The future is here
Emerging trends in ETDs, digital repositories & scholarly communications
Where are we now?

- Scholarly communications [r]evolution
- IR systems
- Metadata standards
- Preservation systems
- Social networking
Open access scholarly communications [R]evolution

- ARL/SPARC OA Initiatives
  - Author’s Rights
  - **Scholar’s Copyright Addenda**
  - Legislative initiatives (NIH, etc.)
- Google Books & other initiatives
- Mandated ETD submission & OA requirements
- ETDs as Scholarly papers
  - Citation impact factor studies by Harnad et al
Open Access Benefits

Self-Acknowledged Archiving of Research = 2 to 5 Times + Increased Scholarly Citations

Open Access increases citations

Range = 36%-200%
(Data: Brody & Harnad 2004; Hajjem et al. 2005)
Institutional Repository Systems

- Open source
  - DSpace
  - Eprints
  - ETD_db
  - Fedora
  - irplus
- Consortia
  - OhioLink
  - TDL
  - Research Triangle
- Home-grown
- Commercial
  - BePress Digital Commons
  - CONTENTdM
  - Ex Libris DigiTool
  - ProQuest PQDT Services
Metadata standards

- Dublin Core
- MARC
- ETD-MS
- Hybrids

- Adherence is vital for discovery & harvesting
Digital Preservation Systems

Figure 1

Digital Preservation Systems

- **OCLC long-term strategy**
  - Assessing the risks for loss of content posed by technology variables such as commonly used proprietary file formats and software applications.
  - Evaluating the digital content objects to determine what type and degree of format conversion or other preservation actions should be applied.
  - Determining the appropriate metadata needed for each object type and how it is associated with the objects.
  - Providing access to the content
General strategies
- Refreshing
- Migration
- Replication
- Emulation
- Metadata attachment
- Trustworthy digital objects
Digital Preservation Systems

- **OAIS (open archival information system): ISO**
  - Negotiate for and accept appropriate information from information Producers.
  - Obtain sufficient control of the information provided to the level needed to ensure Long-Term Preservation.
  - Determine, either by itself or in conjunction with other parties, which communities should become the Designated Community and, therefore, should be able to understand the information provided.
  - Ensure that the information to be preserved is Independently Understandable to the Designated Community. In other words, the community should be able to understand the information without needing the assistance of the experts who produced the information.
  - Follow documented policies and procedures which ensure that the information is preserved against all reasonable contingencies, and which enable the information to be disseminated as authenticated copies of the original, or as traceable to the original.
  - Make the preserved information available to the Designated Community.
DPS Initiatives

- LOCKSS (MetaArchive Cooperative)
- ARKive
- National Digital Information Infrastructure and Preservation Program (U.S.)
- Persistent Digital Archives and Library System (PeDALS) Project
- Portico
- FDsys
- Elsevier Science digital archive
- JHOVE
- Baggit
- iRODS
- New media art preservation
- DuraSpace
- British Library
- PLANETS
- PROTAGE
- PROMETHEUS
- DigitalPreservationEurope, CASPAR, Digital Preservation Coalition
- PADI (Australia)
- Ex Libris Rosetta
- DAITYSS (Florida State System)
Welcome to the Electronic Thesis and Dissertation (ETD) program at West Virginia University. We’ve been promoting graduate student success at WVU through ETDs since 1988. Access to the WVU ETD collection averages 1.5 million downloads per year from over 100 countries, making WVU graduate research the most popular collection around. The majority of the documents are available as open access (unrestricted). As a result, WVU departments and alumni are able to effectively promote their research and publishing endeavors long after graduation. Through our digital library collections in the “wvUScholar” institutional repository we are transforming scholarly communications at WVU.

This site contains information and archives about ETDs at WVU and beyond. The resources are of interest to students, faculty, staff, and the general public.
Social Networking

Most Popular Services
Email Facebook Twitter Save
MySpace Digg Delicious Technorati Buzz Up! Stumbleupon Reddit Livejournal WordPress Blogger

See what your friends are sharing Sign In

Most Popular Services
Email Facebook Twitter Save
Text Live Bebo LinkedIn Bebo G Bookmarks Mixx FriendFeed Propeller Newsvine Xanga Blinklist

See what your friends are sharing Sign In

Most Popular Services
Email Facebook Twitter Save
Twine Twackle Diigo Fark Faves Mr Wong Current Kirtsy Slashdot Oknotizie Care2 AIM Share

See what your friends are sharing Sign In

Most Popular Services
Email Facebook Twitter Save
Meneame Simpy Blogmarks N4G Add to BX Funp Sphinn Fresqui Dealspl.us TypePad Yigg

See what your friends are sharing Sign In
Where will we go and how do we get there?
Web 3.0 - Mashable Report

- The Web Will Be Accessible Anywhere
- Web Access Will Not Focus Around the Computer
- The Web Will Be Media-Centric
- Social Media Will Be Its Largest Component

Google Buzz

Google Wave
2010 Horizon Report

- Time to adoption: 1 Year or Less
  - Mobile Computing
  - Open Content

- Time to adoption: 2 to 3 Years
  - Electronic Books
  - Simple Augmented Reality

- Time to adoption: 4 to 5 Years
  - Gesture-based Computing
  - Visual Data Analysis
Top Digital Trends for 2010

- Facebook replaces personal email
- Open source software starts making money (thanks to the cloud)
- Mobile commerce - The promise that has never delivered, yet
- Fewer registrations — one sign-in fits all
- Disruption vs. continuity – alternatives to the “big idea”
- The continuing evolution of Web-driven, open source DIY culture
- Info-art
- Crowdsourcing
- More Flash, not less
Cloud Computing

Cloud Computing
everything and the kitchen sink
Net Gen

The Net Generation Is Here

The public sector must get acquainted with its next-generation of constituents.

working with
How well can you or your organization handle increasing levels of complexity?

Coined in 2008 by designer Tom Snyder, brother of futurist consultant David Pearce Snyder, the term "complexipacity" refers to the capacity to "assimilate complex ideas, systems, problems, situations, interactions, or relationships."
What’s hot now & what’s next?

Futurist Richard Watson
EXTINCTION UPDATE
What challenges do we face?
New forms of scholarly communications

- Novel and federated approaches to discovery
- Education and advocacy on open access
- New ways to experience digital media
- Breathing new life into digital objects
- Ensuring long-term access
- Data set aggregations
- New metrics for evaluation of scholarly impact
Museum of Beauty
High-definition visualization of high-resolution global climate simulations

The Nihon-UK Global Environmental Model (NUGEM), co-developed by the UKMO Hadley Centre and by NERC’s NCAS CGAM, is an N216 (0.83x0.83o, corresponding to ~60 km in mid-latitude) version of Hadley Centre’s HadGEM1 model, successor to the famous HadCM3. HadGEM1 is normally run with an atmospheric resolution of (1.88x1.25o, ~160 km in mid-latitude) and was recently integrated for hundreds of years within the framework of IPCC AR4. NUGEM is being developed in the context of the UK-Japan Climate Collaboration (UJCC), which was launched in 2005 and allows UK climate scientists to exploit the power of the Earth Simulator supercomputer. NUGEM is part of a broader UJCC group of models, developed to systematically explore the role of resolution; starting with the base N96 AOGCM (HadGEM1), we have set up an array of coupled and uncoupled models, in order to test hypotheses about the importance of increasingly resolving the fundamental elements of climate.
ETD 2010 Conference

Theme
- Collaboration
- Innovation
- Sustainability
- Special focus on Latin America

Keynote speakers
- Daniel J. Clancy, Ph.D., Engineering Director for Google Books
- Laurence F. Johnson, Ph.D., Chief Executive Officer of the New Media Consortium
Austin, Texas

- Largest state in the U.S.
- UT-Austin – largest graduate school
- Live music capital of the world
- Hundreds of unique options for good eats
- Bat colony capital...

Keeping it weird in Austin!
“The Future Is Here”

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ETD 2010 Conference
TDL Pre-Conference Workshop
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Sources

- http://oedb.org/blogs/ilibrarian/category/web-30/
- http://www.nowandnext.com/
- http://www.futureishere.biz/museumofbeauty/
- http://scholars.sciencecommons.org/