Electronic Theses and Dissertations

Gail McMillan, Virginia Tech
   Digital Library and Archives, University Libraries

John Hagen, West Virginia University
   Acquisitions, Wise Library

Nan Seamans, Virginia Tech
   Instruction, University Libraries
Contemporary Turkish Coffeehouse Design Based on Historic Traditions

Timur Oral
MS, Interior Design
College of Human Resources and Education, VT
April 1997
http://scholar.lib.vt.edu/theses/available/etd-2227102539751141/
All the King’s Horses: Delta Wing Leading-Edge Vortex System Undergoing Vortex Breakdown: A Contribution to its Characterization and Control under Dynamic Conditions

Norman Schaeffler
PhD, Engineering Mechanics
College of Engineering, VT
April 1998
http://scholar.lib.vt.edu/theses/available/etd-32498-21232/
The Vision for ETDs

- 400,000 masters and PhD candidates annually exposed to e-publishing
- Faster and better information transfer
  - Empower students to convey richer message through use of multimedia
  - Universities publish their scholarship (timely, too)
- Improve graduate education through more effectively sharing information
- Libraries improve services and resources while saving money and space
Why digital submission?

- Students gain hands-on experience
  - preparing electronic works
  - using tools to share information effectively
- Scanned documents are costly to store, less effective than original digital documents
ETDs: Library Goals

- Improve library services
  - Better turn-around time
  - Always available

- Reduce work
  - Catalog from etext
  - Eliminate handling: mailing to UMI, bindery prep, check-out, check-in, reshelving, etc.

- Save space
Benefits: Increased Access

- Low margin, high use
  - Incorporate ETDs with other digital library activities
    - EJournals, EReserve, ImageBase (digital images)
    - Additional equipment, staff may not be necessary
  - May use VT programs, scripts, etc.
    - http://scholar.lib.vt.edu/ETD-db/

- Online vs. circulation of copies
  - Access statistics
  - Circulation statistics
## Accesses to VT’s ETDs

<table>
<thead>
<tr>
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<th>1997</th>
<th>1998</th>
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<tbody>
<tr>
<td>Total requests</td>
<td>247,537</td>
<td>465,974</td>
<td>1,190,113</td>
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<td>Daily requests</td>
<td>685</td>
<td>1,722</td>
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<td>244,987</td>
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<td>177,647</td>
<td>217,796</td>
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<td>Hosts served</td>
<td>22,725</td>
<td>28,022</td>
<td>35,593</td>
<td>105,632</td>
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Concerns about ETDs

- Inaccessible ETDs
  - Patents pending
  - Future publication status

- Broken links
  - Quality of work remains
    - Similar to out-of-print articles
    - Media standards
an end to the ‘other’ in landscape architecture: poststructural theory and universal design

David Orens
Master of Landscape Architecture
College of Architecture and Urban Planning
April 1997
http://scholar.lib.vt.edu/theses/available/etd-4220121649751351/
Concerns: Archiving

- No paper copies
  - Standard multimedia formats
  - PDF
    - An open source program
    - EJournals, government documents, etc.
  - Frequent backups, multiple locations
  - http://scholar.lib.vt.edu/theses/archive.html

- UMI: traditional microfilming

- VTLS: Union catalog of OAI metadata, links

- NDLTD: cooperative, inter-institutional mirroring (not yet)
What’s NDLTD?
Networked Digital Library of Theses and Dissertations
http://www.ndltd.org

- An initiative to improve graduate education, increase sharing of knowledge, help universities build their information infrastructure, and extend the value of digital libraries

- A federation of members
  - helping evolve standards
  - Meet at conferences
    - 2002: Brigham Young University, May 30-June 1, 5th International Conference
    - 2001: Cal Tech, March 22-24, 4th International Conference
    - 2000: University of South Florida, 1999: Virginia Tech
  - Sharing information and programs
    - ETD system: submission process: http://scholar.lib.vt.edu/ETD-db/

- A recent topic in the news
- Led by a steering committee and working committees
Challenges to Creating and Sustaining ETD Collections

- Copyright
  - Fair use or permission
  - Authors’ rights
- Attitudes about publishing
  - Reclaim university research and scholarship
- Accepted and dependable as paper or microfilm
Current Status of ETDs

- 110 universities world wide
- Required at: VT, WVU, ETSU, U. No..Tex., UT Austin, NCSU, (LSU spring 2002); U Hong Kong
- 55 US institutions have projects
- 3597 ETDs at VT, 1050 at WVU
NDLTD: US Universities

Air University, Maxwell AFB
Baylor University
Brigham Young University
California Institute of Technology
Clemson University
College of William and Marry
Concordia University (Illinois)
East Carolina University
East Tennessee State University
Florida Institute of Technology
Florida International University
George Washington University
Louisiana State University
Marsh University
Massachusetts Institute of Technology
Miami University of Ohio
Michigan Tech
Mississippi State University
Montana State University
Naval Postgraduate School, Monterey, CA
New Jersey Institute of Technology
New Mexico Institute of Mining and Technology
North Carolina State University
Northwestern University
Pennsylvania State University
Regis University
Rochester Institute of Technology
Texas A & M University
University of Central Florida
University of Colorado, Health Sciences
University of Florida
University of Georgia
University of Hawaii at Manoa
University of Iowa
University of Kentucky
University of Maine
University of North Orleans
University of North Texas
University of Oklahoma
University of Pittsburgh
University of Rochester
University of South Florida
University of Tennessee, Knoxville
University of Tennessee, Memphis
University of Texas at Austin
University of Virginia
University of West Florida
University of Wisconsin, Madison
Vanderbilt University
Virginia Commonwealth University
Virginia Tech
Wake Forest University
West Virginia University
Western Michigan University
Worcester Polytechnic Institute
NDLTD: International Universities

Alicante University
Australian National University
Biblioteca de Catalunya
Chinese University of Hong Kong
Chungnam National University (S. Korea)
City University, London
Curtin University of Technology (Australia)
Darmstadt University of Technology
Freie Universitat Berlin
Gerhard Mercator Universitat Duisburg
Griffith University (Australia)
Gyeongsang National University (Korea)
Humboldt University, Berlin
Indian Institute of Technology , Bombay
Lund University, Sweden
McGill University, Montreal, Quebec
Nanyang Technological University (Singapore)
National Sun Yat-Sen University
National University of Singapore
Pontifica Universidade Catlogica do Rio de Janeiro
Rand Afrikaans University (S. Africa)
Rhodes University (S. Africa)
Shanghai Jiao Ton University (China)
St. Petersbourg State Technical U. (Russia)
Sudanese National Electronic Library
Universitat Autonomca de Barcelona
Universitat d'Alacant

Universitat de Barcelona
Universitat de Girona
Universitat de Leida
Universitat Oberta de Catalunya
University Politecnica de Catalunya
University Politecnica de Valencia (Spain)
Universitat Pompeu Fabrра
Universitat Rovira I Virgini
Universite Laval (Quebec)
University of Bergen (Norway)
University of Antioquia (Medellin, Colombia)
University of British Columbia
University of Campinas
University of Guelph (Ontario)
University of Hong Kong
University of Melbourne
University of Mysore
University of New South Wales
University of Pisa
University of Queensland
University of Sao Paulo (Brazil)
University of Syndey
University of Utrecht
University of Waterloo
Uppsala University
Wilfrid Laurier University
Lessons from ETDs

- Implementation of new formats slower than expected
  - still text oriented (faculty influence)
  - new graduate students can plan for ETDs
- Requiring institutions slower/few than expected
- If you build it, it will get used.
  - access exceeded expectations
  - disappointing number are inaccessible
- No longer experimental
  - surprising increase in number and diversity of NDLTD institutions
- Remarkable increase in exposure to graduate student research
ETDs
Case Studies at WVU and VA Tech

John Hagen, West Virginia University
Acquisitions, Wise Library
Electronic Theses & Dissertations
Case studies at WVU and VA Tech
WVU Team Collaboration

♦ Office of Academic Affairs and Research
  ♦ Provost, Office of Graduate Education
  ♦ Decentralized graduate programs

♦ ETD Task Force
  ♦ Planning, Policy, Administration, Education, & Technology Issues

♦ Office of Information Technology
  ♦ Student technical support, labs, workshops, Web resources

♦ Academic Computing
  ♦ Database implementation, archiving

♦ University Libraries
  ♦ Advising, Web resources, submissions review, cataloging, reference & document delivery services, archiving
Collection Maintenance

♦ WVU Academic Computing
  ♦ Server and maintenance: (.3 fte; existing personnel utilized)
    ♦ Dell 20 GB hard drive, Windows NT OS, initial programming, archiving routine
    ♦ Coordinates with University Libraries for archival microfilming or alternate backup via UMI
Education

♦ WVU Workshops / Consultants:
  ♦ 1.0 fte; rotates among 4 consultants existing personnel utilized

♦ ETD Document Preparation and Conversion
  ♦ Academic Computing
    ♦ Many students need lack basic word processing and multimedia skills

♦ ETD Program Overview and Submission Process
  ♦ University Libraries
    ♦ 1/3 of reviewer’s time spent advising, teaching seminars
University Libraries / Technical Services Division

♦ Submissions
  ♦ 1.0 fte; existing personnel utilized: Technical Consultant and occasional backup (equivalent to submission & review by graduate school)

♦ Cataloging
  ♦ 1.5 fte; existing personnel utilized:
    ♦ Cataloging Librarian, Library Technical Assistant
  ♦ Cost reductions for binding, handling, etc:
    ♦ $6.00/ dissertation unit
    ♦ savings of at least $1,000 annually
  ♦ Handling: no book processing required (labor intensive)
Reference / Document Delivery:

- Existing personnel utilized
- Required minimal training, mostly about access to restricted ETDs
- Preparation for expanded use of electronic delivery & copy services
Students

♦ Master’s Theses:
  ♦ $55.00 submission fee
  ♦ UMI submission + $10 archiving fee
  ♦ $45.00 copyright fee optional

♦ Doctoral Dissertation:
  ♦ $65.00 submission
  ♦ UMI submission + $10 archiving fee
  ♦ $45.00 copyright fee optional
Web Distribution Options: Student Submits ETD Online

♦ WVU Web Distribution Options

1. World
2. Campus Only
3. Campus Encrypted
4. No Access
Web Distribution of WVU ETDs:
1998

World 56%
Campus-Only 41%
Patent 3%

Web Distribution of WVU ETDs:
1999

World 53%
Campus-Only 42%
Patent 2%
Campus-Encrypted 3%

Web Distribution of WVU ETDs:
2000

World 62%
Campus-Only 29%
Patent 1%
Campus-Encrypted 8%
Library Access to ETDs

♦ Citation from the catalog
♦ Online Full-text
♦ Document delivery services
♦ ProQuest (UMI)
♦ NDLTD
Library Access to Restricted ETDs

♦ Campus Only ETDs
  – Electronic files free via Inter-Library Loan
  – Printed copies for a fee via Library Copy Services

♦ Campus Encrypted ETDs
  – Available in print format only.

♦ Restricted ETDs
  – Secured until patent / proprietary concern has been resolved.
ETDs are accessed 5,000% more than print documents.
WVU ETD Access by Geographical Domain

- Commercial (.com) 25%
- Educational (.edu) 24%
- Network (.net) 16%
- United Kingdom (.uk) 3%
- Germany (.de)
- Singapore (.sg)
- Australia (.au)
- Spain (.es)

- 65% Domestic
- 35% Foreign
Total WVU ETDs Accesses: 1998 - Present

Number of Accesses

- 235,251
Total WVU ETDs as of Summer 2001

Number

1,500
1,050
1,000
500
0
WVU ETD Format Types as of Summer 2001

- PDF: 99.24%
- PDF & JPEG: 0.19%
- PDF & Qt Video: 0.19%
- PDF & HTML: 0.10%
- XML: 0.10%
- PDF & MP3: 0.10%
- PDF & PPT: 0.10%
- JPEG: 20.00%
- PPT: 40.00%
- HTML: 60.00%
- MP3: 80.00%
- PPT: 100.00%
New and Forthcoming ETD Program Features

♦ Students Market Research on the Web
  – Dynamic Addenda
  – Hit Counters for Individual ETDs
  – Automatic Citation Generation

♦ Multimedia Incentives
  – Stipends

♦ Automated Approval System
  – Library & Committee Chair

♦ Automated Batch Uploads to UMI

♦ Web Based Library OPAC
  – Click-able URL access to ETD Collection

♦ Union Catalog of ETDs Worldwide
Positive Outcomes from Implementation

♦ Heightened sense of awareness on campus of the profound effects of information technology

♦ Rapid Technology Transfer:
  ♦ Transforming West Virginia’s economy
  ♦ Providing research access to the world
ETDs as prior publications: What the publishers say

Nan Seamans
Instruction, University Libraries
Virginia Tech
ETDs as prior publications: What the publishers say

Nan Seamans
November 1, 2001
Charleston Conference
Why this matters...

- Deterrent to all electronic publishing?
- Deterrent to a new form of scholarly communication?
- Misinformation?
- Attempts to hold down costs?
- Information sharing?
- Make people think about it?
Dalton’s study

- Done in 1999, reported at ETD 2000
- Results are available at [http://lumiere.lib.vt.edu/surveys/](http://lumiere.lib.vt.edu/surveys/)
- 200 scientific journals – small response
- 94% had policy on prior publication
- 68% did NOT have a policy that specifically referred to electronic pubs
Dalton – ...begin to build a picture of where opinion was leading with respect to widely disseminated ETDs and their status as ‘publications.’
Seamans’ study

- Science & Technology Studies (STS) graduate program at Virginia Tech
- Where they publish
  - 133 Journal titles
  - 18 academic presses
  - 9 commercial presses
Contacts

• What I ended up with
  – 121 Journal titles
  – 18 academic presses
  – 9 commercial presses

• Aggregation
  – 160 from STS
  – 148 identified
  – 141 were sent an e-mail
• Response rate
  – 46 surveys responses – 31%
  – 36 e-mail responses – 24%
  – Total response rate... – 55%

• “ENTERPRISE” – journal, a press, or a publishing company
Responses

• Majority
  - were editors
  - were not-for-profit enterprises
  - had some kind of policy on prior publication and simultaneous submission

• Subject matter of the publications varied
• Majority did NOT have a policy that referred to work that may have been made electronically accessible on the Web

• Why no policy?
  – Manuscripts are handled on an individual basis; existing policy applied to web-based publications by implication; editorial policy had not yet been set

• 15 people (18%) said that ETDs would constitute prior publication

• 1 person – absolutely not...
Comments from the survey

- New issue
- Too long
- Proportion
- Revisions
- Market

- Condensed, contextualized
- Peer review
- Exposure
- Remove or restrict
General comments

• Copyright
• Time, audience
• Chapters
• UMI, Harvard
• Better paper
• Virginia Tech response...
E-mails

• Taylor & Francis – definitive versions
• Referred back to publishers
• “A bit of a tricky issue this...”
• Different format
Publishers, pro & con

• **Sage** – “Please note that we do indeed consider posted electronic theses and dissertations to be previously published material and would not accept them as original publications.”

• **Elsevier** – “...stated emphatically that [Elsevier] encourages its authors to link their articles in Elsevier journals to their personal web sites and authorizes their departments to provide such links.”
Conclusions

- DERIVED
- Virginia Tech’s alumni survey
- Keep surveying
- Seek opportunities to continue this discussion
This does matter...

- Perceptions
  - Deterrent to all electronic publishing
  - Deterrent to a new form of scholarly communication
- Misinformation
- Looking ahead - holding down costs
- Information sharing, making YOU think about it