

## **ETD Implementation:**

### **The Two Virginias and Their Strategies for Successfully Requiring the Electronic Submission of Theses and Dissertations**

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#### **ABSTRACT**

Virginia Tech and West Virginia University are the first academic institutions in the world to have required the electronic submission of theses and dissertations. Much of their success has been due to the belief in the NDLTD vision of creating academic digital libraries; to empower a true revolution in scholarly research.

At these pioneering schools, ETD implementation was nurtured through the support and encouragement of university administrators, the education of graduate faculty, staff and students, and a collaborative spirit between various diverse groups on campus. The merits of adopting a mandatory ETD program will be emphasized in terms of positive exposure for the student and institution, facilitation of research via Web distribution, and cost efficiency. Discussion will include the successes of the Va Tech and WVU programs and the realities of digital publishing within the academic community. Case studies of the two models will be analyzed to reveal the benefits of developing digital libraries; a discussion of various strategies of organizing support for ETD programs will follow.

This presentation will be of great interest to graduate school administrators and faculty, information technology specialists, and librarians. A wealth of information, technical and logistical support, and advice on ETD implementation will be presented and will provide encouragement and support to other university officials who are considering the development of ETD programs of their own. Va Tech and WVU have both agreed to freely share their program information, submission software, etc. with interested institutions.

#### **Virginia Tech**

<a href="http://scholar.lib.vt.edu/theses">http://scholar.lib.vt.edu/theses</a> <a href="http://etd.vt.edu">http://etd.vt.edu</a> <a href="http://www.ndltd.org">http://www.ndltd.org</a>	<b>West Virginia University</b> <a href="http://www.wvu.edu/~thesis/">http://www.wvu.edu/~thesis/</a> <a href="http://www.libraries.wvu.edu/theses/index.htm">http://www.libraries.wvu.edu/theses/index.htm</a> <a href="http://www.libraries.wvu.edu/thesis.htm">http://www.libraries.wvu.edu/thesis.htm</a>
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#### **West Virginia University**

### 1. Background : Gail

- NDLTD Consortium: 1997 – Present
  - Over 75 members
    - Slide with list
  - Most have only implemented preliminary studies or pilot programs
    - Show a few of their Web pages
  - Need more academic institutions to require mandatory ETD submission policies to fulfill the NDLTD vision of a truly global federated digital library
- Va Tech ETD Implementation: 1997
  - ETD home pages; brief tour of site
- WVU ETD Implementation: 1998 : John
  - ETD home pages; brief tour of site

### 2. Support Elements Necessary for Successful Implementation : John

- Top level administrators (President, Provost, Deans, Department Heads)
- Graduate School
- University Library
- Faculty
- Students

### 3. How to Achieve Support : John

- Make information technology implementation a high priority on campus (President / Provost)
- Recruit implementation team with ambition and dedication to achieve success
- Develop networking both internally and externally
- Educate via presentation and workshops
- Promote and publicize
- Engage discussion
- Design careful planning
- Build support infrastructure
- Set reasonable timeline for implementation of required program

### 4. Va Tech Team Collaboration : Gail

- Graduate School
- University Libraries
- ETD Task Force
- Faculty: Governance, concerns, VT Advisory Committee, FDI

### 5. WVU Team Collaboration : John

- Office of the Provost
- Office of Graduate Education (decentralized graduate programs)
- ETD Task Force
- Academic Computing
- University Libraries (Library ETD Implementation Team)
- Faculty Senate, Council of Deans
- OIT Advisory Committee

## 6. Case Studies: Statistics & Anecdotal Evidence

### WVU/ Va Tech : B&F

- Paper Thesis and Dissertation Circulation (Pre-ETD) [Chart](#)  
VT: 1994; TDs for 1991-94: <http://scholar.lib.vt.edu/theses/data/Dcirc98.pdf> and [Tcirc98.pdf](http://scholar.lib.vt.edu/theses/data/Tcirc98.pdf)
- Monthly ETD Accesses: WVU: More ETDs accessed in an average month than paper TDs circulated in an average year. [Chart](#)
- ETDs Accessed (within and outside) [Charts](#)
- Most Popular ETD [Chart](#)
- ETD Searches & Browsers [Charts](#)
- Total Number of ETDs in Collection [Chart](#)
- Web Distribution Type (World Access, Restricted Access)
  - What access options are students choosing? [Charts](#)
  - What access options are faculty recommending?
    - Student and committee must agree by signing ETD Submission Form; those interested in publishing usually recommend “Campus-Only”, those who have publications pending often choose Campus-Only Encrypted. VT author survey data that says what advice influenced their decisions.
- Format Types in Collection [Chart](#)
- Number of Submissions per Year / theses vs dissertations & totals [Chart](#)
- Analysis of Costs and Benefits for ETD Implementation and Maintenance
  - Collection Maintenance
    - WVU Academic Computing : John
      - Server and maintenance: (.3 fte; existing personnel utilized) Dell 20 GB hard drive, Windows NT OS, initial programming, archiving routine
  - Education
    - Workshops / Consultants: (1.0 fte; rotates among 4 consultants) existing personnel utilized
      - ETD Document Preparation and Conversion
        - Many students need lack basic word processing and multimedia skills
    - ETD Program Overview and Submission Process (University Libraries)
      - Many students complained initially, now accepted and exploring new formats
      - Web Information Page Accesses (Web access to info = cost savings in consultation time) [Chart](#)
    - Va Tech Library Digital Archives : Gail
      - Supporting ETDs at a Typical University Library  
<http://scholar.lib.vt.edu/theses/data/setup.html>
  - 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; Library formally subsidized ½ of cost; current savings of at least \$1,000 annually. Handling: no book processing required (labor intensive)
    - Reference / Document Delivery: existing personnel utilized; minimal impact; required initial training, augmented use of electronic delivery & copy services
  - Students
    - WVU: Master’s Theses: \$55.00 submission fee (covers UMI submission and \$10 archiving fee); copyright fee of \$45.00 is optional; Doctoral Dissertation: \$65.00 submission fee (covers UMI submission and \$10 archiving fee); copyright fee of \$45.00 is optional

- VT: Dissertations only, fees: UMI and "archiving"

### 7. Realities of Digital Publishing : John

- Student Publishing Concerns
  - Dissent from History Department students; WVU program now includes “Embargo By Personal Request” Web distribution option (Campus-Only/ Password Protected up to 3 years initially, no more than 5 years by request; then reverts to world).
  - How have publishers reacted to articles from ETDs?
    - Informal WVU Survey of publishers’ opinions of ETDs: mixed reactions; most considered final publication of derivative article or monograph to be quite different from original thesis or dissertation, so were not bothered by the concept distributing ETDs on the Web. Opinions vary depending on discipline (i.e. Physics vs. History). Smart publishers consider ETDs are free PR.
- University Tenure Systems and Digital Publishing
  - Is digital publishing being recognized for basis of granting tenure and promotion to university faculty? Usually requires “refereed publication status, also depends upon institution and discipline; some are more open than others. Universities are just now beginning to raise and deal with this question.

### 8. Positive Outcomes from Implementation

- WVU : John
- Heightened sense of awareness on campus of the profound effects of information technology; brought whole host of IT developments
  - Rapid Technology Transfer:
    - Transforming West Virginia’s economy
      - Shifting away from dependence on natural resource exploitation;
      - Moving toward an economy based on technology and diversification
    - Providing research access to the world
      - Bosnian Professor’s request for dissertation on building power grids to help rebuild country ravaged by war
- Va Tech : Gail
- Heightened sense of awareness on campus of the profound effects of information technology

### 9. NDLTD’s Role [If there’s time.]

- Provide Implementation Support
- Networking University Communities
- Federated Searching
- Consortium Research and Development: Commitment to the Future
- What should its role be in the future per audience response?

## 10. Epilogue : John

Excerpt from *Changing Landscape* (“Educause”; 25 Feb 2000)

There are 3,700 institutions and 15 million students in the United States today facing the challenge of integrating the past with the present, questioning how to mold the traditional model of higher education into a form that will not become obsolete in a world awash in an information explosion driven by electronic technology... The Internet is restructuring society, shifting our educational market away from one in which producers define the nature of the educational product and the nature of its delivery, toward one in which the consumer is in charge and is no longer simply being fed information but is instead responding to and interacting with that information. Educators cannot be afraid of this new Internet era and instead must embrace it with creativity and understand that education is not an entity separate from the rest of life, but one that depends upon the successful combination of digital innovation and intellectual resources.

### List of Handouts

- Cover Sheet
- WVU ETD FAQ Guide
- WVU ETD Quick Start Guide
- WVU ETD Submission Form
- WVU ETD Recent Press Releases
- Va Tech Digital Archives Guide
- Va Tech ETD Program Guide

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