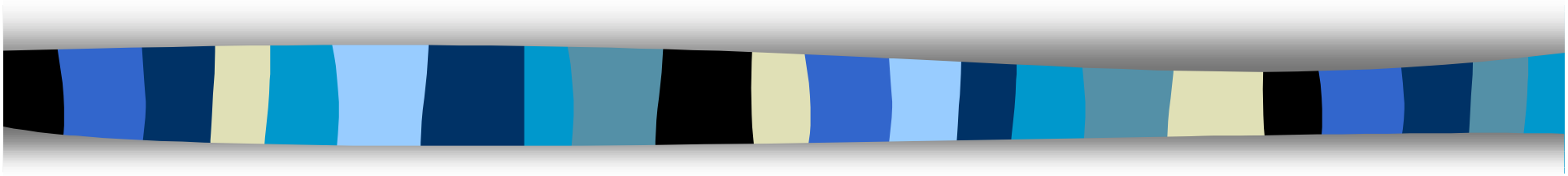
# What to Expect from ETDs: Library Issues and Responsibilities



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4th International ETD Conference March 24, 2001

# ETDs: University's Goals

- Students learn about electronic publishing and digital libraries
  - improve graduate education
- Timely technology and information sharing
- Universities unlock intellectual property

# ETDs: Library Goals

- Improve library services
  - Timely access to more information
  - Serve more clients with fewer staff
- Save money
- Save space

# Library may Introduce Faculty to ETDs

- Overview of process and access
  - From student's submission to public access
  - Virtual tour of ETD web sites
- Faculty concerns
  - Does the Library have enough server space?
  - Network response time might be too slow
  - Future publication potential, copyright

# Library Responsibility: From Author to Public Access

1. Author submits ETD
   - Directly to library server/permanent archive
   - Access/archiving fee replaces binding fee
2. [Graduate School] approves ETD
3. ETD accessible
   - Per author/advisor's notification
   - Public has appropriate level of access

# Libraries with ETDs: Improve Access to Information Resources

- Server maintenance and archiving
- Public access equipment, software
  - Information seekers need
    - Internet/Web, OPAC
  - Authors need
    - Internet workstations:create, access

# Library Internet Workstations-- Public, On-Campus Access to ETDs

- locate ETDs through
  - OPAC and World Wide Web
- throughout University Libraries
  - circa 350 workstations (mostly Macs)
    - Newman (main) Library
    - Branch libraries
- ACITC

# Internet Workstations-- for Student ETD Authors (and others)

- Netscape, Acrobat, Word, PowerPoint, Photoshop, and much more
- Scanners, digital video/audio production, etc.
- Helpful, knowledgeable staff
  - New Media Center -- ACITC: 50 Macs
  - http://www.nmc.vt.edu

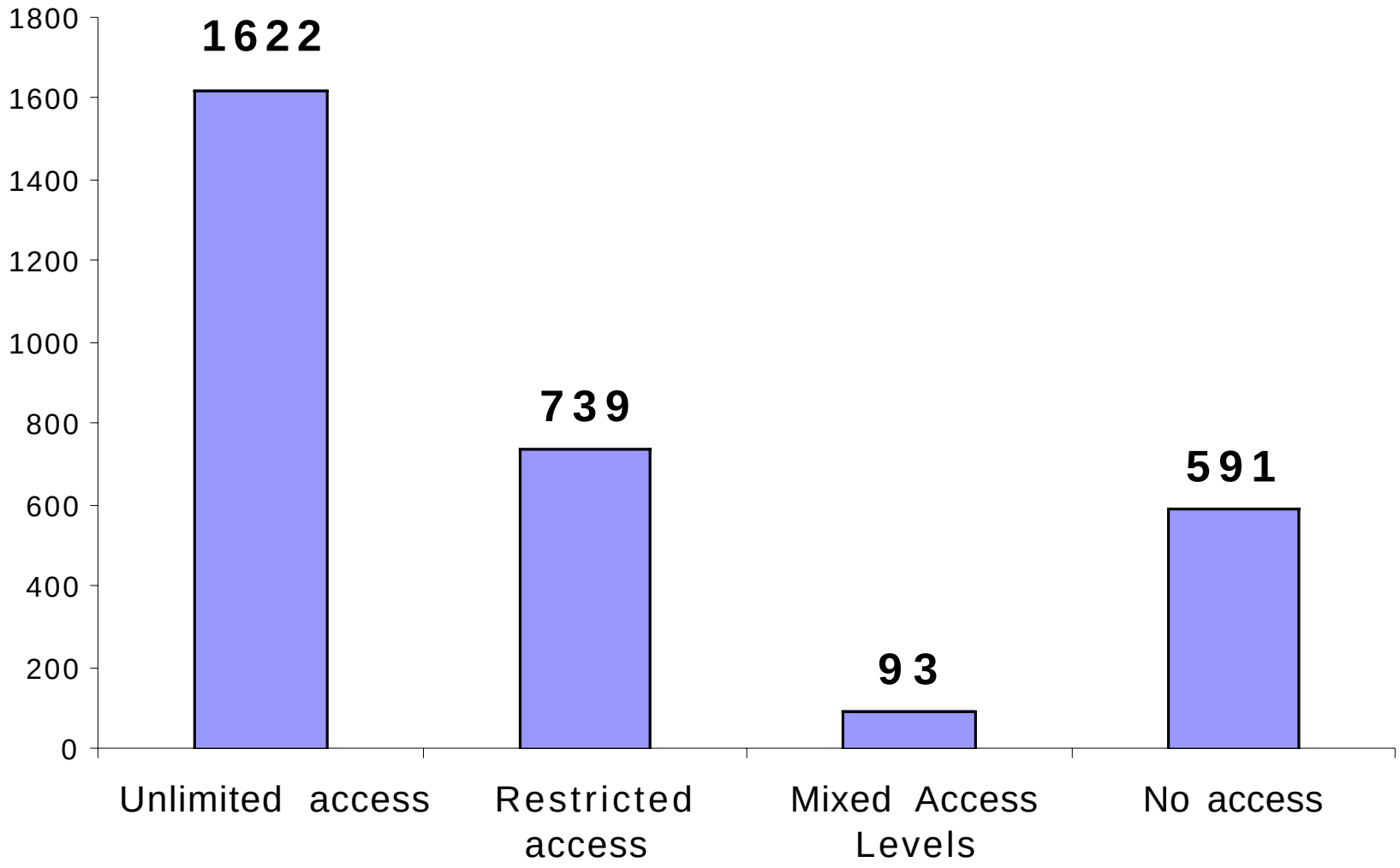
# Library Responsibility: ETD Server

- Provides, maintains, backs-up
- Upgrades hardware/software
  - Started small: NeXt 3.3 (running HP: 1989-1997)
  - Grew: Sun dual-processor Enterprise 250 running Solaris 2.7
- Other
  - Copyright
  - Share knowledge, information, expertise with NDLTD partners

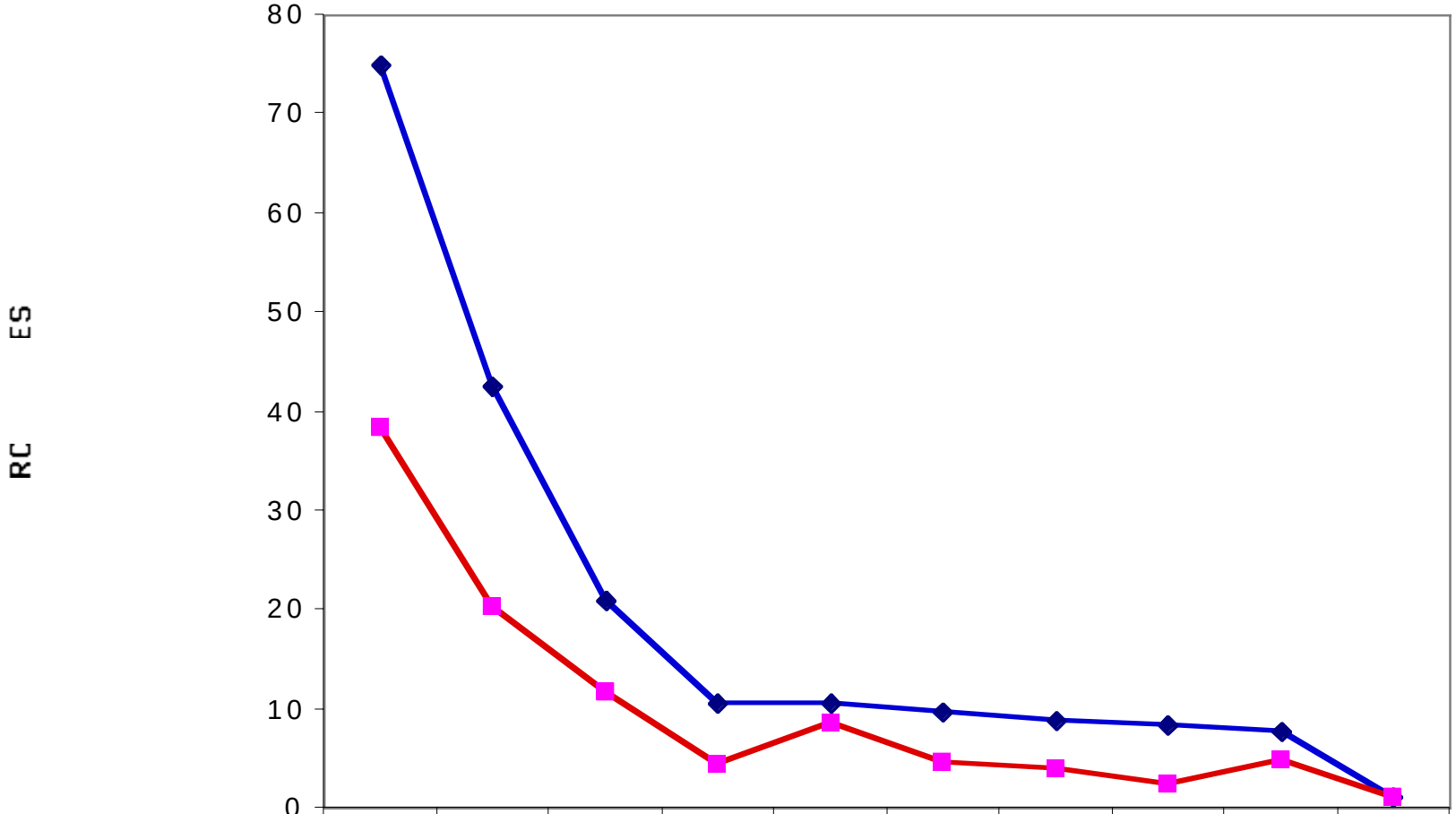
# Library Responsibility: Access

- ETD available on the Web
  - As soon as approved
  - Used to wait for cataloging
- Programmatic notification--e-mails
- Access points
  - Browsable topics--author and department
  - all access points available through search
- Search engines
  - Started small: freeWAIS first
  - Grew: InfoSeek's ULTRASEEK search engine
- Statistics

# VT ETDs as of March 19, 2001

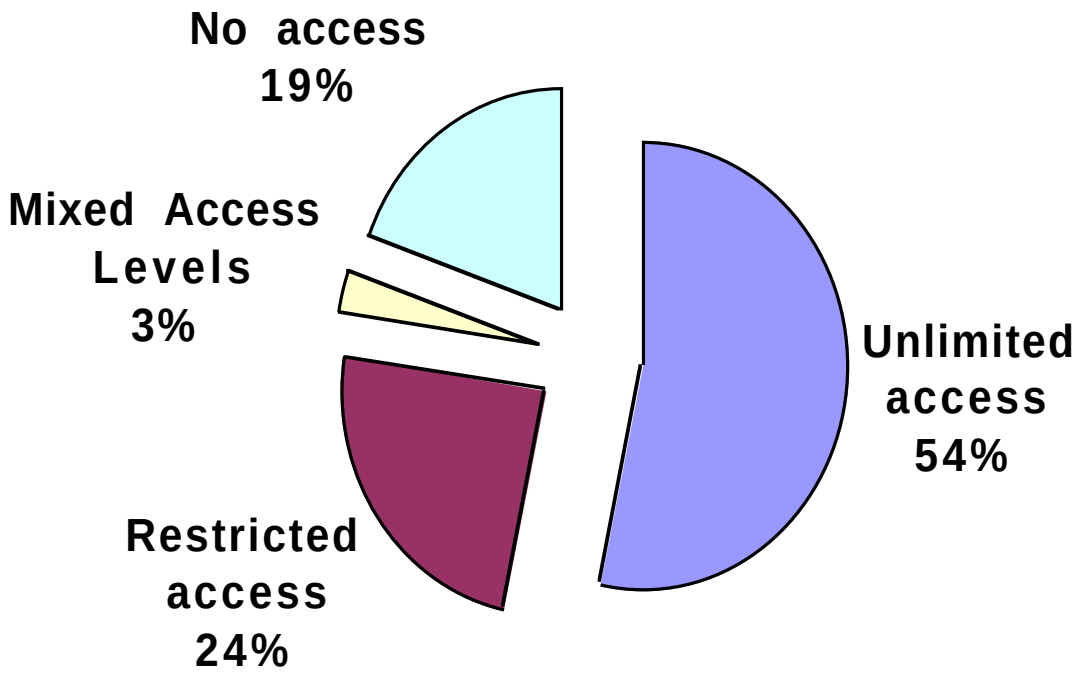


# While preparing your ETD, where did you find answers to your questions?

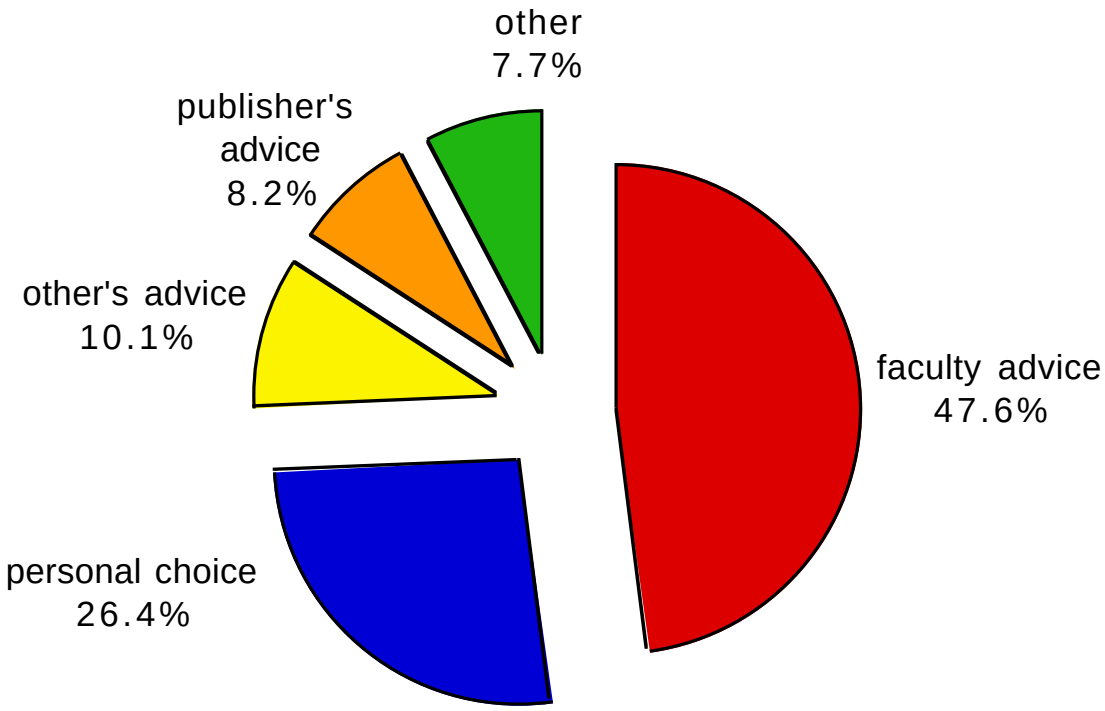



| | VT Web | friends | worksh op | telepho ne | other | NMC | email | tech_s upport | commit tee | web |
|---|---|---|---|---|---|---|---|---|---|---|
| Feb-Aug. 1999 | 74.9 | 42.6 | 20.9 | 10.5 | 10.5 | 9.7 | 8.8 | 8.4 | 7.7 | 1.1 |
| 1999-2000 | 38.4 | 20.2 | 11.6 | 4.5 | 8.6 | 4.6 | 3.9 | 2.5 | 4.8 | 1.1 |

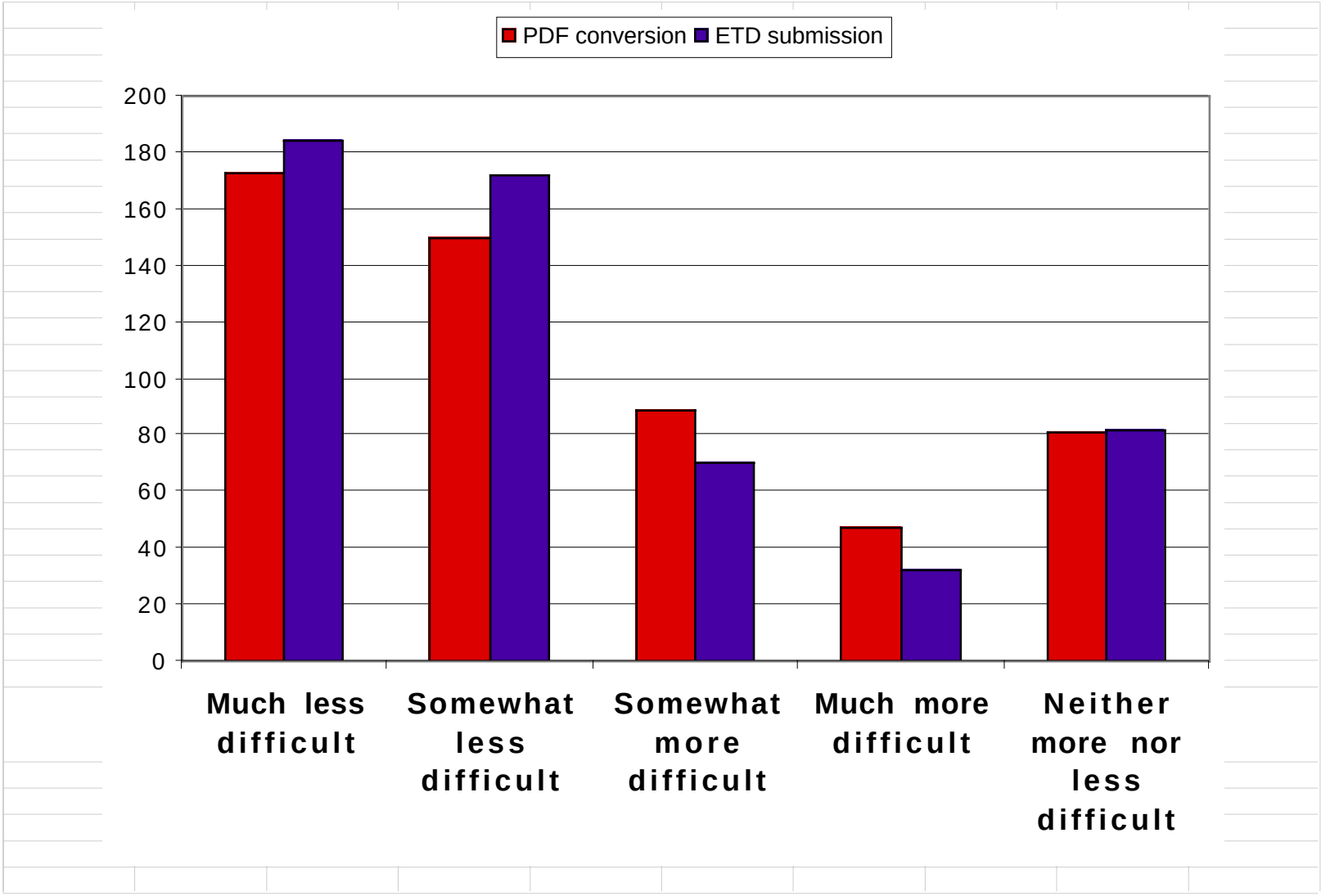
# VT ETDs as of March 19, 2001



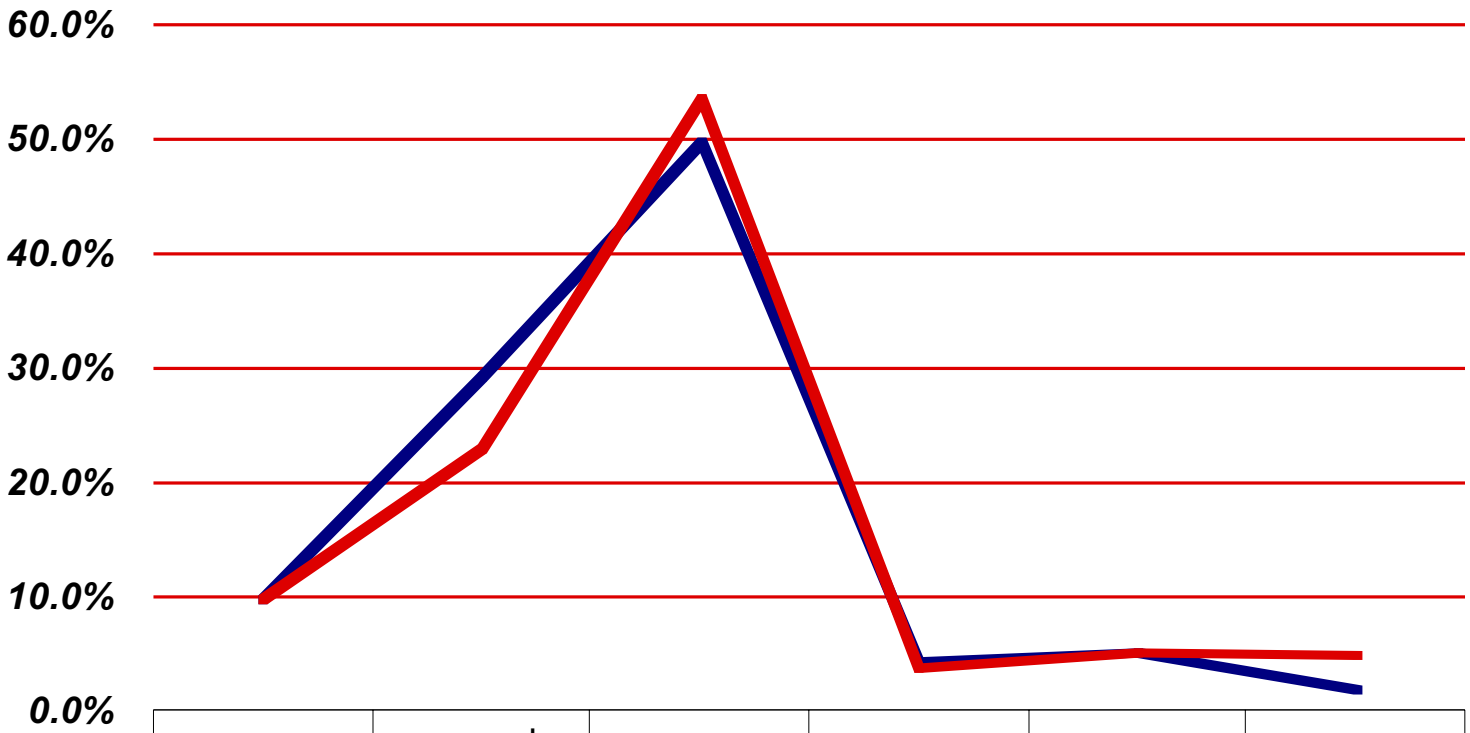
# Why Graduate Students Restrict Access



# Ease of Conversion and Submission Processes



# What do graduate students plan to publish from their ETDs?




| | nothing | proceed - ings | article | chapter | book | other |
|---|---|---|---|---|---|---|
| 1998/1999 | 9.9% | 29.2% | 49.8% | 4.2% | 5.0% | 1.9% |
| 1999/2000 | 9.7% | 23.0% | 53.5% | 3.8% | 5.1% | 4.9% |

# VT Graduate Student Alumni Surveys

- 21 had published by fall 1998
- 48 had published by fall 1999
- **0% encountered publisher resistance** to accepting manuscripts derived from their ETDs

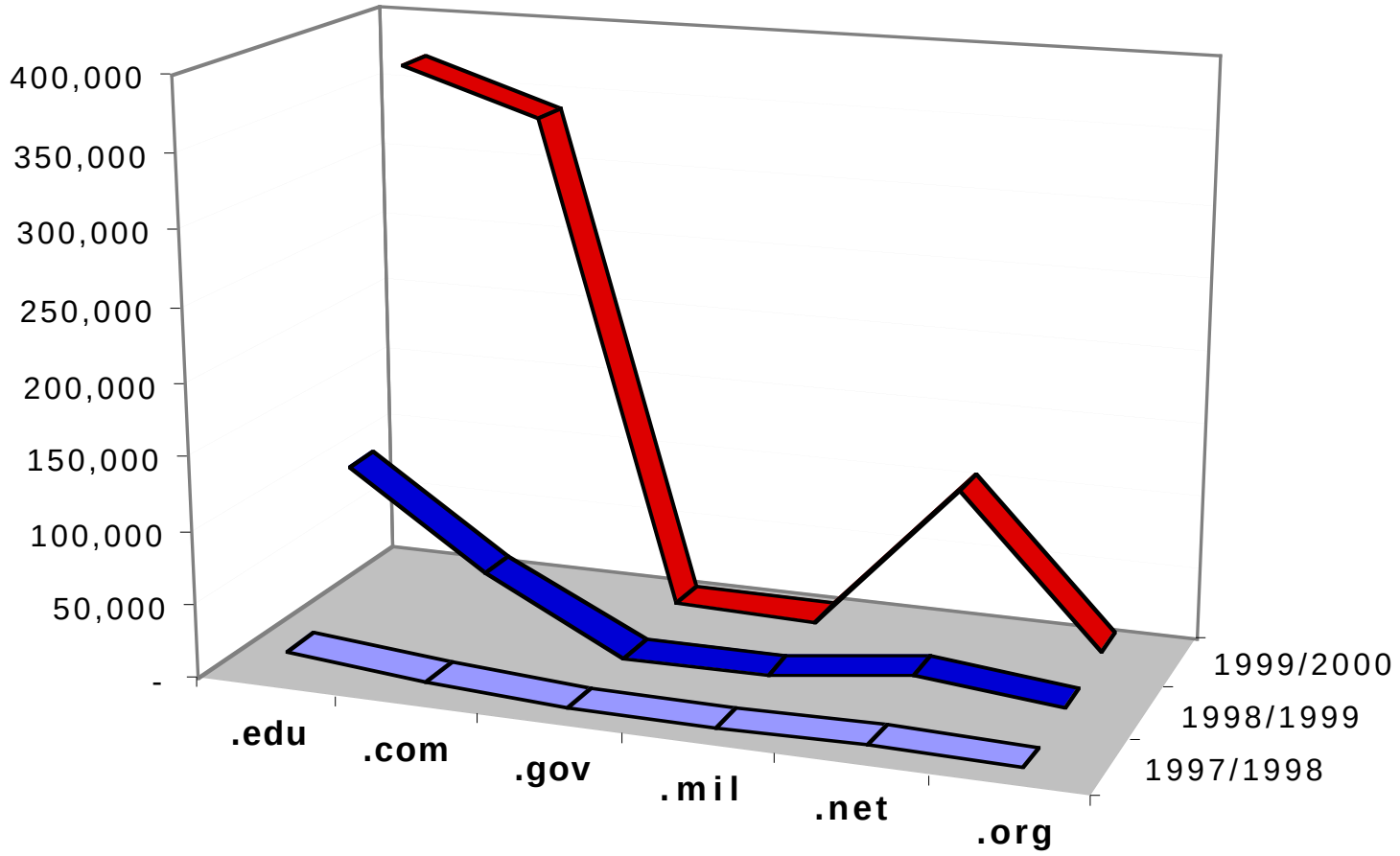
# Access to VT ETDs

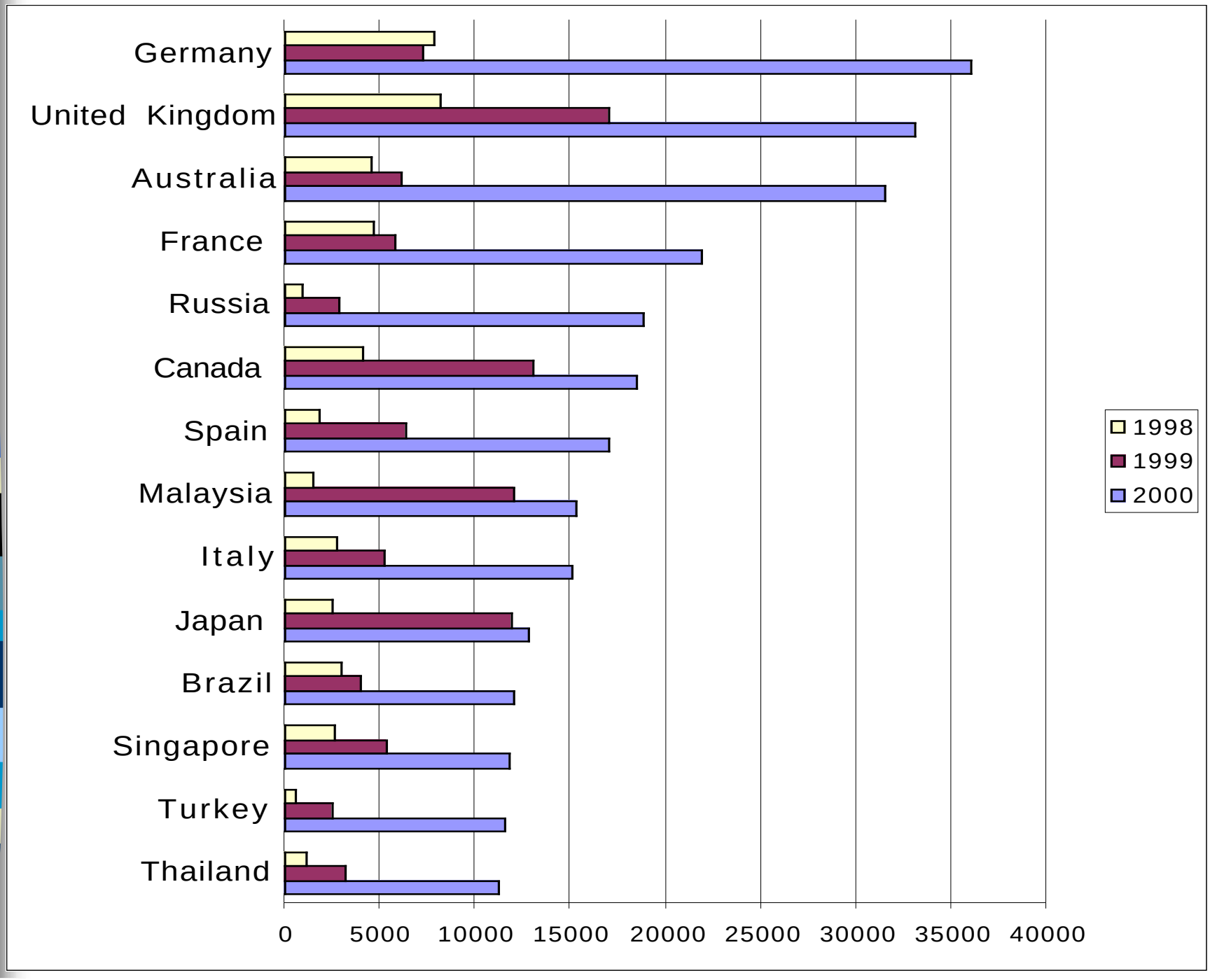
| | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|
| Total requests | 37,171 | 247,537 | 465,974 | 1,190,113 | 1,894,510 |
| Daily requests | 102 | 685 | 1,722 | 3,016 | 5,176 |
| ETD requests | 4,600 | 72,854 | 244,987 | 671,981 | 734,807 |
| Abstract req. | 25,829 | 112,633 | 177,647 | 217,796 | 320,273 |
| Hosts served | 9, 015 | 22,725 | 28,022 | 35,593 | 105,632 |

1990-1994: paper TD circulated 2-3/yr

- VT theses submitted 1990-94: combined average circulation was 2.24/yr per copy
- VT dissertations submitted 1990-94: combined average circulation was 3.2/yr per copy

# Libraries Serve more ETD Users




Germany
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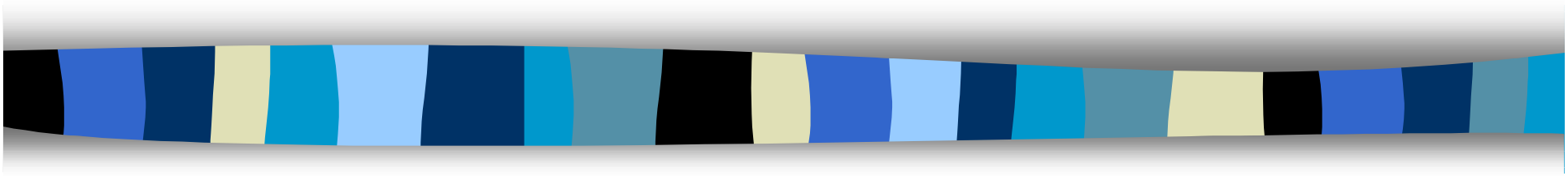

# Library Issues: Internal Users

## Cataloging

# ETD Cataloging

- Professional catalogers adapt policies and procedures
- Catalogers' workstations
- Cataloging from submission form
- Input in OCLC, download to OPAC

# ETD Cataloging
## time to rethink policies and procedures

- Same cataloging policies, except:
  - fields/subfields as required for computer files
  - full abstracts
  - author-assigned keywords (or LCSH)
  - generic (or LC) call no.
- Time savings
  - cataloger familiar with computer files
  - equipment, software for word processing
  - 5 minutes avg. (10-15 minutes for paper TDs)

# Library Costs

OLD

- $12/vol. for processing a paper thesis
  - catalog, bind, security strip, label, shelve
  - @950 vols./yr. = $11,466
- $.10/vol. shelving
- $.07/vol. circulation

NEW

- $3.20/vol. ETD processing
  - cataloging @950 vols./yr. = $3040

# Library Savings: Processing New Titles

- Immediate savings from eliminated technical processing
- Future: cataloging costs
  - $0/title to generate MARC record
  - OCLC access costs remain
- Generate MARC from ETD
  - Use tagged elements within e-text to generate bibliographic record: ETD DTD>>MARC
- Shelving space available

# Archiving ETDs

- Frequent back-ups
  - not-yet-approved submissions
  - approved ETDs
- Regular back-ups of entire ETD collection
- Copies stored on-site and off-site

# New Concerns for Libraries

- Authors limiting access to some ETDs
  - ILL: InterLibrary Loan
  - Contact authors for copies
  - Distribute authors' e-mail addresses
- Multiple formats approved
- URLs >> PURLs and Handles [>> SFX]
  - maintaining links to ETDs
  - maintaining links to external sites
- Expanded federated search of NDLTD

# Current Status of NDLTD

- 106 universities world wide
- VT, ETSU, WVU, UNo.Tex., and UT Austin require digital submission
- 48 US institutions have projects
- Annual conferences with growing participation--presenters and attendees
- >9000 ETDs
  - 3042 ETDs at VT, 825 at WVU

# 90 NDLTD University Members

Air U., Maxwell AFB, Alabama
Alicante U.
Australian National U.
Baylor U. *g*
Bibloiteca de Catalunya
Brigham Young U. *g*
Benson Food & Ag Institute
California Institute of Technology *g*
Chinese U. of Hong Kong (Hong Kong)
Chungnam National U., Dept of CS City U., London (UK)
Clemson U. ° *g*
College of William and Mary *g*
Concordia U. (Illinois) *g*
Curtin U. of Technology (Australia)
Darmstadt U. of Technology (Germany)
East Carolina U. *g*
East Tennesse State U. *g* **R**
Florida Institute of Technology
Florida International U. *g*
Freie U. Berlin
Gerhard Mercator U. Duisburg (Germany)
George Washington U. *g*
Griffith U. (Australia)
Gyeongsang National U., Chinju (Korea)
Humboldt-Universität zu Berlin (Germany)
Indian Institute of Technology, Bombay (India)
Louisiana State U.
Marshal U. *g*
Massachusetts Institute of Technology *g*
McGill U., Montreal, Quebec
Miami U. of Ohio*g*
Michigan Tech *g*
Mississippi State U.
Nanyang Technological U. (Singapore)
National Sun Yat-Sen U.
National U. of Singapore (Comput. School)
Naval Postgraduate School, Monterey CA *g*
New Mexico Institute of Mining and Technology (NM Tech)
North Carolina State U. ° *g*
Pennsylvania State U. ° *g*
Regis U.
Rhodes U. (South Africa)
Rochester Institute of Technology *g*
Shanghai Jiao Tong U. (China)
St. Petersburg State Technical U. (Russia) U. de las Amèricas Puebla (Mèxico)
U. Autonoma de Barcelona
U. d'Alacant
U. de Barcelona
U. de Girona
U. de Lleida
U. Oberta de Catalunya
U. Politecnica de Catalunya
U. Politecnica de Valencia (Spain) [Sistemes Informatics i Computacio]
U. Pompeu Fabra
U. Rovira i Virgili
U. Laval (Quèbec, Canada) *g*
U. of Bergen (Norway)
U. of Colorado Health Sciences Center
U. of Florida ° *g*
U. of Georgia ° *g*
U. of Guelph (Ontario, Canada)
U. of Hawaii at Manoa ° *g*
U. of Hong Kong *g*
U. of Iowa *g*
U. of Kentucky *g* [Computer Science **R**]
U. of Maine ° *g* [Spatial Info Science and Engineering, and Computer Science **R**]
U. of Melbourne (Australia)
U. of Mysore (India)
U. of New South Wales (Australia)
U. of North Texas *g* **R**
U. of Oklahoma *g*
U. of Pisa (Italy)
U. of Queensland (Australia)
U. of Sao Paulo (Brazil)
U. of South Florida *g* [Department of Industrial Engineering **R**]
U. of Sydney (Australia)
U. of Tennessee, Knoxville ° *g*
U. of Tennessee, Memphis
U. of Texas at Austin *g* **R**
U. of Utrecht
U. of Virginia *g*
U. of Waterloo (Canada)
U. of Wisconsin, Madison ° *g*
Vanderbilt U. *g*
Virginia Commonwealth U.
Virginia Tech ° *g* **R**
West Virginia U. ° *g* **R**
Western Michigan U. ° *g*
Wilfrid Laurier U. (Ontario, Canada)
Worcester Polytechnic Institute *g*

° = Land grant institution (12)
* = Association of Research Libraries (19)
g = Council of Graduate Schools (37)
**R** = requires ETDs (4 + 3 depts.)