling the Pipeline and Paying the Piper: Scholarly Publishing on the Electronic Networks*, Washington, D.C.: ARL, 1995; p. 135-145. (Based on a paper presented for "In the Scholarly Pipeline" at the fourth symposium of the ARL/AAUP, Nov. 6, 1994, Washington, D.C.)

SELECTED INVITED PRESENTATIONS DIGITAL EIBRARIES AND ETDs

- McMillan, Gail. "Open Archives Initiative" for the Society for Scholarly Publishing annual conference: "Back to the Future: Publishing for the Third Millennium," June 1, 2000, Baltimore, Md. <http://scholar.lib.vt.edu/presentations/SSP/OIA4SSP.pdf>
- McMillan, Gail. "The digital library - without a soul can it be a library?" plenary presentation at Books and Bytes: Technologies for the Hybrid Library, VALA 2000 Conference (Victorian Association for Library Automation, Melbourne, Australia), Feb. 17, 2000 <http://scholar.lib.vt.edu/staff/gailmac/presenations/DL4VALA.pdf>
- *McMillan, Gail, with Len Peters. "ETDs: Practical, Operational, and Technical Issues for Universities Implementing Electronic Theses and Dissertations," Conference on Preservation and Access for Electronic College and University Records, Mesa, Arizona (Arizona State University: sponsor) Oct. 8, 1999 <http://scholar.lib.vt.edu/staff/gailmac/presentations/ArizonaETDs.pdf>
- *McMillan, Gail. "Perspectives on Electronic Theses and Dissertations" for New Frontiers in Grey Literature: 4th International Conference, Kellogg Center, Gallaudet University, Washington, D.C., Oct. 4, 1999. <http://scholar.lib.vt.edu/staff/gailmac/presenations/GL99ETDslides.pdf>
- *McMillan, Gail. "What to Expect from ETDs: If you build it, they will use it." <http://scholar.lib.vt.edu/staff/gailmac/presentations/CWRUGMc1.pdf>
"What to Expect from ETDs: Library Issues and Responsibilities" <http://scholar.lib.vt.edu/staff/gailmac/presentations/CWRUGMc2.pdf>
for Case Western Reserve University, Digital Library Symposium, Sept. 21-21, 1999
- McMillan, Gail. "Using Technology for Distributed Education: The Library" for the National Communication Association Summer Conference: Communication and Technology, Northern Virginia Center, July 22, 1999 <http://scholar.lib.vt.edu/staff/gailmac/presentations/NCA3ppt.pdf>
- *McMillan, Gail. "Electronic Theses and Dissertations: Eliminating Borders" for the 1999 Rare Books and Manuscripts Conference: Border Crossings: Exploring New Territories for Special Collections, June 22, 1999, McGill University, Montreal, Quebec, Canada
- *McMillan, Gail. "Theses and Dissertations in the Digital Library" CNI Spring 1999 Task Force Meeting, Washington, DC, April 26, 1999, with Ed Fox.
- McMillan, Gail. "Put the Library in Digital Library," keynote for the Association of College and Research Libraries' biennial conference, *Racing Toward Tomorrow*, Detroit, April 9, 1999. <http://scholar.lib.vt.edu/staff/gailmac/presentations/ACRLppt.pdf>
- McMillan, Gail. "Libraries as Scholarly Publishers" for University of Tennessee at Knoxville's Electronic Academy March 24, 1999.

- *McMillan, Gail. "Progress toward the Networked Digital Library of Theses and Dissertations" for the ACRL Science and Technology Section, at the American Library Association Midwinter Conference, Jan. 10, 1998.
- *McMillan, Gail. "Evolving Genre of Electronic Theses and Dissertations" for the 32nd Hawaii International Conference on System Sciences, Maui, Jan. 7, 1999. (based on proceedings prepared with Ed Fox and John Eaton)
<http://scholar.lib.vt.edu/theses/presentations/Hawaii/ETDgenreALL.pdf>
- McMillan, Gail. "Library Services and Resources for the University Community" for the Strategie sur la bibliotheque virtuelle dans le contexte actuel: Séminaire résidentiel de formation à l'intention de directeurs de grandes bibliothèques suisse, Jongny, Switzerland, Oct. 23, 1998. <http://scholar.lib.vt.edu/staff/gailmac/presentations/SEBIB/Libs4Suisse.pdf>
- McMillan, Gail. Digital Libraries in Practice: Issues and Ideas: VT's Scholarly Communications Project for the Digital Library Research Group
(<http://www.wam.umd.edu/~tsetony/DLWorkshop.html>), College of Library and Information Services, University of Maryland College Park, March 25, 1998.
- *McMillan, Gail. "Digital Dissertations: The Virginia Tech Initiative" for Issues in Science and Technology Librarianship, American Library Association Midwinter, New Orleans, Jan. 10, 1998.
- McMillan, Gail, with Joanne Eustis. "Technology Initiatives and Organizational Change: Higher Education in a Networked World," CAUSE '97, Orlando, Florida, Dec. 4, 1997.
- McMillan, Gail, with Joanne Eustis. "Libraries Address the Challenges of Asynchronous Learning," for the 3rd International Conference on Asynchronous Learning Networks, New York, Oct. 1997.
- McMillan, Gail. "Electronic Journals from a Scholarly Communications Point of View" for the Legal Periodicals Past and Future: annual conference of the American Association of Law Libraries, July 20, 1997, Baltimore, MD
- *McMillan, Gail. "Electronic Theses and Dissertations: Unlocking Access to Graduate Research" for the Teaching and Learning in Cyberspace: CAUSE/CNI Southeast Regional Conference, Sept. 12, 1996, Roanoke VA
- McMillan, Gail. "Developing Digital Libraries" for the Networked Information: Challenges and Solutions: CAUSE/CNI Northeast Regional Conference, with David Seamans (UVa EText Center), May 30, 1996, Philadelphia, PA
- McMillan, Gail. "Scholarly Communications: A Digital Library in the Changing Academy" *Electronic Library: Administrative Issues for Organization & Access Institute*, ALA/ALCTS, April 26, 1996, Boston, Mass.
- McMillan, Gail. "A New Service from Libraries: Electronic Publishing" *Continuity and Transformation--The Promise of Confluence*, 7th ACRL National Conference, Mar. 30, 1995, Pittsburgh
- McMillan, Gail. "The Scholarly Communications: Publishers and Librarians" *Scholarly Publishing on the Electronic Networks--Filling the Pipeline and Paying the Piper*: ARL/AAUP Conference, Nov. 6, 1994, Washington, D.C.
- McMillan, Gail. "From Virtual Libraries to Working Reality: The Challenge to Just Do It!" *Electronic Library: Administrative Issues for Organization & Access Institute*, ALA/ALCTS, Oct. 29-30, 1994, San Antonio, Tex.

RECENT PARTICIPATION IN PROFESSIONAL ORGANIZATIONS

ALCTS: Association for Library Collections and Technical Services, ALA

- Electronic Library: Administrative Issues for Organization and Access Institute: Feb. 1993-Jan. 1996: Planning Committee
- Scholarly Communications Committee: Oct. 1991-July 1995

- Electronic Library: Administrative Issues for Organization and Access Institute:
Feb. 1993-Jan. 1996: Planning Committee
Oct. 29-30, 1994, San Antonio, Institute Moderator
May 1996, Boston, Institute Faculty member
 - Serials Cataloging in the Age of Format Integration Institute
Planning Committee, June 1994-Dec. 1995
- ASERL: Association of Southeastern Research Libraries:
Committee on Electronic Archives: October 1996 to 1998
Committee on Special Collections: December 1996 to 1998
- CAUSE/CNI Southeast Regional Conference, workshop organizer, Sept. 11, 1996
"VT Scholarly Communications," a half-day preconference at the New Media
Center, Newman Library, Virginia Tech
- CONSER: Cooperative Online Serials, Library of Congress
Electronic Resources Task Force: July - December 1995
- MARAC: Mid-Atlantic Regional Archives Conference, 1995 to date
Panel organizer and moderator, 1997 annual meeting
"Archives Online: Regional Projects"
- OCLC: Online Computer Library Center
Resource Sharing Advisory Committee: July 1993 - June 1996
- Society for Scholarly Publishing, Program Planning Committee, 1999/2000
Panel organizer and moderator, 2000 annual conference, June 1-2:
"Library Collection and Access Issues in the Third Millennium"
<http://scholar.lib.vt.edu/presentations/SSP/CollAssessPanel/CollAssess.pdf>
"Archiving Digital Content"
<http://scholar.lib.vt.edu/presentations/SSP/ArchivingPanel/ArchivPnl.pdf>

John L. Eaton

Present Position: Associate Provost for Graduate Studies and Professor of Entomology

Professional Preparation

Undergraduate

University of Illinois, Urbana, B. S., Entomology, 1962.

Graduate

University of Illinois, Urbana, Ph.D. Entomology, 1966.

Appointments:

Virginia Tech

Associate Provost for Graduate Studies 1995-Present

Acting Dean of the Graduate School 1992-1993

Associate Dean of the Graduate School, 1988-1995

Professor of Entomology, 1987-Present

Associate Professor of Entomology, 1976-1986

Assistant Professor of Entomology, 1969-1974.

Kalamazoo College

Assistant Professor of Biology, 1966-1969

Publications:

Eaton, J. L. Fox, E.A. and McMillan, G. 1998. The Role of Electronic Theses and Dissertations in Graduate Education. The Council of Graduate Schools Communicator. 31: (1). Page 1.

Eaton, J. L. 1971. Insect photoreceptor: An internal ocellus is present in sphinx moths. Science 173: 822-823.

Dickens*, J. C. and J. L. Eaton. 1973. External ocelli are present in many Lepidoptera previously considered to be anocellate. Nature 242: 205-207.

Eaton, J. L. 1983. Identification of dorsal ocellar primordia in larvae of *Trichoplusia ni* (Lepidoptera: Noctuidae). Ann. Entomol. Soc. Am 75: 884-886.

Summary: Books 1, Book Chapters 1, Refereed Publications 37, Symposia Proceedings 1, Teaching Publications 2, Book reviews 1.

Synergistic Activities

Responsibilities of the Associate Provost for Graduate Studies:

Promoting graduate programs;

Guidance of the graduate admissions and plans and clearances process;

Implementing , reviewing and improving policies and procedures related to maintaining quality graduate programs;

Serve as liaison between the graduate students and the university to enhance the quality of their graduate school experience.

Work through the Council of Graduate Schools and the Conference of Southern Graduate Schools to advance graduate education in the southeast and the nation.

Activities Specific to the Electronic Thesis and Dissertation (ETD) Project:

Participant or leader for in numerous informational presentations to CNI, the SURA Monticello library project, the Council of Graduate Schools and the Conference of Southern Graduate Schools and at U.S. Universities.

Leader for the Graduate School at Virginia Tech to develop and promote the ETD concept. Provided leadership to get the ETD proposal approved by the Graduate School administration and the Commission on Graduate Studies and Policies.

Currently leading the organization of ETD training workshops for Virginia Tech graduate students.

Collaborators and Other Affiliations

i. Collaborators:

Edward Fox, Professor of Computer Science, Virginia Tech

Gail McMillan, Associate Professor, Library, Virginia Tech

ii. Graduate Advisor

James G. Sternburg, Professor of Entomology (Ret) University of Illinois, Urbana

iii. Advisees and Post Docs

Member 32 M.S. Committees, 1969-1988

Member 33 Ph.D. Committees, 1969-1988

Major Professor for 4 M.S. students.

Major Professor for 4 Ph.D. students

Advisor for two Post Docs Abt. 1976

JOSEPH M. MOXLEY

moxley@chumal.cas.usf.edu | <http://etd.eng.usf.edu/moxley>

Summary

Moxley's [current research and scholarship](#) examines the effects of information technologies on academic scholarship. He is working with his academic colleagues and education leaders to research ways to facilitate electronic theses and dissertations. Moxley has published nine books: four books on scholarly publishing and the academic reward system; one edited book on ethnography; one edited book on teaching creative writing; two books on legal writing; and one college-level rhetoric. His essays have appeared in numerous publications, including *College Composition and Communication*, *Innovative Higher Education*, and *College Teaching*. Moxley has authored successful grant proposals, including a three-year grant from the Department of Education to develop learning communities at USF. He [teaches](#) graduate courses in pedagogy, research methods, computers and composition, and composition theory. At the undergraduate level, he teaches technical and academic writing. He is the recipient of three undergraduate awards for excellence in teaching. Moxley serves as a writing coach for professional organizations and university faculty, offering workshops on academic writing, grant writing, writing across the curriculum, learning communities, and tools for writers. His academic clients include the Universite d'Artois (in Bethune, France); the Ana G. Mendez University System in Puerto Rico; the Bowman Gray College of Medicine at Wake Forest University; the University of Memphis; the University of Puerto Rico College of Medicine; Professional Organizational Development Network; and Stetson University College of Law. His business clients include the American Bar Association, the Utah Bar Association, KPMG Peat Marwick, and Bausch and Lomb Pharmaceuticals.

Education

Ph.D., SUNY at Buffalo, Educational Research and Evaluation, 1984
M.A., SUNY at Buffalo, Creative Writing, 1980
B.A., University of Utah, Creative Writing, 1978
B.A., University of Utah, Psychology, 1978

Related Administrative Experience

Project Director, USF and Microsoft ETD Pilot Research Project (5/99--present), <http://etd.eng.usf.edu>

Director, Center for NewMediaWriting.Org

Conference Director, Third International Symposium on ETDs: Applying New Media to Scholarship (3/2000)

Chair, USF Task Force on ETDS, USF (1/97-present)

Project Director, USF Flexible Learning Community Model (8/96-8/99) (<http://www.usf.edu/~lc>)--a FIPSE-sponsored project under Rosemary Wolfe

Related Publications

Books in Process

Fox, Ed, Weisser, Christian, and Moxley, Joseph M. *Electronic Theses and Dissertations Sourcebook*.
Moxley, Joseph M. *A Field Guide to Research*. (Under contract with Allyn & Bacon)
Moxley, Joseph M. *Becoming an Academic Writer: A Modern Rhetoric* (Working on a revision)

Articles Submitted for Publication

Moxley, Joseph M. "New Media Scholarship: A Call for Research."
Moxley, Joseph M. "Academic Scholarship in the Digital Age."
Moxley, Joseph M. Digital Dances: New Media Theses and Dissertations (an ethnography)

Related Books Published

Edited Books:

Moxley, Joseph M. and Todd Taylor, eds. *Writing and Publishing for Academic Authors, Second Edition*. Lanham, Maryland: Rowman & Littlefield Publishers, Inc., 1996.
Moxley, Joseph M. and Lagretta T. Lenker, eds. *The Politics and Processes of Scholarship*. Greenwood. Westport, CT: Greenwood Publishing Group, 1995.

Authored Books:

Moxley, Joseph M. *Becoming an Academic Writer: A Modern Rhetoric*. Lexington, MA: D.C. Heath, 1994.
Moxley, Joseph M. *Writing and Publishing for Academic Authors*. Lanham, MD: University Press of America, 1992. (Also published as a UPA paperback.)
Moxley, Joseph M. *Publish, Don't Perish: The Scholar's Guide to Academic Writing & Publishing*. Westport, CT: Greenwood Publishing Group, 1992. (Also published as a Praeger paperback.)

Articles Published

Moxley, Joseph M. "Academic Scholarship in the Digital Age". *On the Horizon*
Moxley, Joseph M. "Using MOOs to Develop Learning Communities." *Letter to the Editor. The Technology Source.* February 1999.
Moxley, Joseph M. "Finding Our Inner Voices: Rediscovering Scholarship." *Innovative Higher Education*. 20:3 (Spring 96): 183-200.

Articles Reprinted

Moxley, Joseph M. "Responding to Student Writing: Goals, Methods, Alternatives." *Freshman English News* 17 (Spring 1989): 3-4; 9-11. Reprinted in *The Holt Handbook, Third Edition. Annotated Instructor's Edition*. 31-36. Ft. Worth, Texas: Holt, Rinehard and Winston, Inc., 1992.

Related Papers Delivered at Professional Conferences

Moxley, Joseph M. and Jude Edminster. "What's After WAC: Electronic Theses and Dissertations." Association for Computers and Writing. http://www.eaze.net/~dene/cw2k_grid2.html, 5/23/2000.

Moxley, Joseph M. and Jude Edminster. "Working Collaboratively Online to Create Electronic Theses and Dissertations." Conference on College Composition and Communication. April 15, 2000.

"Beyond PDF: Publishing Standards for Preservation." Networked Digital Library of Theses and Dissertations National Conference. Virginia Tech, 5/17/99.

"Training Graduate Students to Create ETDs." Networked Digital Library of Theses and Dissertations National Conference. Virginia Tech, 5/17/99.

"MacGregor, Jean, Joe Moxley, and Judith Summerfield. "Learning Communities as a Context for Change." Invited Presentation. FIPSE 26th Annual Project Directors' Meeting. Washington, D.C. 10/24/98.

"The Effect of ETDs on the Academic Climate of Research Universities." 14th Computers and Writing Conference. Gainesville, FL 5/28-5/31/98.

"Interdisciplinary Innovations: Scientific and Historical Literacies." Invited Presentation. Ninth International Conference on College Teaching and Learning. Jacksonville, FL 4/15-4/18/98.

"Electronic Scholarship: Breaking with Precedent or Continuing the Tradition?" Conference on College Composition and Communication. Chicago, Illinois, 4/3/98.

CURRICULUM VITAE

Name: Marian Elizabeth BATE Msc DipLib AALIA

Position: Principal Librarian

Address: UNSW Library
The University of New South Wales
UNSW SYDNEY 2052
AUSTRALIA

Telephone: 61 2 9385 2662

E-mail: m.bate@unsw.edu.au

Fax: 61 2 9385 8002

EDUCATIONAL QUALIFICATIONS

1972 Diploma in Librarianship (University of New South Wales)

1968 Master of Science (Pharmacology) (University of Sydney)

1966 Bachelor of Science (University of Sydney)

Other qualifications:

1987 Train the trainers (Australian Information Management Association)

1991 Myers-Briggs Type Indicator Training and Accreditation Program
(Australian Psychologists Association)

EMPLOYMENT

Current: October 1995 –

Position: Principal Librarian

Employer: The University of New South Wales

Responsibilities: The leadership, management and operation of the University Library

- approximately 200 staff
- collection of 2 million items, including 5,500 electronic serials
- total budget over \$18 million

February 1994 - July 1995

Position: Acting University Librarian

Employer: The University of New South Wales

May 1992 – October 1995

Position: Manager (Information Technology)

Employer: The University of New South Wales Library

September 1988 - May 1992

Position: Associate Librarian (Information Services)

Employer: The University of New South Wales Library

March 1987 - July 1987

Position: Acting Reader Services Librarian

Employer: The University of New South Wales Library

May 1977 - September 1988

Position: Physical Sciences Librarian

Employer: The University of New South Wales Library

January 1975 - May 1977

Position: Chief Librarian (Class 3)

General Science and Technology Section

Employer: National Library of Australia

July 1974 - January 1975

Position: Librarian, Class 2

BIOSIS Section

Employer: National Library of Australia

January 1973 - July 1974

Position: Librarian, Class 1

MEDLARS Section

Employer: National Library of Australia

1969

Position: Teaching Fellow

Employer: Pharmacology Department
University of Sydney

PROFESSIONAL ACTIVITIES

Project Leader, Australian Digital Theses Project 1998-

Project Leader, Management of Access to Networked Information Resources Project, 1999 –

Project Leader, MetaChem: a chemistry gateway 1998 –

Project partner, AVEL: an engineering gateway 1999-

Member of Kinetica Advisory Committee 1997 –
(Currently Deputy Chair of this national Committee)

Member of review panel for University of Adelaide Libraries June 2000

Facilitator for development of the AIMA Training and Consultancy Ltd 's strategic plan. Canberra, February 1995

Member of Council for Australian University Librarians (CAUL) 1994 -

Member of Executive Committee, CAUL 1996-99

Member of UNISON (Committee of NSW University Librarians) 1994 –

Member of Executive committee, UNISON 1996-99

Chair, COFA Library Review Committee. 1994

President of the AIMA Board 1992-1993

(A major task during my presidency was the drawing up of a Heads of Agreement with the National Library of Australia and the transfer of AIMA to the ACT as a non-profit company reporting to the Council of the National Library of Australia.)

Member of the AIMA Board 1992 -

Member of the National Taskforce on Conspectus 1989

(Contributed to:

National Task Force on Conspectus (Australia). *The Australian conspectus. Final report.* Canberra, Australian Council of Libraries and Information Services (ACLIS), December 1989.)

Member of the Information Online Conference Program Committee, 1986-87

Member of the LAA Information Science Section Committee 1986-88

(As a member of this Committee I was actively involved in the organisation of a number of IT related seminars, e.g. communications software)

Member of AUSINET Technical Subcommittee 1981

Co-founder of the NSW Online Users Group 1978

Member of the LAA/ALIA including the University and College Libraries Section, Information Science Section and Serials Special Interest Group 1973 -

Management trainer

AIMA trainer 1991 -

AIMA co-trainer 1987 - 1991

As an AIMA trainer and co-trainer, I have been involved in the design of the management courses and have either been the presenter or co-presenter of the following courses:-

AIMA Basic Management Institute (3-3.5 days)

AIMA Advanced Management Institute (5 days)

Management for Special Librarians

Conflict Management

Change Management and Risk-taking

Conspectus (initially with Jeff Gardner from the Association of Research Libraries (USA))

Performance Measurement (with Professor Nancy Van House, then Dean of Library Studies, University of California, Berkeley)

Train the trainers

In addition I was selected as the co-trainer for a number of inhouse management courses provided for the National Library of Australia and the State Library of NSW.

I have presented workshops in Sydney, Melbourne, Brisbane, Canberra, Christchurch (NZ) and Suva (Fiji).

PUBLICATIONS AND PRESENTED PAPERS

BATE, M. and PIPER, F. *UNSW Library examination papers imaging project*. Paper presented at *Seminar on the Application of Document Imaging Technology*. Sydney, Macquarie University, 16 February 1994.

BATE, M. *Accountability, collection management and Conspectus*. Australian library review 8(2), May 1991, pp.141-146

BATE, M. and CAMPBELL, J. *Basic and value-added services in academic libraries*. Paper presented at a meeting of the Australian Library and Information Association, University, College and Research Libraries Section (NSW). Sydney, State Library of NSW, 16 April 1991.

BATE, M. *The Distributed National Collection and the national document supply system*. Paper presented at *The Distributed National Collection Seminar*. Perth, 30 September 1990.

BATE, M. *Conspectus planning issues*. Paper presented at a seminar, *Issues in collection management*, held by Australian Library and Information Science Association, University, College and Research Libraries Group (Qld). Brisbane, Queensland Cultural Centre, 25 October 1989.

BATE, M. *Issues in serials automation*. Paper presented at *Attacking serials in 88*. UNSW, September 1988.

BATE, M. *OPACs and online bibliographical services: subject access and retrieval*. Paper presented at the LAA Cataloguers Section's Annual Seminar, Sydney, 7-8 October, 1983.
Published in:
Cataloguing Australia 9(4), December 1983, pp. 34-45

BATE, M. *Energy information retrieval*. ERDIC Annual Report. University of New South Wales, 1981, pp.16-23

BATE, M. *Online information retrieval in food science and technology*. Paper presented at the AIFST-NZIFST Joint Conference, University of New South Wales, June 1980.

BATE, M. *UNER file*. Poster paper and demonstration presented at the first Australian Institute of Energy Conference, University of Newcastle, 5-9 February, 1979.
Published in:
Energy sources - Australia's needs. Australian Institute of Energy First National Conference, University of Newcastle, 1979. Melbourne, Australian Institute of Energy, 1979. Volume 2. Public addresses and invited papers, pp.S1-S3.

BATE, M. *Studies on some beta adrenergic receptor blocking agents*. Paper presented at a meeting of the Australian Physiological and Pharmacological Society, Monash University, November, 1968.

BATE, M. *Studies on some new beta adrenergic receptor antagonists and the effect of Verapamil (Iproveratril) on smooth muscle adrenergic receptors*. Unpublished thesis. NSW, University of Sydney, 1968.

In addition, I have given guest lectures in the School of Library, Information and Archive Studies, notably on Conspectus.

Curriculum Vitae

José Luis Brinquete Borbinha

Name: José Luis Brinquete Borbinha
Birth: 28 May 1963 (Borba, Portugal)
Nationality: Portuguese
Address: Biblioteca Nacional
Direcção de Serviços de Inovação e Desenvolvimento
Campo Grande, 83
1749-081 Lisboa
Portugal
Phone: +351 1 7982083
Fax: +351 1 7982123
Email: Jose.Borbinha@bn.pt

José Borbinha received the Electrical Engineering degree in 1988 and the Msc. in Computers in 1991, both from the IST - *Instituto Superior Técnico* of the Lisbon Technical University, Portugal. He has been since 1992 a Senior Researcher of the Telematics Group at INESC - *Instituto de Engenharia de Sistemas e Computadores* (an Invited Researcher since October of 1998) and since 1991 a Lecturer of the Department of Informatics of IST.

In October of 1998 Jose Borbinha assumed position of Director for Innovation and Development of the National Library of Portugal. In this mission he has been the main direct responsible for all the information infrastructure of the National Library, as also for the new related projects and services.

Since the beginning of 1996 that he has been involved in the activities of the Digital Libraries Working Group of ERCIM - European Research Consortium for Informatics and Mathematics, namely in the DELOS Network of Excellency for Digital Libraries (an initiative initially supported by the Long Term Research Program of the European Commission, and actually supported by the Information Society and Technology Program). He was a member of the ERCIM/NSF Metadata Task Force, a joint initiative promoted in Europe and in the United States to address the research agenda for digital libraries, has been a member of the Advisory Committees of the DCMI - Dublin Core Metadata Initiative and NDLTD - Networked Digital Library for Thesis and Dissertations. He is also member of the technical working groups for CENL – Conference of European National Libraries, and Bibliotheca Universalis (a world-wide initiative promoted by IFLA).

In Portugal, José Borbinha is member of the Digital Libraries Task Force created in the following of the “Green Book for the Information Society” promoted by the Portuguese Government. The mission of this task force has been to work with the government agencies in order to propose a program for the development of the digital libraries in Portugal. In this context, is has been leading also the creation of the new Portuguese Special Interest Group on Digital Libraries.

José Borbinha was also member of the Commission for the Revision of the Legal Deposit Law, promoted by the Ministry of Culture during 1998. He was invited as a specialist in multimedia and digital publishing and as a specialist in Information Technology in general.

He is also a member of the Digital Libraries Working Group promoted by RUBI, the Network of Portuguese University Libraries. This group has been working in the development of a concept and development plan of a digital library for the Portuguese R&D community.

José Borbinha was a member of the Program Committee of the conference "Digital Libraries 99", promoted by ACM - Association for Computer Machinery), and also a member of the Program Committee and the Local Chair of ECDL2000, the "Fourth European Conference on Research and Advanced Technology for Digital Libraries" (to be held in Portugal in the year 2000).

José Borbinha is a member of the international organisations ACM, IEEE (The Institute of Electrical and Electronics Engineers) and ISOC (The Internet Society), as also a member of *Ordem dos Engenheiros*, (the Association of Portuguese Engineers).

Ana Pavani, D Sc

Electrical Engineer, Master of Engineering and Doctor in Science in Electrical Engineering. Associate Professor in the area of Systems and Automation of the Department of Electrical Engineering of the Pontifícia Universidade Católica do Rio de Janeiro (PUC-Rio), Brazil, since June of 1976.

Manager of the development of systems to be used in different areas. The systems range from higher education administrative systems to museum cataloging. Her current research and development interests are focused on digital collections (libraries, archives and museums) and distant education.

Experienced consultant for many public and private companies in Brazil, in the last 4 years she has presented more than 30 lectures on digital collections and distance learning.

Currently she manages LAMBDA – Laboratory for Automation and Digitization of Libraries, Museums and Archives of the EE Department of PUC-Rio.

Rio de Janeiro
July 2000

CURRICULUM VITAE

Name : **SHALINI R. URS**

Current Position : Professor & Chairperson

Office : Department of Library and
Information Science
University of Mysore,
Manasagangotri,
MYSORE - 570 006. INDIA
Telefax : +91-0821-514699 ;
518835
Mobile Phone:98451 12356

E.Mail : shaliniurs@hotmail.com

Residence : # 1515, 'DEV AALAYA'
Aniketana Road,
C&D Block, Kuvempunagara,
Mysore - 570 023.
Tel. (0821) 540033, 545002

Date of Birth : 12th December 1954

Marital Status : Married with two children
Ipsitha Pradayini and
Kushagra Dev

Husband : Prof. D. Shrijay Devaraj Urs,
IDS, University of Mysore,

Educational Qualifications : **B.Sc., M. Lib. Sc, PGDCA, Ph.D.**

B.Sc. - First Class - 1973
B.Lib-Sc. - I Rank - 1974
M.Lib.Sc. - II Rank - 1975
PGDCA - II Rank - 1988
Ph.D. - 1993

Professional & Research Experience :

Teaching Experience : 24 years of teaching at the
Post Graduate Level
As Lecturer-1976-1989, 13+yrs
As Reader -1989-1998,
As Professor-1998-Present

Administrative Experience

: 2 years as Chairperson,
Dept. of Library & Info. Sc.
(Nov. 93 - Nov. 95).

Awards & prizes won

- : * National Merit Scholarship
1970-1973
- * I Rank & B.N. Raju Gold Medal
for securing the highest
percentage of marks at the
B.Lib.Sc, 1974.
- * Karnataka Govt. Award, 1974.

Training/Visits Abroad :

1. **Invited as an expert** for the Unesco Workshop on Electronic Dissemination of Theses and Dissertations. Paris, Sept. 27 & 28, 1999.
2. Participated & presented a paper at the Fifth International Conference on Scientometrics & Informetrics, Rosary College, Illinois, USA, June 5-10, 1995.
3. Participated in the International Graduate Summer School, College of Librarianship. Wales, U.K. July - Aug 1981

Courses Offered : (i) Problems in Information Science 4 Credits - A grade
(ii) Library and the Computer

4. On the job training at the Centre for Scientific and Technical Information Tel Aviv. Israel April - June 1979. Visited several libraries and information centres in Israel

Visiting Professor :

1. Nov 1 - Dec 31 1998. D.R.T.C., Indian Statistical Institute, Bangalore.
2. Nov 1 - Nov 30 1999. D.R.T.C., Indian Statistical Institute, Bangalore.

Projects :

Completed

1. Member of the Project Team : Raja Ram Mohan Roy Library Foundation funded Project on Public Libraries and their services in Karnataka - 1983-1985.
2. Principal Investigator & Project Director : UGC Major Research Project on Hypermedia based Computer Aided Learning Packages in LIS., 1996-1999

Developed 7 modules using Macromedia Authorware.

OnGoing

3. VIDYANIDHI: Indian Digital Library of Electronic Theses, sponsored by NISSAT, DSIR, New Delhi
4. SASYA SIRI : A web enabled multi media database of plants of Karnataka. Sponsored by Dept. Ecology and Environment, GOVT. of KARNATAKA

Professional distinctions :

- Eight of my papers have been cited in International Journals and Publications.
- My Paper entitled 'Beyond Boolean' Designing the next generation User directed User sensitive Hyperbase' presented at INFOTEX '93 - International Conference on Databases sponsored by NIC & NISSAT, received the 'BEST PAPER AWARD' with a cash prize of Rs.1500 & a Memento.
- Member of the NISSAT Expert Committee to prepare the National Action Plan for Bibliometrics, Informetrics & Scientometrics. 1994.
- Member, State level High Power Committee of the Dept. of Public Libraries, Government of Karnataka, Nov. 1995- Dec.1998

Professional Activities :

- Member, Board of Studies, S.N.D.T. University, Mumbai, Associated with their curriculum design & development.
- Special Invitee, Board of Studies in LIS, Mangalore University, 1995.
- Since 1988, I have been invited as Resource person to deliver special lectures at the Academic Staff College, Mysore for their Orientation as well as Refresher courses in various subjects like Chemistry, Physics, History etc.
- Organised & Directed the NISSAT sponsored Workshop on Bibliographic Data-bases ; production and development, July 25 - August 6, 1994.
- Organised and coordinated the NISSAT sponsored Workshop on INTERNET, April 24-26th, 2000.
- Coordinated Three Refresher Courses in LIS
 - * Third Refresher Course in LIS, ASC, Mysore Nov 16 - Dec 10, 1994.
 - * Fifth Refresher Course in LIS, ASC, Mysore Aug 16 - Sept. 9, 1995.
 - * Ninth Refresher Course in LIS, ASC, Mysore Dec. 4 - Dec. 27, 1997.

Apart from being involved in teaching and Research, I have also been involved in the setting up of the

- Automated Library Systems in the University Library
- INTERNET CENTRE
- Centre for Information Science and Technology(CIST)

As a Member of the Following :

- Member of the Mysore University Library Automation Committee, August, 1995-April 1996. and closely involved with the drawing up of the plan and implementation of the programme.
- Member, Advisory Committee for the planning and establishment of Centre for Information Science and Technology. (CIST)
- Member, Mysore University INTERNET Committee - 1998 – present

I am also closely involved in the professional activities at the national level as

- General Secretary, IATLIS (Indian Association of Teachers of Library & Info. Science) 1998-2000

Publications :

Published more than 60 papers in journals & Conference proceedings (National & International). Five articles in International refereed journals & Five papers in International Conferences.

Current Research Interests :

- Digital Libraries & ETDs
- Hypermedia / Hypertext.
- Developing Computer Aided Learning Packages
- User Interfaces
- Mapping of Science & Mathematical Modeling of Science and growth of Knowledge
- Paradigms in Information Science
- Human factors in Information Seeking

Special Training :

1. Three months on the job training in Online Searching at the Centre for Scientific & Technical Information. Tel Aviv., ISRAEL.
2. Two months training at the International Graduate Summer School, College of Librarianship . Wales U.K., July-Aug 1981.
5. 6 week Training Course on Programming and Programming Languages, Sponsored by Dept. of Electronics, Govt of India conducted by SJCE, Mysore.
6. 6 week training course in Data processing, sponsored by Dept. of Electronics, Govt. of India, conducted by SJCE, Mysore.

7. 2 semester Post Graduate Diploma in Computer Applications, SJ College of Engineering, Mysore

Editorial Experience :

- Member, Editorial Board, Tech briefs, Academy of Information Science, CFTRI. Mysore
- Member, Editorial Board, MCLC News, Mysore University Library.
- IATLIS Communications.

Courses taught:

- Electronic Data Processing
- Application of Information Technologies to Libraries
- Information Sources
- Planning of National & International Information System
- Industrial Information Systems & Services
- Medical Information Systems & Services
- System Analysis
- Information Storage & Retrieval
- Classification & Indexing (Theory & Practice)
- Cataloguing (Theory & Practice)

Research Guidance :

- Two candidates have completed their Doctoral Research Work.
- Five candidates are currently pursuing their Ph.Ds under my supervision

Membership of Professional Associations :

- | | |
|--|-------------|
| • General Secretary,
Indian Association of Teachers
of Library & Information Science | Life Member |
| • Indian Library Association | -"- |
| • Indian Association of Special
Libraries & Information Centres | -"- |
| • Society for Information Science | -"- |
| • International Society for
Scientometrics & Informetrics | -"- |

Areas of Specialisation :

- Information Technology Applications
- Information Systems Management
- Information Storage & Retrieval
- Scientometrics & Informetrics

Other Interests & Hobbies

- Rotarian, Rotary Mysore West.
- Member, Mysore Sports Club
- Painting (Mysore style)
- Debating & Quizzing
- Reiki
- Vasthu

Appendix A.3

The ETD Sourcebook: Theses and Dissertations in the Electronic Age

PURPOSE OF TEXT

Researchers and scholars in higher education are currently concerned with how new electronic technologies will affect the composition, storage, and dissemination of intellectual information. Many universities and libraries throughout the world are already making digitized versions of theses and dissertations available online. Some schools are even requiring graduate students to submit work in electronic formats. As this newest form of scholarship emerges, graduate students, educators, and researchers will need a source to help de-mystify both the theoretical and technical underpinnings of electronic theses and dissertations, or ETDs.

***The ETD Sourcebook* offers insights into the impact of technology on graduate scholarship; examines how electronic formats might allow for a broader conception of writing, including hypermedia, multimedia, and virtual reality formats; suggests ways that librarians and administrators might implement ETDs projects at their schools; and presents authoritative yet easy to understand explanations of what technologies are being used to publish and maintain ETDs.**

AUDIENCE/MARKET

Graduate students across the disciplines are our primary audience, because they will need *The Sourcebook* when they are required to compose their theses and dissertations in electronic formats. In addition, this book will be of interest to nearly everyone involved in the production, evaluation, and dissemination of graduate research and scholarship.

Librarians will be particularly interested in this book because they are often responsible for initiating the conversion from print to electronic formats.

Faculty members mentoring theses and dissertations will find this book invaluable as more and more graduate students submit their scholarship electronically.

Researchers and scholars will soon find themselves forced to rely upon technology to search for information and will turn to this book as a preliminary research tool.

Administrators will want this book to be informed about how the trend setters in academe are making the move toward electronic scholarship.

Additionally, system administrators and "techies" will appreciate a text that will help them understand how to most easily provide technological support.

TABLE OF CONTENTS

Preface: Overview of the ETD Initiative

PART I: New Perspectives on ETDs

1. ["The Evolution of ETDs: A History of Innovation"](#) by Christian Weisser

This chapter provides a brief history and case study examples of how ETDs have developed. It chronicles early efforts by students and faculty to write and submit theses and dissertations in various electronic forms, and explores some of the obstacles that these pioneers were forced to overcome. The chapter closes by examining how the concept of the ETD has evolved and transformed through the influence of new technologies and institutional efforts.

2. ["From Monograph to Multigraph: Next Generation Electronic Theses and Dissertations"](#) by Matthew G. Kirschenbaum

(completed, 18p. double spaced)

This chapter will seek to define the scope and potential of ETDs which are intended to be native to some form of digital media, and which use their digital environment to support scholarship which could not be undertaken in print. Topics to be discussed include hypertext and multimedia as formats for scholarly work, and professional concerns for graduate students engaged in non-conventional scholarship.

PART II: Guidelines for Writing and Designing ETDs

3."Beyond the Paper Paradigm: ETD-ML and the Case for XML Markup" by Neill A. Kipp

(completed, 24p. double spaced)

This chapter will focus on the various types of mark-up languages which are being used in the composition of ETDs. It also will explore the problems and possibilities of institutionalizing a universal mark-up language in the production of ETDs.

4. ["Choices of Electronic Formats"](#) by Steven Salik

This chapter will examine how to create documents that are flexible enough to be read by a variety of users, yet still preserve the document's original formatting. The primary focus of this chapter will be Portable Document Format (PDF) and the ways in which it overcomes the limitations of other formats. Also, the chapter will discuss the best ways to create PDF documents along with suggestions for post-production enhancements such as images and digital video.

5."TEI, Chemical Markup, and ETD -- by David Seaman and Wolf-Dietrich Ihlenfeldt

This chapter will examine the potential impact of the Text Encoding Initiative as well as specialized markup schemes like the Chemical Markup Language, and how they might affect access and distribution of Electronic Theses and Dissertations.

6. ["Multimedia in ETDs"](#) by Stephan Fischer and Ralph Steinmetz

(completed, 24p. double-spaced)

This chapter discusses the various ways to successfully integrate multimedia applications in electronic documents. It will also focus on how multimedia might allow students to go beyond the boundaries of paper theses or dissertations by including audio, image, and video illustrations and by adding hypertext links.

7. "Electronic Scholarship and Citations: Documentation and ETDs"

by Janice R. Walker

(completed, 9p.)

This chapter explores how documentation is informed by the electronic publication of theses and dissertations. It also will examine whether active links in ETDs to URLs (Uniform Resource Locators) outside the text should be permitted, or if ETDs should contain internal links only.

8. "ETDs: Structuring Elements of Scientific Research" by Frédéric Potok and Marie-France Lebouc

(completed, 8p.)

While the debate about Electronic Theses and Dissertations (ETDs) mainly deals with the advantages and difficulties in the cataloging and storage of electronic documents, we would like to underline some challenging elements in the production phase of theses. Although these elements may seem only technical, they have important impacts on strategic relations between students and theses supervisors, and between students and their peers in their research field, and they also bring epistemological consequences.

PART III: Campus Perspectives on ETDs

9. "Enhancing Graduate Education through Electronic Theses and Dissertations"

by John L. Eaton

(completed, 10p. double spaced)

This chapter looks at how electronic publication of theses and dissertations might enhance graduate education. Topics to be discussed will include greater access to scholarly information,

improved knowledge of electronic publication technologies and methods, and wider distribution of an author's work.

10. "Rhetoric, Reality and the Digital Publication of Ph.D. Dissertations and Master's Theses" by William Savage, Director of Dissertation Publishing, UMI

(completed, 24p. double spaced)

This chapter looks at the changing role of University Microfilm International as theses and dissertations move to electronic formats. It will present the views and perspectives of UMI concerning ETDs and will detail UMI's ProQuest Digital Dissertation System.

11. "Phases and Issues in the Transition to ETDs" by Martin Bunch and Christine Jewell

(completed, 13 p.)

This chapter discusses the move at universities to develop and institutionalize ETDs. It will survey universities that have taken steps to establish ETDs. It will examine how to effectively ease the transition from paper to electronic theses and dissertations.

12. "Innovative Hypermedia ETDs and Employment in the Humanities" by Seth Katz

(completed, 7p.)

This chapter will explore how electronic publication of theses and dissertations might affect the job search for new PhDs. Further, it will explore how Tenure and Promotion committees might begin to value this emerging form of scholarship as more and more faculty members are asked to mentor students writing ETDs.

13. "Copyright Dot Com: ETDs in the Digital Millennium" by Robert N. Diotalevi

(completed, 24 p. with extensive white space)

This chapter looks at present practices universities have developed for dealing with issues of copyright for print theses and dissertations. It considers how these current policies may reasonably be extended for use for electronic theses and dissertations. It goes on to examine what some universities have done regarding intellectual property and ETDs, and to suggest ways in which universities might best deal with

these copyright issues in the future.

14. ["Implementing ETD Services in the Library"](#) by Gail McMillan
(completed, 16p. double spaced)

This chapter discusses the mutual and diverse concerns revealed by librarians and information technology personnel. It will examine the new and evolving roles of library staff as they implement ETD services in their libraries and universities.

15. ["Indexing and Accessing Electronic Theses and Dissertations: Some Concerns for Users"](#) by Ilene Frank and Walter C. Rowe
(completed, 9p.)

This chapter discusses how libraries might most effectively catalogue ETDs to ensure that they can be easily found by scholars worldwide. Further, it explores the various access points for indexing and cataloguing ETDs.

PART IV: International Perspectives

16. "The Australian Digital Theses (ADT) Project: An Experiment" by Tony Cargnelutti and Fred Piper
(completed, 3 p. double-spaced)

17. "Dissertationen Online - The ETD Project of the German Learned Societies" by Peter Diepold
(completed, 7p.)

18. "Deposit Collections of Digital Thesis and Dissertations" by José Luis Borbinha and Nuno Freire
(completed, 12p.)
This chapter explains efforts in Portugal related to ETDs.

PART V: Future

19. "New Media Scholarship: A Call for Research" by Joseph Moxley (completed, 15 p. double spaced)

This chapter identifies areas for research related to the ETD initiative.

20. ["The Networked Digital Library of Theses and Dissertations"](#) by Virginia Tech ETDs Team

This chapter addresses using the emerging digital library of ETDs, digital library searching, and other concepts and technologies. This chapter will also explain how ND LTD will allow for greater access and distribution of scholarly work.

SCHEDULE

After selecting a publishing agreement (2 publishers have offered contracts, and two others are still reviewing this proposal), we will ask our colleagues to complete revisions to their chapters by September of 2000. Our goal is to complete preparation of the manuscript in its final form by November of 2000.

LENGTH

While we allow authors 4,500 words, we encourage shorter essays so we can submit an approximately 300 page manuscript.

ABOUT THE EDITORS

Dr. Edward A. Fox, who directs the Networked Digital Library of Theses and Dissertations, holds a Ph.D. and M.S. in Computer Science from Cornell University and B.S. from MIT. Since 1983, Dr. Edward A. Fox has been at Virginia Tech (VPI&SU), where he serves as Professor of Computer Science, and directs the Digital Library Research Laboratory. He is editor for the Morgan Kaufmann Publishers book series on Multimedia Information and Systems, is co-editor-in-chief of the ACM Journal of Educational Resources in Computing (JERIC), serves on many editorial boards, and has authored or co-authored numerous publications in the areas of digital libraries, information storage and retrieval, hypertext/hypermedia/multimedia, and

electronic publishing.

Christian R. Weissner teaches professional writing, computer-assisted composition, and computer-assisted technical writing at the University of Tampa. He is chair of the University of Tampa Faculty Technology Committee, is a former member of the USF Task Force on ETDs, and has delivered presentations on ETDs at several international conferences. Christian has authored or co-authored several articles on ETDs and electronic scholarship.

Joseph M. Moxley, Professor of English at the University of South Florida, chairs the USF Task Force on ETDs. Moxley has published ten books, including *The Politics and Processes of Scholarship*, *Publish, Don't Perish*, and *Writing and Publishing for Academic Authors*. He has published over thirty articles and served as an editor for several academic journals, including the American Bar Association's Web Site on Legal Writing <http://www.abanet.org/lpm/writing/>.

Appendix A.4 Support Letters

- **Marian Bate (University of New South Wales, ADT)**
- **José Luis Brinquete Borbinha (Biblioteca Nacional, Portugal)**
- **Eberhard Hilf (University Oldenburg, Germany)**
- **Alexander Plemnek (St. Petersburg State Technical University, Russia)**
- **Johann van Reenen (University of New Mexico, ISTECH)**
- **Shalini R. Urs (University of Mysore, VIDYANIDHI)**

THE UNIVERSITY OF
NEW SOUTH WALES

UNSW LIBRARY

12 July, 2000.

Professor Edward A. Fox, PhD.,
Director,
Networked Digital Library of Theses and Dissertations,
C/- Department of Computer Science,
660 McBryde Hall, M/C 2106,
Virginia Polytechnic and State University,
Blacksburg, VA.24061,
U S A.

Dear Professor Fox,

Re: Participation in UNESCO Grant Proposal

The Australian Digital Theses Program is pleased to participate in the proposal from NDLTD to create an International Guide for the Creation of EDTs.

Our contribution will focus on documenting the software standards, and workflow practices required for creating EDTs and establishing a national database of EDT metadata drawn from individual university collections of EDTs. We will also assist in ensuring the Guide meets the needs of Australasia and the Pacific Rim.

A summary of the Australian Digital Theses Program is attached. Detailed information is available at <http://adt.caul.edu.au/>.

Yours sincerely,

Marian Bate,
Principal Librarian,
Project Leader, ADT.



mbeafox

AUSTRALIAN DIGITAL THESES PROGRAM

Background

Approximately 4,000 degrees are awarded each year in Australia. Postgraduate theses represent a significant proportion of Australia's research activity. However, lack of easy access to this information means other researchers can wait months or years before papers or books describing aspects of the research are published. These publications do not always comprehensively cover the valuable information in a thesis; information which in many cases is then effectively lost.

Theses are an underutilised information resource. A thesis by its very nature is produced in very limited quantities and normally the only copy available is the archival copy deposited in the Library. It is estimated that copies of fewer than 1,500 per year are requested from the participating libraries, even fewer are supplied as the cost and delay factors are a significant deterrent.

The lack of usage is attributed to a number of factors:

- lack of knowledge that the thesis exists
- lack of information about the contents of the thesis
- lack of ready availability

Increasingly, students are using word-processing and desktop publishing and graphics software to produce their theses. These tools also provide them with the opportunity to include multimedia components. However, use of these technologies is limited by the requirements for theses to be submitted in paper format. By changing the procedures for creating and submitting theses, the deposit of theses can be made more efficient and less costly to the student in terms of cost of making multiple paperbound copies. Many examiners would prefer to evaluate an electronic copy but there would still be the option to print copies as required from the electronic version. Importantly, theses will be readily accessible to all interested, worldwide. Some students are already putting their theses up on the web.

A current major US initiative is the development of a Networked Digital Library of Theses and Dissertations (NDLTD). The project which is led by the Virginia Polytechnic Institute and State University involves a growing number of US universities, University Microfilms International and industry partners. As a result of this work, standards for creation, deposit, conversion, storage, archiving and printing have already been established.

The focus of the NDLTD has shifted from a US based one to a growing international network of universities. Its aim is to improve graduate education, increase sharing of knowledge, help universities build their information infrastructure, and extend the value of digital libraries. Use of the same standards by Australian universities ensures compatibility with the US and other digital thesis collections.

Aims

The aim of the ADT program is to establish a distributed database of digital versions of theses produced by the postgraduate research students at Australian universities. The theses will be available worldwide via the web. The concept behind the program is to provide access to, and promote Australian research to the international community.

The initial project was funded by an Australian Research Council (ARC) - Research Infrastructure Equipment and Facilities (RIEF) Scheme grant (1997/1998).

The ADT concept was an initiative of 7 Australian universities (listed below) in association with the Council of Australian University Librarians ([CAUL](#)).

The original ADT membership group:

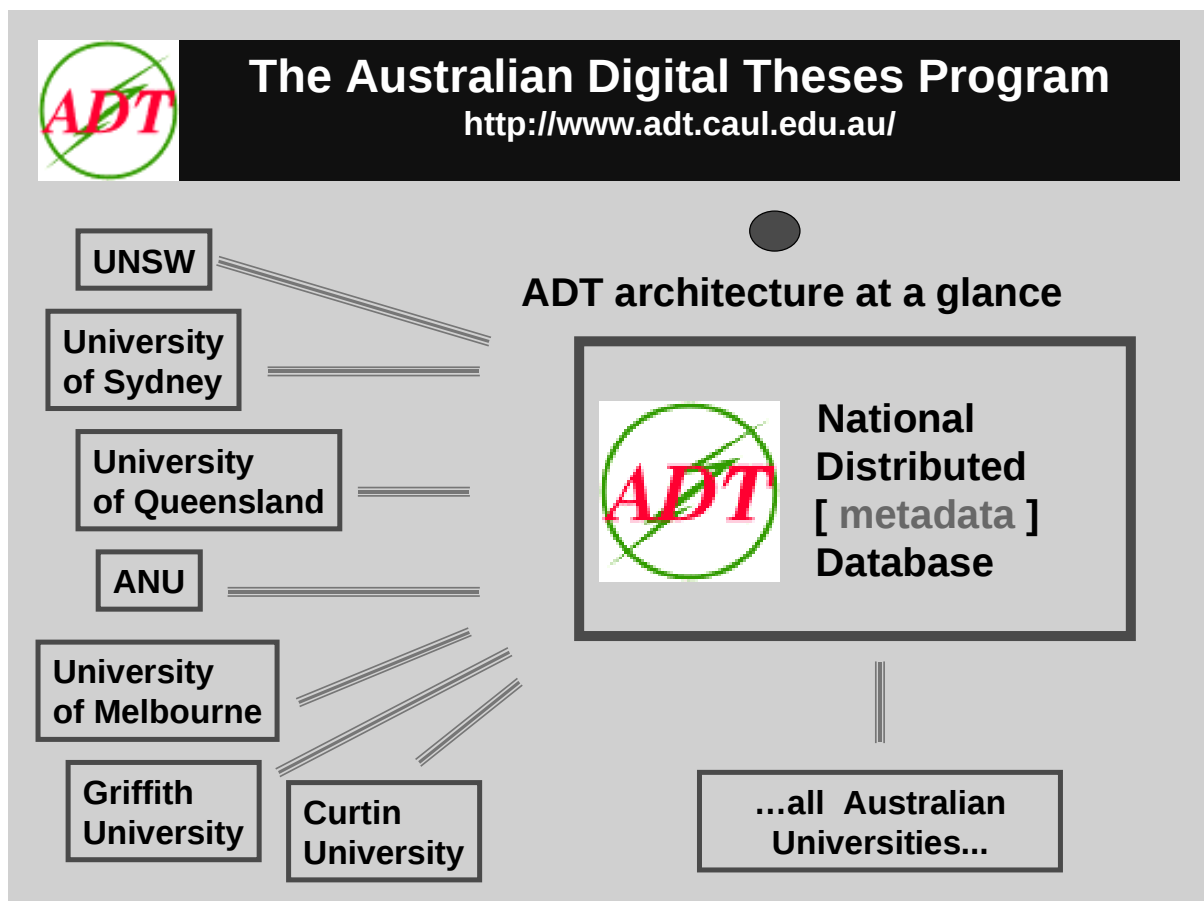
- [University of New South Wales](#) (lead institution)
- [University of Melbourne](#)
- [University of Queensland](#)

- University of Sydney
- Australian National University
- Curtin University of Technology
- Griffith University

The ADT program is designed to improve access to, and enhance transfer of, the research information contained in theses by providing a full text version available from the desktop via the web. The retrieval is enhanced by the inclusion of metadata tags in the documents which are given a higher weighting by the more sophisticated search engines. It is also designed to provide a new model for deposit and archiving of theses that takes into account the tools and technologies that students are now using to prepare their theses.

The program has two major components, digitisation of theses as part of the deposit process and the digitisation of a selected number of frequently requested existing theses. As each University is responsible for maintaining an archival copy of the theses of their own institution, each participant in the program will mount their own theses on a server located in their respective institution. The participants will use the same database configuration, standards and metadata system to ensure compatibility. The document format will be Adobe Acrobat Portable Document Format (PDF) ensuring that the data is independent of the platform on which it is created. Adobe PDF ensures that a high quality printed version can be provided if needed. Acrobat is relatively easy to use, with a high quality free reader readily available. PDF has also become an electronic publishing standard.

The Program is largely involved at this stage in dissemination of research information. However, the National Library of Australia is a partner in the Program in relation to the preservation of digital objects on an ongoing basis.

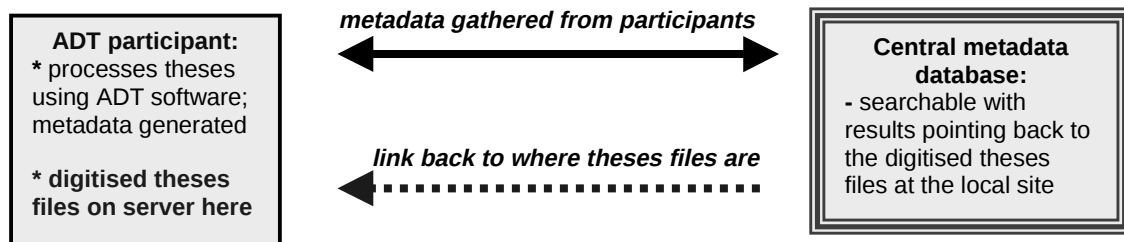


The ADT model was developed by the 7 original project partners during 1998-1999. The program was then opened up to all CAUL members (all Australian universities) in July 2000. The original 7 partners will continue to guide and advise the national group in their role as the ADT Steering Committee.

ADT model

The ADT model works as follows:

- local institution uses ADT software to process theses in digital format. The theses are mounted on the institutions own server/s. The local institution can also integrate access to theses via local infrastructure, eg webcatalogue, provide local search interface, etc..
- the ADT software automatically generates DC metadata. This metadata is gathered on a regular basis into a central metadata repository/database. The metadata database is searchable using a proprietary search engine with links provided back to the local institution housing the digitised theses files.



- for the moment digitising theses and making them available via the web is done on a voluntary basis; in essence depositing a digital copy in addition to the traditional paper version
- the ADT model is scalable, and sustainable as long as participants maintain enthusiasm and dedicate resources to the ideal
- at some time in the future some institutions will inevitably move to full electronic submission only; at some point in the future too, this may be a comprehensive database of digitised versions of all Australian research theses

The use of standards in the deposition of ETDs and the automatic creation of metadata enables the development and easy maintenance of a national distributed database of theses. The processes used can be readily transferred as is shown by the rollout to all Australian university libraries which wish to create ETDs. It is also envisaged that this model can be used for any other country wishing to develop a national database of data about its ETDs.



BIBLIOTECA NACIONAL

18th July 2000

Edward A. Fox, Director
Networked Digital Library of Theses and Dissertations
660 McBryde Hall, Virginia Tech
Blacksburg, VA 24061-0106
USA

Dear Professor Fox:

I am writing to express the formal support of the National Library of Portugal for the proposal to be submitted to UNESCO for an "International Guide for the Creation of ETDs". This support extends our commitment to the initiative "Networked Digital Library of Theses and Dissertations (NDLTD)".

Sincerely,


 José Luis Borbinha
 Director of the Services for Innovation and
 Development

Carl v. Ossietzky
**UNIVERSITÄT
OLDENBURG**

Carl von Ossietzky Universität Oldenburg - D-26111 Oldenburg

Professor Edward A. Fox, Ph.D.
Department of Computer Science
660 McBryde Hall, M/C 0106
Virginia Tech
Blacksburg, VA 24061 USA
FAX +1-540-231-6075

FACHBEREICH 8 - Physik

Prof. Dr. Dr. Eberhard R. Hilf

Ihr Zeichen, Ihre Nachricht vom

Unser Zeichen, unsere Nachricht vom

Standort: Carl-von-Ossietzky-Straße

Tel.: (0441) 798-2543

Telefax: (0441) 798-3201

Email:

hilf@merlin.physik.uni-oldenburg.de

Datum: 12. Juli 2000

Betreff:

Dear Prof. E. Fox!

Hereby we formally declare our willingness to support actively the UNESCO-application project 'International Guide for the creation of ETDs' by work as specified in conjunction with the group of Prof. Diepold to which we have close contact.

Yours sincerely Eberhard R. Hilf

Eberhard R. Hilf



OPEN LIBRARY SYSTEMS CENTER ST. PETERSBURG STATE TECHNICAL UNIVERSITY

Ul. Polytechnicheskaya 29 · 195251 St. Petersburg, Russia · Tel. +7(812)552-7647 Fax/Tel. +7(812)552-7654
E-mail: libmaster@unilib.neva.ru · WWW: <http://www.unilib.neva.ru/olsc/home.html>

Professor Edward A. Fox, Ph.D., Director
Networked Digital Library of Theses and Dissertations
c/o Department of Computer Science
660 McBryde Hall, M/C 0106
Virginia Tech
Blacksburg, VA 24061, USA

July 12, 2000

Dear Professor Fox,

Hereby I would like to express my willingness to carry out the work within the International Guide for the Creation of ETDs project.

Since 1994 St. Petersburg State Technical University launched activities directed to create a next generation distributed networked library system. The title of the project is the RUSLANet – Regional University and science Library Advanced Network in the North-West of Russia. The project is based on such principles as distributed processing, the Internet, and open standards. Thus from the beginning we tried to build a system, compatible with world leading library systems. Flexible and effective access to electronic catalogues as well as to full-text electronic resources were the key issues of the project. ETDs also are significant information sources valuable for end users. Consequently, the RUSLANet project has been divided into separate sub-projects, each with its definite deliverables. Among them I would like to mention the following ones:

- Creation of the library consortium for five leading universities of St. Petersburg. The system provides access to a union catalogue via the Z39.50 protocol and Z39.50-HTTP gateway. While issuing a query the end user can choose combinations of 20 MARC fields, using left and right truncation of key words. The union catalogue developed as a virtual union catalogue, so an end user is free to select any set of consortium members. The union catalogue supports the item order service, developed as a Z39.50 extended service.
- Creation of digital library of "grey" literature. The databases include full texts of the university's transactions. Access via HTTP as well as Z39.50 protocol is provided. The context search facility is supported.
- Creation of digital library for ETDs. The architecture of the system, as well as the working prototype have been developed. The system supports description in DC format of the document by the author, storing of the full texts in the archive, searching and ordering facilities. The data and metadata of the digital library are accessible via the Internet and Z39.50 protocol. In half of year we shall complete the development of a converter from DC to MARC, with appropriate tools for librarians to create a complete MARC description of the electronic document.
- Creation of common environment for working with the Internet resources. Special software has been developed for co-operative creation of electronic catalogues in DC format for electronic resources.

The administration of our university, as well as of other library consortium members, fully understand the importance of ETD technology for improving the quality of higher education. Many of the universities have started to collect electronic copies of theses and dissertations.

From September 2000 in our university the special department for work with electronic resources will be launched. It ensures such services as to produce electronic documents, to describe them, to create appropriate pathfinders, and to study end users to work in new environments.

Regarding the UNESCO project we are planning to contribute in the following ways:

- To co-operate in writing guidelines with account of our experience in development of digital libraries and the networking environment for Russian universities
- To translate guidelines to Russian
- To create the mirror Web site of the project in Russian
- To deliver courses of ETD technology and best practices for university librarians and end users. The courses will be delivered in the regional library training center of our university
- To disseminate ETD technology and practices at Russian conferences and workshops

I believe that our contribution will be valuable since we represent a very large country with many universities, which still have high positions in many disciplines.

I am planning also to use some other possibilities in order to expedite the process of planting new technology in Russian universities. Being the Director of the Library Automation Program of the Soros Foundation/ Russia, I have announced the contest on creation of digital libraries in Russian.

In conclusion I would like to say that I fully realize that the guidelines for our distributed environment requires co-operation of a "distributed" community. We will do our best to create and disseminate new and promising technology for many Russian universities and for the world research community as a whole.

Sincerely yours,



Alexander Plemnek

Director

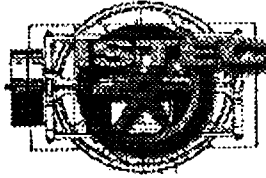
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IBERO-AMERICAN SCIENCE AND TECHNOLOGY EDUCATION CONSORTIUM (ISTEC)

July 10, 2000

Professor Edward A. Fox, Ph.D., Director
Networked Digital Library of Theses and Dissertations
c/o Department of Computer Science
660 McBryde Hall, M/C 0106
Virginia Tech.
Blacksburg, VA 24061
USA

Dear Ed,

Re: Participation in UNESCO Grant Proposal

The Library Linkages Initiative of ISTEC is pleased to participate in the proposal from NDLTD to create an *International Guide for the Creation of EDTs*.

Our contribution will be to arrange the translation of the *Guide* into Spanish and advice on appropriate approaches and best ways for dissemination in Latin America and the Iberian area. We have extensive influence and contacts in Ibero-America as can be seen in the brief overview of our activities, which is attached.

We will be able to meet your deadlines for translation, advice and dissemination. We hope to be a successful part of this important academic and scholarly initiative.

Yours sincerely,



Johann van Reenen
Director, Library Linkages

Attached: ISTEC overview

ISTEC Mission:

ISTEC fosters scientific, engineering, and technological education in Ibero-America; joint international research and development efforts; and provides a cost-effective vehicle for technology transfer among its members (academia, government agencies, industry, and international agencies).

History:

In the summer of 1990 personnel from the University of New Mexico visited countries in Latin America to identify and evaluate opportunities for successful collaboration in an international effort in science and technology education. Meetings were held with officials with various governments, educational institutions, research facilities, and industrial firms to gauge interest in establishing efforts of cooperation in technical fields. The meetings resulted in the identification of areas of common interest for employing hands-on education, research, and technology transfer in state-of-the-art technology and science. These discussions, which resulted in the creation of the Ibero-American Science and Technology Education Consortium (ISTEC), identified a number of obstacles that need to be addressed:

- Lack of current information for planning and developing technology
- Lack of expertise in the use of information
- Lack of international cooperation in developing the critical mass needed for projects and joint efforts
- Lack of availability of technology
- Lack of interaction (lack of confidence and sometimes lack of information) between universities, industries, governments, and international organizations

ISTEC was created, and universities, industries, and other organizations become members by signing a Memorandum of Understanding (MOU). The organizations that constitute ISTEC have agreed upon the following Mission Statement: ISTEC is a non-profit organization comprised of educational, research, and industrial institutions throughout the Americas and the Iberian Peninsula.

The mechanism developed by ISTEC to work on its objectives is the Initiative, which is an organized effort to create activities to address a specific area of concern. The Initiatives are member-driven, flexible, and run concurrently. Within initiatives, projects are identified, planned, and implemented. The distributed structure from which the projects stem avoids duplication of efforts and inherently responds to the needs of the ISTEC membership. Projects are designed with both short- and long-term goals, as well as consideration of social impact. They are dynamic and expandable, and coordination is encouraged in order to maximize the utilization of available resources. Currently, there are four Initiatives underway: 1) Library Linkages, 2) Advance Continuing Education, 3) Research and Development Laboratories, 4) Los Libertadores.

Objectives:

The objectives of the Consortium are to conceive, plan, and carry out activities of higher education, research and development, and technology transfer, for the purpose of facilitating scientific and technical progress of the Ibero-American countries. The mechanism developed by ISTEC to work on its objectives by involving

personnel and resources from diverse geographical locations is the Initiative, which is an organized effort to create activities to address a specific area of concern. The Initiative concept provides an effective answer to the challenges present in Ibero-America. The Initiatives are member-driven, flexible, and run concurrently. Within initiatives, projects are identified, planned, and implemented. Projects are designed with both short- and long-term goals, as well as consideration of social impact. They are dynamic and expandable, and coordination is encouraged in order to maximize the utilization of available resources. Currently, there are four Initiatives underway: Library Linkages, Advanced Continuing Education, Research and Development Laboratories, and Los Libertadores.

Library Linkages Initiative: The Library Linkages Initiative seeks to modernize document delivery as component of education, and research, as well as policy design. This initiative also seeks to broaden electronic availability of research materials, to upgrade the information system skills of library staff, and to sharpen the savvy and independence of the electronic library user. The ISTECoop Cooperative Interlibrary Loan project has facilitated installation of Internet based document transmission software, trained users to electronically research science and engineering databases, and coordinated electronic request and transmission of documents among libraries of ISTECoop. To date, projects within the Library Linkages Initiative have trained in excess of 5,000 people, transferred over 150,000 pages of documents, created regional inter-library loan systems, established an on-line journal for Information Technology, established databases for local library collections, and developed software for document transmission as well as a search engine for retrieval of on-line journal information. For instance in Brazil, ISTECoop has a working network of 18 Brazilian universities for real-time information exchange. This is the largest collaborative effort in Digital Libraries via Internet in the entire region. This effort provides 86% of all documents delivered to the universities. Based on this experience, the model is being utilized in Argentina, Colombia, Mexico, Peru, Central America, and Spain. The current growth rate of the Liblink project exceeds 200% annually, with over 45 participating institutions in 24 countries connected in real-time.

Advanced Continuing Education Initiative: The lack of education in Latin American will increase the inequalities and the level of poverty of its population and will induce a negative impact in the productivity and development. Presently, the principle areas needed are Information Technology. This initiative seeks to upgrade the available skills and increase the number of qualified individuals in applicable areas. Projects conducted within the auspices of this initiative involve curriculum adaptation, design and enhancement, professional development, on-site training, web based distance learning, as well as non-traditional faculty, staff, and student exchanges, including "sandwich" graduate programs. Regional partnerships are evolving to meet these goals. ISTECoop is a member of the Asociación de Televisión Educativa Iberoamericana (an association of over 300 institutions throughout the Americas, Spain, and Portugal), and to date five courses have been delivered via the ATEI system, which involves satellite transmission of coursework to participating institutions throughout Ibero-America. Innovative technology has been used to incorporate course feedback using the Internet. With funding from the Organization of American States (OAS), ISTECoop has identified and created new R&D capabilities in image processing, and trained 196 scientists in the area. There have been over 30,000 ftp Internet grabs of the web DIP course.

At the present time, ISTECoop is developing a web-based network for training throughout the region that will make state-of-the-art technology available to a variety of personnel, foster horizontal collaboration, and produce material for the improvement of education, research, and development in the region. Of particular interest is the development of materials that incorporate the latest technology in the education process, both in the way of state-of-the-art textbooks and laboratory materials, and also in the way of developments systems. To this end, ISTECoop has joined the European Knowledge Science Pool "ARIADNE" Consortium.

Research and Development Laboratories: This initiative has been created to provide a vehicle for performing research and development in a variety of informatics and telecommunications related areas. The laboratory facilities are also designed to be utilized in teaching situations, and are being used to enhance

interaction between industries and universities. Thus, this initiative improves the ability of technology to be applied to the resolution of problems in a variety of areas. At the present time, over a 125 Motorola processor laboratories have been established in 67 sites throughout the region to provide a common platform for sharing knowledge, exchange of information, and enhancement of curricula materials for undergraduate and graduate education. These processors include micro-controllers for effective control of a variety of systems, microprocessors for applications that are based on computations, and digital signal processing systems for applications that manipulate the characteristics of signals or images. These laboratories are distributed throughout 24 countries. Over twelve telecommunication-based facilities donated by Nortel Networks, 2 by Fluke, 14 by VeriBest, and 14 servers by Sun Microsystems have also been installed in the region, and instrumentation equipment has also been made available to a number of institutions. At the present time, installation is proceeding on a major aspect of this system, which is a network of communication servers. The machines involved in this activity will provide access to a variety of different types of information. For participating educational institutions, access is provided to state-of-the-art software, tools, and techniques. For companies and other organizations that require it, access is provided to talent and facilities located throughout the region. And for all participants, access is provided to technology indicators that can measure the success of educational programs and identify the areas in which growth is needed. In addition, this process has helped to create an innovative and creative vehicle of collaboration with industry, and for promoting R&D efforts. With Motorola, for example, ISTEAC has deployed technologies for microprocessors, micro-controllers, DSP, and signed a licensing agreement to work with the M-CORE technology in education and R&D for Systems-on-a-Chip. Key in this development has been Motorola Inc., Nortel Networks, Sun Microsystems, and Fluke Corporation.

Los Libertadores: This initiative is a “common thread” effort that links together all of ISTEAC’s goals and objectives. It seeks to create a flexible network of telecommunication services (a hemispheric backbone for academic and R&D purposes), computing facilities, and teaching stations, known as “Centers of Excellence”. Each country or region identifies needs that must be met, and then designs a Center of Excellence to address those needs. Each Center of Excellence brings together people from the private sector, the public sector, and the educational system to work together to find solutions to the problems of interest. Since those problems invariably have multiple facets, the solutions must involve multiple disciplines and the diverse contributions available from each sector. It is important that the Center be adapted to the needs of the country, identifying those areas that can be most beneficial for all the participants and finding effective methods of collaboration. Thus, the Center may not be a central building, but rather a network of capabilities distributed throughout an area. To date, legislation has been passed in two countries to establish the legal framework for creation of Centers, and ISTEAC is actively working with several governments, international funding agencies, and professional organizations to highlight the importance and critical nature of this effort in the development of the nations in Ibero-America. Progress is being made toward the creation of other Centers in the region, and as those Centers are developed they will be linked with the existing Centers to form a powerful resource for addressing problems of the region. For example, ISTEAC and two Brazilian universities, the University of So Paulo (USP) and the State University of Campinas (UNICAMP) are assuming a leadership position in microelectronics education and research and development in the hemisphere. These universities are in the process of establishing an advanced semiconductor processing capability, on a par with the most advanced educational installations in the world. The two universities plan to build a new facility in which they will consolidate all their sub-micron capable equipment. The equipment set will be completed through donations from private sector. In addition, we have developed cooperation strategies with the Organization of American States (OAS), the Inter-American Development Bank (IADB), United Nations Education, Science and Culture Organization (UNESCO), United Nations Development Program (UNDP), United Nations Economic and Social Council (ECOSOC.) The common goal is to develop human capital, emphasizing the involvement of

both public and private institutions that implement training, research, and academic exchanges in science and technology within the region.

Members:

Instituto Tecnológico de Buenos Aires (ITBA), Argentina
Universidad Blas Pascal (UPB), Argentina
Universidad del Centro de la Provincia de Buenos Aires (UNCPBA), Argentina
Universidad J. F. Kennedy (UJFK), Argentina
Universidad Nacional de La Plata (UNLP), Argentina
Universidad Evangélica Boliviana (UEB), Bolivia
Universidad Mayor de San Andrés (UMSA), Bolivia
Universidad Privada de Bolivia (UPB)
Universidad Privada de Santa Cruz de la Sierra (UPSA), Bolivia
Universidad Privada Franz Tamayo (UPFT), Bolivia
Instituto Militar de Engenharia (IME), Brasil
Instituto Tecnológico de Aeronáutica (ITA), Brasil
Pontificia Universidade Católica do Rio Grande do Sul (PUCRS), Brasil
Universidade de Brasília (UB), Brasil
Universidade de São Paulo (USP), Brasil
Universidade do Sul de Santa Catarina (UniSul), Brasil
Universidade Estadual de Campinas (Unicamp), Brasil
Universidade Estadual Paulista (UNESP), Brasil
Universidade Federal de Pernambuco (UFP), Brasil
Universidade Federal de Santa Catarina (UFSC), Brasil
Universidade Federal do Rio de Janeiro (UFRJ), Brasil
Universidade Federal de Uberlândia (UFU), Brasil
Pontificia Universidad Católica de Chile (UC), Chile
Pontificia Universidad Javeriana (PUJ), Colombia
Universidad de Antioquia (UA), Colombia
Universidad Autónoma de Occidente, Colombia
Universidad de Cauca (UC), Colombia
Universidad de Los Andes (ULA), Colombia
Universidad Nacional de Colombia, Colombia
Universidad de Costa Rica (UCR), Costa Rica
Escuela Politécnica Nacional (EPN), Ecuador
Universidad Tecnológica Equinoccial (UTE), Ecuador
Universidad Técnica Particular de Loja, Ecuador
Universidad Centroamericana José Simeón Cañas (UCASC), El Salvador
Universidad de El Salvador (UES), El Salvador
Universidad Don Bosco (UDB), El Salvador
Universidad de Granada (UG), España
Universidad de Málaga (UM), España
Universidad Politécnica de Madrid (UPM), España
Universidad de Vigo (UV), España
Universidad Francisco Marroquín (UFM), Guatemala
Universidad Nacional Autónoma de Honduras (UNAH)

Instituto Nacional de Astrofísica, Óptica y Electrónica (INAOE), México
Instituto Tecnológico de Apizaco (ITA), México
Instituto Tecnológico de Chihuahua (ITCh), México
ITESM: Ciudad de México
ITESM: Estado de México
ITESM: Morelos, México
Universidad Autónoma del Estado de Morelos (UAEM), México
Universidad Autónoma Metropolitana (UAM), México
Universidad de las Américas (UDLAP), México
Universidad de Guadalajara, México
Universidad Veracruzana (UV), México
Secretaría Nacional de Ciencia y Tecnología (SENACYT), Panamá
Universidad Católica-Asunción (UC), Paraguay
Pontificia Universidad Católica de Perú (PUCP), Perú
Universidad Nacional de Ingeniería (UNI), Perú
Universidad Peruana Cayetano Heredia (UPCH), Perú
Massachusetts Institute of Technology (MIT), United States
University of New Mexico (UNM), United States
ORT-Uruguay
Universidad de la República (UR), Uruguay
Universidad de los Andes (UA), Venezuela
Universidad Simón Bolívar (USB), Venezuela

Motorola Inc.
Nortel Networks
Microsoft

Infocast LLC
Morgan Kaufmann Publishers
Veribest Inc.
Invenio Technology Co.
Khoral Research, Inc.
Synopsis

Organization of American States (OAS)
Interamerican Development Bank (IADB)
United Nations (UN)



Shalini R. Urs, Ph.D.
Professor and Chairperson

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July 12, 2000

Dear Professor Fox,

Re: Participation in UNESCO Grant Proposal

The Vidyanidhi: *Indian Digital Library of Electronic Theses*- an ETD Initiative of the University of Mysore and NISSAT, Government of India is pleased to participate in the proposal from NDLTD to prepare an *International Guide for the creation of ETDs*.

We do believe that an international team of collaborators working together in the preparation of an International Guide is the best approach in this kind of an endeavour. The team lead by NDLTD - the World Wide leaders in ETD Initiatives - would help bring in the diverse perspectives and the requisite inputs for carrying out the project.

Representing Vidyanidhi: *Indian Digital Library of Electronic Theses*, I am pleased to collaborate and work with the NDLTD team and other collaborators in this academic endeavour. Vidyanidhi project aims to demonstrate the feasibility of ETDs in India and evolve into a National Centre for ETDs in India (see the attached information following this letter).

We are willing to carry out the work as specified in the proposal. We would focus our efforts on:

- ◆ Problems, challenges and opportunities obtaining in developing countries
- ◆ Diversities in ETDs especially in terms of languages and scripts

We hope to be a successful part of this important international collaborative initiative.

Yours sincerely,


Director,
VIDYANIDHI

VIDYANIDHI

Indian Digital Library of Electronic Theses

Sponsored

by

**National Information System for Science & Technology
(NISSAT),**

Department of Scientific & Industrial Research (DSIR)

Ministry of Science and Technology

Government of India

Grant No. NI/IC/211/2000

Dated 31st March 2000.

Principal Investigator

Shalini R.Urs, Ph.D

Professor and Chairperson

Department of Library and Information Science

University of Mysore,

Manasagangotri,

Mysore 570 006.

INDIA

VIDYANIDHI

Indian Digital Library of Electronic Theses

VIDYANIDHI: *Indian Digital Library of Electronic Theses* is a project initiated by the Department of Library and Information Science, University of Mysore sponsored by the National Information System for Science and Technology (NISSAT), Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology, Government of India.

VIDYANIDHI :Aims and Objectives

The **VIDYANIDHI** project aims to establish a large online digital resource of Indian University theses and other research works; develop/evolve mechanisms to build the collection on a dedicated webserver and allow for its full content to be accessible via desktop computers and networks. Specifically, **VIDYANIDHI** purports to collect, catalogue and archive Indian theses and make them accessible worldwide through the Internet.

Objectives

- To develop a digital library of theses submitted to select Indian universities.
- To design and develop a database of Indian theses comprising of meta data.
- To enhance access to Indian Theses literature
- To archive and preserve electronically the theses and other research literature.
- To familiarise future generation of Scientists in the techniques and issues in electronic publishing
- To study the organisational and technical challenges of evolving a Digital Library of Electronic Theses

The Indian Scenario

Successive Indian governments, since the mid eighties have pursued and promoted Information Technology Infrastructure development. Consequently today India has achieved fairly adequate levels of network infrastructure. Development of networks like VSNL, ERNET, NICNET and other data communication networks has accelerated network connectivity. Recognising the tremendous opportunity IT provides to the nation, the Indian Government constituted the National Task Force on Information Technology and Software Development. The Task Force was given five main tasks and 15 terms of reference to work on. The Task Force submitted the Information Technology Action Plan (ITAP) on 4th June 1998. The terms of reference No.5 pertains to the Development of Indian Content. Governments and other agencies have realised the importance of developing Indian Content. Content development needs to be given due importance because without content (or information) to access, what could one do with an information infrastructure alone?

NISSAT, DSIR is actively supporting development of Digital Content. Through NISSAT's funding and support Indian Institute of Science, Bangalore has embarked on an ambitious project VIGYAN. The VIGYAN server will host several modules relating to Indian Science and Scientific information.

Thanks to the steady decline in the cost of computers, increased awareness of the potential of information technology and munificent grants by various funding agencies and the INFLIBNET programme of the University Grants Commission, many Universities in the country have now developed a fair degree of infrastructure in terms of computers and Internet connectivity.

Given these developments, today Indian Universities are poised to harness the computer and Network technologies towards :

- Accelerating Access to global information resources
- Providing global access to their own research output and information resources

Indian Theses Literature

The Doctoral theses submitted to Indian Universities are hard to get hold of in the absence of an appropriate mechanism for collecting and preserving them. The major problems of Indian Theses are:

- Lack of systematic plan for the collection and organisation of theses in Universities
- Lack of bibliographic organisation and control mechanism for theses literature
- Consequent to the above, virtual inaccessibility to Indian Theses

Considering the intellectual and economic investments that go into the preparation of theses, universities ought to consider the opportunities offered by Digital Library technologies in overcoming these problems of theses literature.

VIDYANIDHI: Current status

Given this scenario Vidyanidhi is envisioned as an Initiative to demonstrate the feasibility, mechanism and workflow of Electronic Theses and Dissertations in India.

Vidyanidhi project is currently focussing on:

- Studying the workflow of theses submission in selected Indian Universities and other institutions of higher learning
- Exploring the ways in which submission of these in electronic form could be encouraged and supported
- Developing tools and mechanisms for the digitisation of theses and making them available on line through the INTERNET
- Liaising with Doctoral research funding organisations and agencies like University Grants Commission, Council for Scientific and Industrial Research, Indian Council of Social Science Research and agencies like Association of Indian Universities to promote and support Electronic Theses and Dissertations
- Finally developing a demonstration model for ETD Initiatives and evolve onto a National Centre for ETDs



Professor Shalini R.Urs.,Ph.D

Director

VIDYANIDHI

Indian Digital Library of Electronic Theses