

# **1<sup>st</sup> Canadian ETD & Open Repositories Workshop**

**May 10-11, 2010      Carleton University, Ottawa**

## **“NDLTD: Past, Present, and Future”**

by Edward A. Fox

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# Outline

- **Acknowledgements**
- NDLTD
- Union Catalog
- Recent and Future Work
- Summary

# Acknowledgements

- All those working with ETDs
- ND LTD, including Board, Committees, and Members
- ETD & OR Workshop Team
- Sponsors
- Presenters, Attendees

# Acknowledgements: Future Conferences

- 2010 – 13<sup>th</sup> symposium
  - University of Texas at Austin, 16-19 June
- 2011 – 14<sup>th</sup> symposium
  - Cape Town, S. Africa, in Sept.-Oct. time frame
- 2012 – 15<sup>th</sup> symposium
  - Bidding still open ... ☺

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**The Networked Digital Library of Theses and Dissertations**

**www.NDLTD.org**

**Advocate:**

**Training Authors**

**Expanding Access**

**Preserving Knowledge**

**Improving Graduate Education**

**Enhancing Scholarly Communication**

**Empowering Students & Universities**

**Leader of the Worldwide ETD**

**(Electronic Thesis and Dissertation) Initiative**



## ELECTRONIC THESES AND DISSERTATIONS

A Sourcebook for Educators, Students, and Librarians

by

**Edward Fox** *Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA*

**Shahrooz Feizabadi** *Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA*

**Joseph M. Moxley** *University of South Florida, Tampa, Florida, USA*

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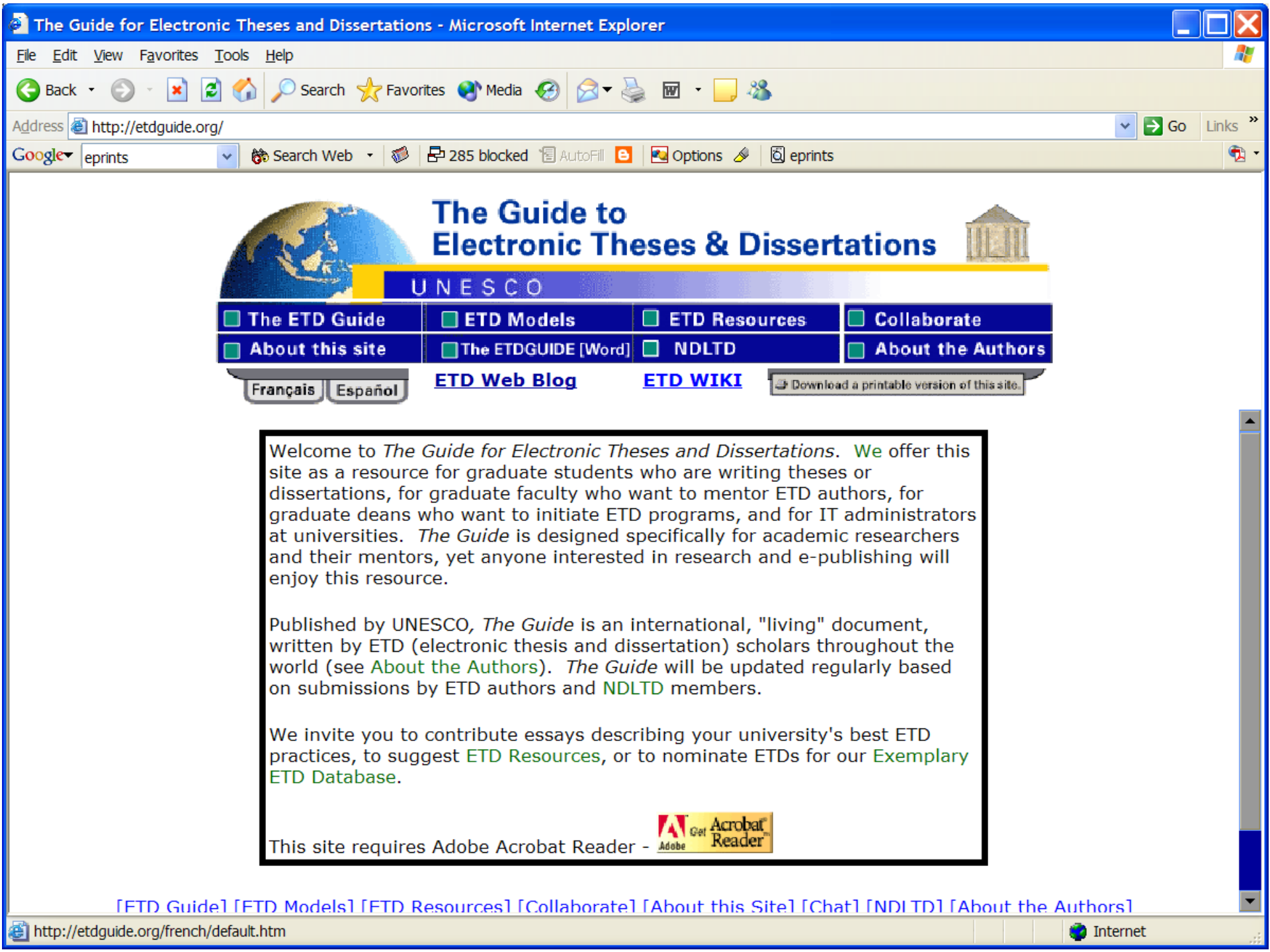



April 2004 / ISBN: 0-8247-0973-X / E-ISBN: 0-8247-4946-4 / 440 pp. / List Price: \$79.95

Examining how electronic publication of theses and dissertations may enhance graduate education, this text clarifies the composition, evaluation, dissemination, and preservation of electronic theses and dissertations (ETDs)—providing a conceptual framework for the development of effective ETD programs and identifying the main technical concerns related to the adoption of ETD initiatives. This volume contains answers, techniques, and methods that have proven effective in the longest-running library-group support effort for campus ETDs. Helping graduate students, research mentors, and librarians ease students through the transition from paper to electronic theses and dissertations, this text



- Addresses seven key questions that students often face when considering an ETD
- Studies how institutions are providing technical support and offering digitized versions of theses and dissertations
- Provides case study examples of how ETDs have evolved through the influence of new technologies and institutional efforts
- Analyzes currently utilized technologies for the publishing and maintenance of ETDs
- Examines strategies currently in use by universities for handling of copyright issues
- Discusses the best methods for cataloging ETDs to ensure that they can be easily found

Presenting studies by leading figures in the ETD community, *Electronic Theses and Dissertations* is a must-have guide for all





# The Guide to Electronic Theses & Dissertations

<a href="#">The ETD Guide</a>	<a href="#">ETD Models</a>	<a href="#">ETD Resources</a>	<a href="#">Collaborate</a>
<a href="#">About this site</a>	<a href="#">The ETDGUIDE [Word]</a>	<a href="#">NDLTD</a>	<a href="#">About the Authors</a>

[Français](#)
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[ETD Web Blog](#)
[ETD WIKI](#)
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Welcome to *The Guide for Electronic Theses and Dissertations*. We offer this site as a resource for graduate students who are writing theses or dissertations, for graduate faculty who want to mentor ETD authors, for graduate deans who want to initiate ETD programs, and for IT administrators at universities. *The Guide* is designed specifically for academic researchers and their mentors, yet anyone interested in research and e-publishing will enjoy this resource.

Published by UNESCO, *The Guide* is an international, "living" document, written by ETD (electronic thesis and dissertation) scholars throughout the world (see [About the Authors](#)). *The Guide* will be updated regularly based on submissions by ETD authors and NDLTD members.

We invite you to contribute essays describing your university's best ETD practices, to suggest [ETD Resources](#), or to nominate ETDs for our [Exemplary ETD Database](#).

This site requires Adobe Acrobat Reader - 



# NDLTD Incorporation

- Networked Digital Library of Theses and Dissertations
- incorporated May 20, 2003 in Virginia, USA
- Charitable and educational purposes  
(501 c 3)

# Board of Directors

- Suzie Allard (ETD 2004, U. Kentucky)
- Julia C. Blixrud (ARL)
- Tony Cargnelutti
- Vinod Chachra (VTLS)
- Birte Christensen-Dalsgaard (Royal Library, Denmark)
- William Clark (Ohio State U.)
- Bruce Cochrane (Miami U. Ohio)
- Susan Copeland (RGU, UK)
- Jude Edminster (Bowling Green St. U.)
- Edward A. Fox (Executive Director, Virginia Tech)
- John H. Hagen (West Virginia U.)
- Thomas B. Hickey (OCLC)
- Christine Jewell (U. Waterloo, Canada)
- Joan K. Lippincott (CNI)
- Austin McLean (Treasurer, Proquest)
- Gail McMillan (Secretary, Virginia Tech)
- Eva Müller (EBSCO, Sweden)
- Ana Pavani (PUC Rio, Brazil)
- Max Read (U. British Columbia)
- Sharon Reeves (Library and Archives of Canada)
- Peter Schirmbacher (ETD 2003, Humboldt)
- Nancy Seamans, Georgia State U.
- Hussein Suleman (U. Cape Town, S. Africa)
- Shalini R. Urs (U. Mysore, India)
- Eric F. Van de Velde (ETD 2001)
- Xiaolin Zhang (National Science Library, China)

# NDLTD Committees (Chairs)

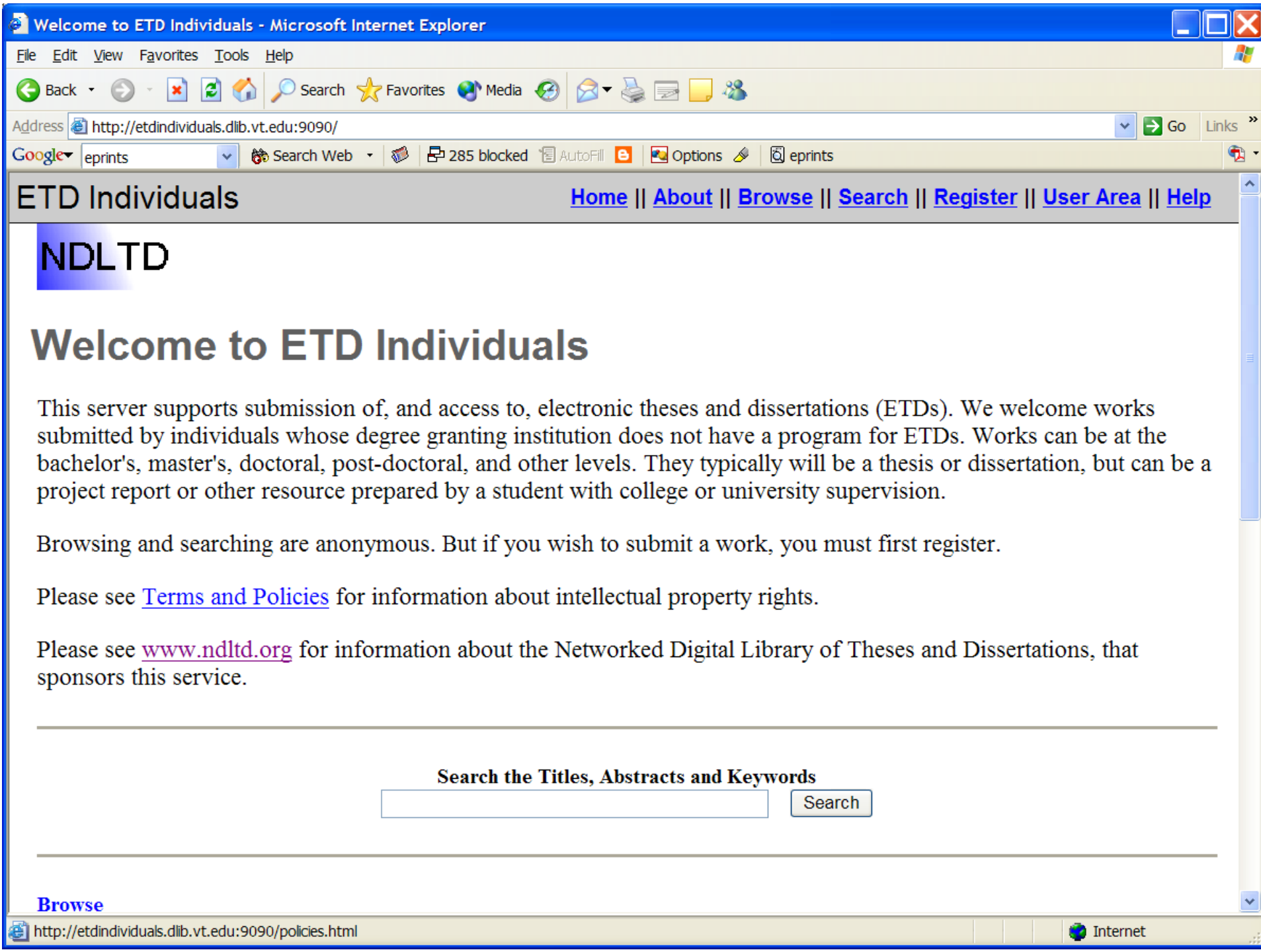
- Awards (Christine Jewell, John Hagen)
- Communications (Suzie Allard)
- Conferences (Sharon Reeves)
- Development (Suzie Allard, John Hagen)
- Executive (Ed Fox)
- Finance (Austin McLean)
- Membership (Eric Van de Velde)
- Nominating (Joan Lippincott)
- Working Groups
  - International Activities, Strategic Planning, Website Revision, ETD Guide Revision

# Member Support

- Advocacy for ETD activities
- Annual conference
- ETD-L – listserv for discussion
- Union catalog: improving local data
- Best X ETDs in Y lists
- Services for access
- Information for ETD projects
  - Standards, documentation, best practices
- Connect with: institutional repositories, ...<sup>12</sup>

# Focused Needs/Opportunities

- DART-Europe
- **Internationalization**
- Marketing
- Member Benefits
- Mentoring
- **Students**
- Visibility
- **Website**, Guide (in Wikibooks)



# Members, Community

- Individuals
  - Universities
  - Consortia
- 
- Investigate the Possibility
  - Pilot
  - Richer ETDs
  - Backfile conversion
  - Help other sites

# For Students

- Learn about
  - Electronic publishing
    - Concepts, computational thinking
    - Tools and services
  - Intellectual property rights
  - Digital libraries
- More visibility
  - Discover (potential) collaborators
  - More citations



# For Universities

- Improve graduate education
- Save time, space, and money
- Increase visibility of research
  - Through open access
- Expand capabilities with digital libraries
  - Including institutional repositories
- Collaborate in region, nation, and internationally through the ETD movement

# Outline

- Acknowledgements
- NDLTD
- **Union Catalog**
- Recent and Future Work
- Summary

# Union catalog

- OCLC runs OAI data provider on TDs, getting data from WorldCat (many sites!).
- Harvests from all others who contact them (see Thom Hickey, [hickey@oclc.org](mailto:hickey@oclc.org)).
- Need DC and either ETD-MS or MARC.
- Need a set for ETDs, or separate data provider.
- Supports services by VTLS, Scirus, ...

OCLC ONLINE COMPUTER LIBRARY CENTER

A Project of OCLC Research

# XTCat NDLTD

## NDLTD Union Catalog

[Identify](#) | [GetRecord](#) | [ListIdentifiers](#) ([Resumption](#)) | [ListMetadataFormats](#) | [ListRecords](#) ([Resumption](#)) | [ListSets](#)

<b>responseDate</b>	2003-05-09T17:54:25Z
<b>request</b>	http://alcme.oclc.org/ndltld/servlet/OAIHandler?verb=ListSets

## ListSets

setSpec	setName
<a href="#">VTETD</a>	Virgina Tech. Theses and Dissertation
<a href="#">LMU</a>	Digitale Hochschulschriften der LMU
<a href="#">LSU</a>	Louisiana State University
<a href="#">CALTECH</a>	California Institute of Technology
<a href="#">HKU</a>	Hong Kong University Theses
<a href="#">VIENNA</a>	Wirtschaftsuniversität Wien
<a href="#">USF</a>	University of South Flordia
<a href="#">DUETT</a>	Dissertations and other Documents of the Gerhard-Mercator-University Duisburg
<a href="#">MIT</a>	M.I.T. Theses and Dissertation
<a href="#">WATERLOO</a>	Waterloo University Canada
<a href="#">PHYSNET</a>	PhysNet, Oldenburg, Germany, Document Server
<a href="#">NCSU</a>	North Carolina State University
<a href="#">UUdiva</a>	Upsalla University

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GO TO OTHER  
LANGUAGE:  
Select Language

# Scirus ETD Search

This search service is provided courtesy of **Scirus**, based on data harvested from the Union Archive hosted by OCLC.

## Basic Search

Query :   powered by **scirus**

## Advanced Search

All of the words  in

AND

All of the words  in

AND

All of the words  in

Only show results published between

1900 and  2012

Only show results in

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> All subject areas       | <input type="checkbox"/> Agriculture and Biological Sciences |
| <input type="checkbox"/> Astronomy                          | <input type="checkbox"/> Chemistry and Chemical Engineering  |
| <input type="checkbox"/> Earth and Planetary Sciences       | <input type="checkbox"/> Economics, Business and Management  |
| <input type="checkbox"/> Engineering, Energy and Technology | <input type="checkbox"/> Environmental Sciences              |
| <input type="checkbox"/> Languages and Linguistics          | <input type="checkbox"/> Law                                 |
| <input type="checkbox"/> Life Sciences                      | <input type="checkbox"/> Materials Sciences                  |
| <input type="checkbox"/> Mathematics                        | <input type="checkbox"/> Medicine                            |
| <input type="checkbox"/> Neuroscience                       | <input type="checkbox"/> Pharmacology                        |
| <input type="checkbox"/> Physics                            | <input type="checkbox"/> Psychology                          |
| <input type="checkbox"/> Social and Behavioral Sciences     | <input type="checkbox"/> Sociology                           |

Only search in the following collection

- ☒ ETDs ☐ The Scholarly Web

# Union catalog statistics 5/2010

- WorldCat has 13.4M records w. 502 MARC field indicating “thesis”
- 915K records are ETDs
  - 502 and 856 MARC fields
- ETDs added to WorldCat over the last 21 months = 630K
- Uncertainty
  - ETDs in Union Catalog not in WorldCat
  - Union Catalog duplicates

# Outline

- Acknowledgements
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- Union Catalog
- **Recent and Future Work**
- Summary

# Recent and Future Work

- OAI
- Preservation (LOCKSS)
- Metadata: Update ETD-MS
- Seungwon Yang
- Venkat Srinivasan
- Sung Hee Park
- Other Future Services and Enhancements



# OAI - Open Archives Initiative

- Advocacy for interoperability
- Standard for transferring metadata among digital libraries
  - Protocol for Metadata Harvesting (PMH)
    - Simplicity
    - Generality
    - Extensibility
- Support for PMH => Open Archive (OA)

# LOCKSS, MetaArchive

- Lots of copies keep stuff safe
- Stanford (Vicky Reich)
- Initial content: journals
- Set of publisher manifests (information providers)
- Set of storage systems (archival storage)
- 2005 proof of concept inside USA
- 2006 proof of concept for international members
- Who wants to join to extend (w. MetaArchive)?
- Preservation Initiative: Gail McMillan

# ETD-MS

- **ETD Metadata Standard**
  - XML-encoded metadata standard (content and encoding) for Electronic Theses and Dissertations (ETDs)
  - in part conforming to Dublin Core (DC)
  - using RDF
  - using UNICODE
- **With specified relationship to MARC**
- **Reworking and updating ...**

# Seungwon Yang

- Gigapixel display
  - Many computers and monitors in display wall
  - 5 high x 10 wide
- Showing many pages simultaneously
- Sections of display for different purposes
- Structure tree, sections as leaves
- Comparing 2 ETDs

# Venkat Srinivasan

- DMOZ: OK if use highest levels
- LCSH: over 4000 entries
- OCLC data for training
  - MARC records: for ETDs, for comparable set of books
- Build classifiers
- Data to use
  - Title + Abstract vs. Adding Fulltext
- New categorization and derived services
  - One ETD, ranked list of categories
  - Categories for each chapter

# Sung Hee Park

- ETD Table of Contents
  - Identify Structure according to ToC
  - Relate to Structure of Chapters, Sections, ...
  - Extract citations and references
- 
- Related work by C. Lee Giles, etc.
  - Extract tables
  - Extract figures

# Vision for a Research Project

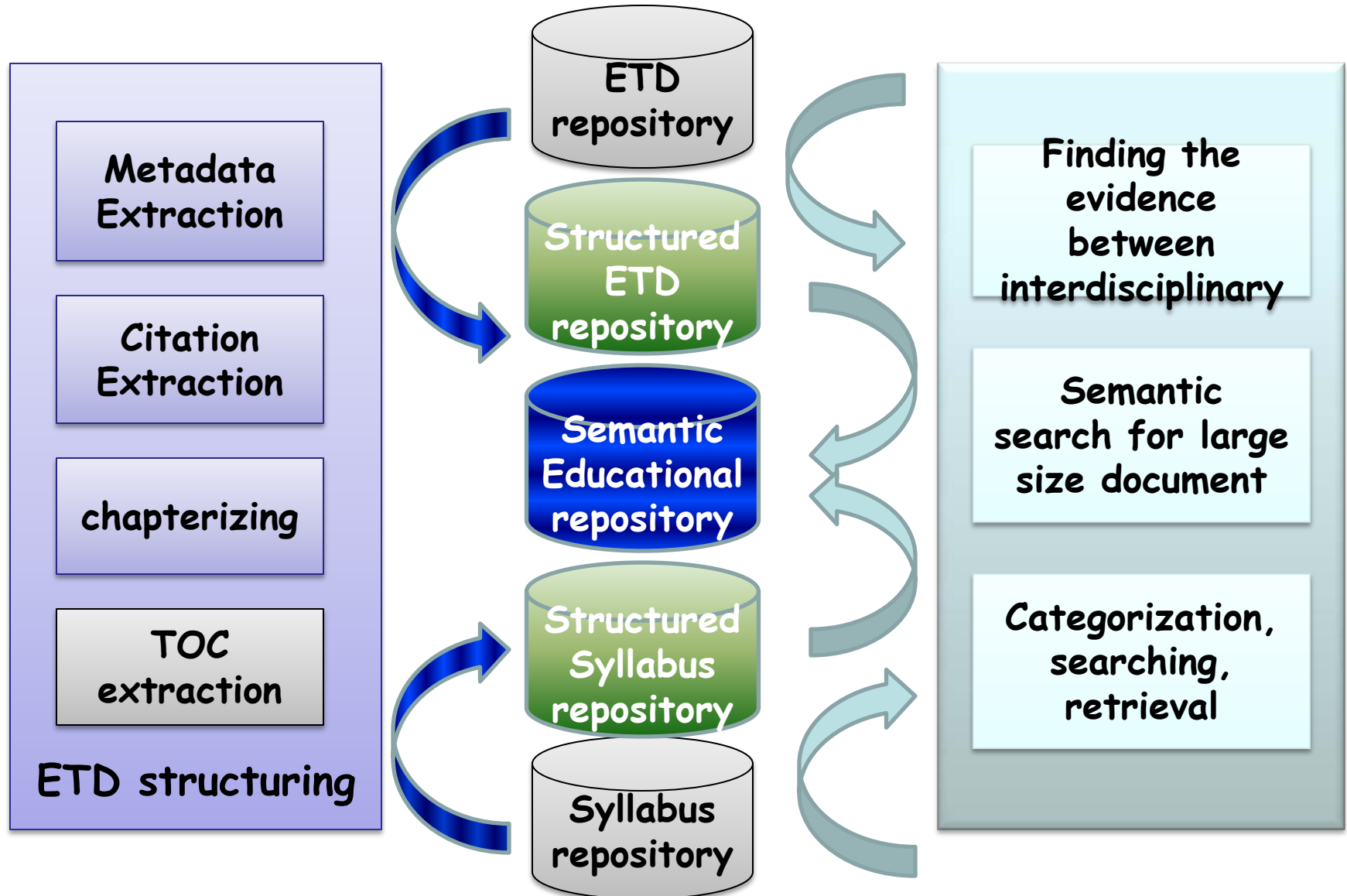


TABLE OF CONTENTS		
Logical structure		Logical location
LIST OF TABLES .....		vii
LIST OF FIGURES .....		viii
LIST OF ABBREVIATIONS.....		x
1. INTRODUCTION .....		1
1.1. Overall.....		1

**ToC entry** →

**Numbering scheme** →

**Separator** →

**Indentation** →

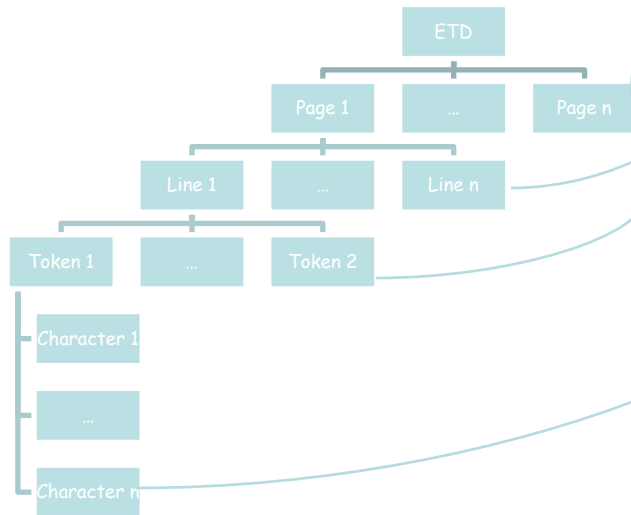
**heading** →

**Delimiter** →

**Logical page** →



# Physical Hierarchy



## Introduction

*Theoretically, it is possible that the right kind of music, employed in the proper manner, appropriate to both subject matter and audience, may facilitate learning. If music makes any contribution to learning from the film medium (and this is a hypothesis to be tested), then the problem becomes one of establishing what is right and appropriate...*

-- from Zuckerman (1949, p. 1)

In the fields of advertising and media, there has been a rapidly growing interest in studying the effects of music in commercials, films and television. In the advertising field alone, millions of dollars are being spent on background music research with the belief that proper music choice helps reinforce commercial messages (Kellaris, Cox, & Cox, 1993). A content analysis (Stewart & Furse, 1986) of commercials, found that music had a positive relationship with recall as well as comprehension. Hunt (1988) found that radio ads with music backgrounds achieved higher recall scores than ads with straight announcement format.

Seidman (as cited in Bruner, 1990) reviewed music's contribution in the film industry (both box-office features and educational films) and found that "cognitive and affective comprehension...[could] be influenced." Boltz, Schulkind, and Kantra (1991) concluded that background music was able to influence recall for film events and that music mood congruency with film mood was also able to have an effect.

With today's "Nintendo" generation, educators are challenged to present new ideas to students in a way that will "draw them into the excitement of learning," (p.35) not only to reach those most at risk of dropping out but also high-achieving students (Gates, 1993). The result has been the development of multimedia teaching aids in the hope of capturing

# Future Work – 1 of 3

- Build Collection
  - Add in page images of back files or at least bib records (retrospective)
  - Expand from dissertations to theses to undergrad theses (to reports to e-portfolios)
  - Cover all universities in every region, every country
- Build Community: local, national, regional

# Future Work – 2 of 3

- Promote richer use of ETDs
  - Collaborate with Google, Microsoft, ...
  - Support students so have DOIs, resolved references, citing passages, separate CVs
  - Support cross language, multilingual, image & multimedia search/browse
  - Cross-lingual summarization and support for discovery
  - Browsing after classifying

# Future Work – 3 of 3

- Enhance services for students
  - Help students with electronic submission, e-pub, multimedia, hypermedia, electronic data sets, electronic lab notebooks
  - Support students with annotations, threaded discussions, recommenders
  - Support work with early versions of ETDs for collaboration, with limited access and chat groups, mentoring, external committee members
  - Encourage submission of PPT, video of defense (or a rerun)

# Other Conferences

- JCDL
- ICADL
- ECDL
- CIKM
- SIGIR
- Multimedia
- ...
- [www.dlib.org](http://www.dlib.org)

# Spirit of NDLTD

- Help make a better (smaller) world
- Win-win-win (everyone can benefit)
- Have fun helping others
- Helpers/teachers learn more than those they work with
- Build on standards
- ETDs are preservable, popular, expressive, “better”
- Doable, feasible, learnable, affordable, sharable
- Please join/support NDLTD!

# Summary

- Acknowledgements
- NDLTD
- Union Catalog
- Recent and Future Work
- Questions and Comments?
- <http://fox.cs.vt.edu/talks/2010/>