"When print emerged, universities failed to recognize its importance and almost managed to marginalize themselves into oblivion. With a new major transition upon us, such benign neglect simply will not do. Yet the challenges universities face in responding to an increasingly digitized and networked world are staggering. Universities need a vision allowing them to express their dearest values in new forms, rather than protect their present form at the expense of their most fundamental values." (Jean-Claude Guedon, Conseiller, Publications Électroniques, Presses de l'Université de Montreal 1998)

Status of the NDLTD at Virginia Tech

Graduate School Procedures
Submission of ETDs became a Graduate School requirement effective Spring 1997
Student training workshops have been ongoing since Spring 1996
A special ETD approval form has been developed for use by the student, advisor and advisory committee
A Graduate School staff member reviews all ETDs for format
The Graduate School can help the student correct errors detected before cataloging
Over 1500 ETDs will have been submitted by the end of Fall Semester 1998
Less than 2% of TDs are now submitted as paper copies

Library Procedures
ETDs are submitted by students using a Netscape browser
They are deposited in a directory of ETDs awaiting Graduate School approval
If the ETD is secured for patent or proprietary reasons it is held after approval in a secure directory
If the ETD is available for VT or world wide access it is transferred to a directory for cataloging
ETDs are cataloged within X-X weeks and made available as designated by the student and advisor
Available ETDs may be searched by author name, or by Open Text

How has usage changed at VT?
Usage of Paper Theses and Dissertations
Virginia Tech theses submitted 1990 - 1994, combined average circulation per copy is 2.24/yr
Virginia Tech dissertations submitted 1990 - 1994, combined average circulation per copy is 3.2/yr

Usage of ETDs in VT Collection Jan - May Totals

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Requests</td>
<td>37,171</td>
<td>247,537</td>
<td>225,622</td>
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<tr>
<td>Requests/Day</td>
<td>102</td>
<td>685</td>
<td>1,416</td>
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<td>Requests for EDTs</td>
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<td>Requests for Abst.</td>
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<td>82,655</td>
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<tr>
<td>Host Served</td>
<td>9,015</td>
<td>22,725</td>
<td>16,525</td>
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Costs/Savings at VT
Graduate School no longer processes, stores and ships to the library 3000 copies of paper TDs/year
Library no longer processes, binds and shelves 3000 copies of TDs/year
166 ft of shelf space saved/year by the library (Based on 2000 1 inch TDs/year)
VT used existing equipment in the Scholarly Communications project to support the ETD project
Library start up costs for staff, hardware and software from a zero base estimated at $65,000  <http://www.theses.org/>

Status of the NDLTD at Other Institutions
Over 40 Universities worldwide have joined the NDLTD. 21 are U.S. and 4 are Canadian institutions
NCSU, Michigan, UT Memphis, UVA, WVA, Waterloo, Rhodes (SA), Humbolt (Berlin) have ETD collections
Many institutions have discussions underway in their governance systems concerning starting ETD projects
Many institutions have visited Virginia Tech
Members of the VT ETD team have visited many institutions
Australia has a national ETD initiative underway

Challenges to Creating and Sustaining ETD collections (and Digital Libraries)
Making information literacy an expectation of graduate (and undergraduate) education
Informing graduate students and faculty of their responsibilities associated with use of copyrighted work in ETDs
Informing students and faculty of their rights as holders of copyright to ETDs and
other original work
Changing university P&T systems to make it possible to reclaim research and
scholarship produced by students and faculty
Changing the attitudes of publishers about publishing manuscripts derived from
ETDs
Developing an archiving system for electronic documents which is as dependable
as paper or microfilm