What to Expect from ETDs: PART 2
Library Issues and Responsibilities

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ETD Server

- Library
  - provides, maintains, backs-up
  - upgrades hardware/software
    - NeXt 3.3 (running HP: 1989-1997)
    - Sun dual-processor Enterprise 250 running Solaris 2.7
  - other
    - training
    - information for NDLTD partners
VT’s ETD Server: Sun Netra

- 2 300 Mhz Ultrasparc processors
- 384Mb of RAM
- 9 Gb of disk space for OS, related tools
- ETDs on 9 Gb partition
- Apache, Apache SSL
- Perl 5.004_01
- CGI.pm
- Sun 8mm Ultra Wide SCSI tape drive
  - 170m tapes; 40 Gb compressed storage
Library Provides Access

Internet workstations
- for authors/creators
  - computer labs and classrooms
  - New Media Center (software, hardware, and assistance)
- for library users: local and remote
  - OPAC
  - World Wide Web
Library Internet Workstations--for Student ETD Authors (and others)

New Media Center -- Newman Library
- 22 Macs
- scanners, digital video/audio production, etc.
  - Netscape, Acrobat, Word, PowerPoint, Photoshop, and much more
- helpful staff
- http://www.nmc.vt.edu
Library Internet Workstations--Public, On-Campus Access to ETDs

- locate ETDs through
  - OPAC and World Wide Web
- circa 350 workstations (mostly Macs)
- throughout University Libraries
  - Newman (main) Library
    - TechConnect (50), throughout the building
  - Branch libraries
Library Introduces Faculty to ETDs

- Overview of process and access
  - from student’s submission to public access
  - virtual tour of ETD web sites

- Faculty concerns
  - Now: Future publication potential, copyright
  - Previously:
    - Does the Library have enough server space?
    - Network response time might be too slow
Library Issues: Cataloging

Current Improvements and the Outlook for the Future
ETD Cataloging

- Professional catalogers developed policies and procedures
- Catalogers’ workstations
- Cataloging from submission form
- Copy/paste and direct keying
- Input in OCLC, download to OPAC
VT ETD Cataloging

- same as current cataloging policies, except:
  - author-assigned keywords (not LCSH)
  - generic (not LC) call no.
  - fields/subfields as required for computer files
  - full abstracts

- time savings
  - cataloger familiar with computer files
  - equipment, software for word processing
  - 5 minutes avg. (10-15 minutes for paper TDs)
Cataloging completed (OCLC>>OPAC)

ETDs available on the Web
- Programmatic notification e-mailed to UMI
- Browsable author and department
  - all access points available through search
- InfoSeek’s ULTRASEEK search engine
Library Costs

- $12/vol. for paper thesis processing
  - catalog, bind, security strip, label, shelve
  - @950 vols./yr. = $11,466
- $3.20/vol. ETD processing
  - cataloging @950 vols./yr. = $3040
- $.07/vol. shelving
- $.04/vol. circulation
Library Savings: Processing New Titles

- 73.3% savings NOW ($8360/yr.)
- Future: cataloging costs = $0/title
  - to generate MARC record
    - $3.65 credit w/OCLC for original bib record contributed
  - OCLC access costs remain
- Generate MARC from ETD
  - Use tagged elements within e-text to generate bibliographic record: SGML ETD DTD>>MARC
Savings for Libraries can be Realized when ETDs are Available

- Circulating from the general collection
  - /month: 1997
  - 148/month: 1996 (16% from Storage)
- Retrieved from off-site storage (pre-1984)
  - 57/month: 1997 (19% fewer)
  - 70/month: 1996
- TDs out through interlibrary loan
  - 79/month: Jan. 1998 (45% fewer)
  - 175/month: Feb. 1996
Archiving ETDs

- Every 15 minutes back-ups made of not-yet-approved submissions
- Hourly back-ups of newly approved ETDs
- Weekly back-ups of entire ETD collection
- Copies stored on-site and off-site
Availability of Library Resources

In a typical month
- 80% of VT ETDs available
  - 53% available without restrictions
  - 27% available to VT only
- 20% unavailable
New Concerns for Libraries

- Authors limiting access to some ETDs
  - VT ETDs unavailable through InterLibrary Loan
  - Contact authors for copies
  - Distribute authors’ e-mail addresses
- Multiple formats approved
- URLs >> PURLs and Handles
  - maintaining links to VT ETDs
  - maintaining links to external sites
(Anticipated) Changes for ETDs

- Redesign of submission form (completed 8/99)
  - data for analysis and to generate bibliographies, etc.
- ETDs in dual formats: PDF and SGML
  - Portable Document Format
  - Standard Generalized Markup Language
- MARC derived from SGML (ETD DTD)
  - MAchine Readable Cataloging
  - ETD Document Type Definition
- Distributed searching of NDLTD (available)
  - Networked Digital Library of Theses and Dissertations
Join the Networked Digital Library of Theses & Dissertations

- **Browse**
  - [http://scholar.lib.vt.edu/theses](http://scholar.lib.vt.edu/theses)
  - [www.ndltd.org](http://www.ndltd.org)

- **Share your ideas, questions, concerns, experience: Contact**
  - John Eaton, Graduate School (eaton@vt.edu)
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