### Two Decades of Advances in Electronic Theses and Dissertations

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### Outline

### Background

- Landscape of Academic Libraries and Scholarly communications
- Emerging Trends

### About ETDs

- ETD Stakeholders
- Tools and Projects

### • ETDs at Academic Institutions

• UNT's Experiences

# Background

# Background

- The Open Access movement is transforming scholarly communication
  - Open Access (provision of unrestricted online access to results/outputs of research & development)

### Numerous emerging trends fundamentally change the directions of scholarship:

- The development and availability of interoperable Open Access content
- Global and explosive growth of social networking,
- Big data and inter-institutional data sharing,
- Cross discipline collaborations, etc.

# **Emerging Trends**

#### • Expressions of scholarship are increasingly becoming more diverse

- Rate of creation of new data and data sets
- Storage format evolution and obsolescence

#### Maintaining accessibility to data through links and search results

- Different community inclined to share items at different level of normalization
- Comparability of semantic and ontological definitions of data sets

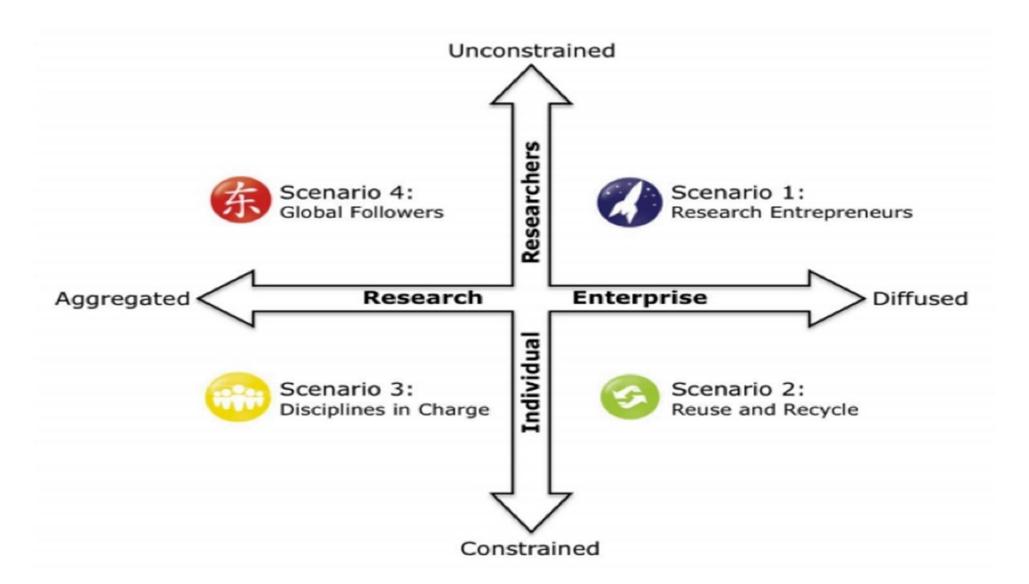
#### • Access from anywhere, anytime, via whatever (mobile) devices

- Embracing true user-centric in any context
- Giving users what they need with freedom and flexibility

#### • Altmetrics for measuring impact in this diverse scholarly ecosystem

- Traditional metrics vs. usage metrics vs. divorcing a metric from the scholarly work
- Rethinking vs. revolutionizing the analysis of the value and impact of scholarly work

## **Emerging Roles of Academic Libraries**



Source: (Pinfield et al., 2014: http://eprints.whiterose.ac.uk/76839/15/wrro\_76839.pdf)

## **Emerging Roles of Academic Libraries**

#### • Scenario 1: Research Entrepreneurs

• "individual researchers are the stars of the story". Academic institutions and disciplinary silos are no longer relevant for entrepreneurial researchers who chase short-to-long term contract work from private and public sources.

#### • Scenario 2: Reuse and Recycle

• Outlines a world defined by an "ongoing scarcity of economic resources" which forces the reuse and recycling of research activities, with virtually no public support for research.

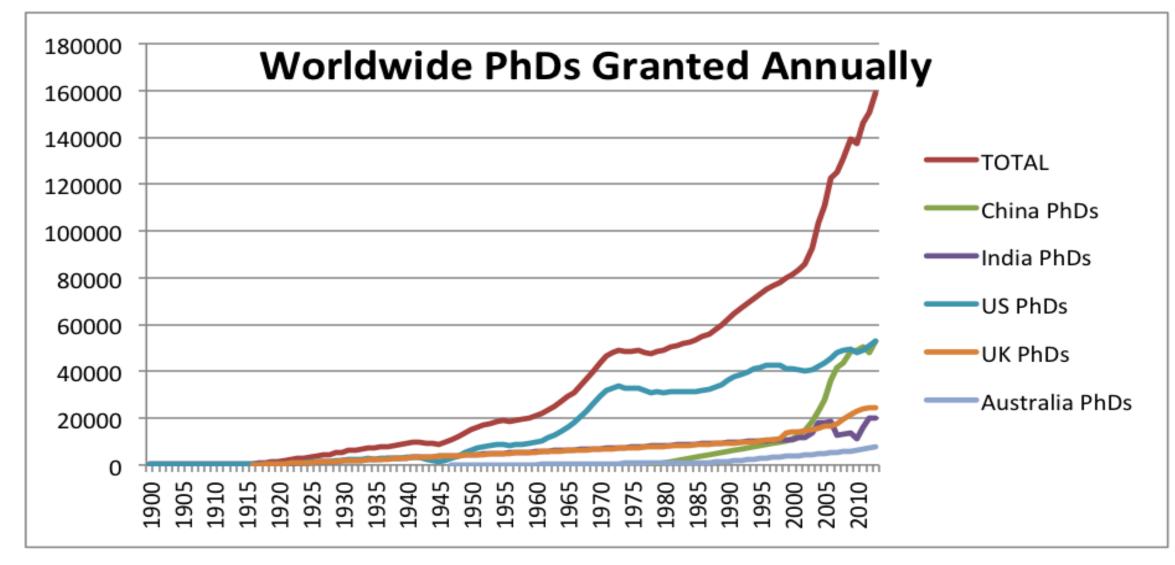
#### • Scenario 3: Disciplines in Charge

 Utilizing advances in information technology "computational approaches to data analysis dominates the research enterprise", fostering massive research projects aligned around "datastores".

#### • Scenario 4: Global Followers

• As funding agencies become more international, scholars continue to do their research but with new cultural influences from Middle Eastern and Asian funding agencies.

## **Science Still Increasing Exponentially**



### ETD

- ETD is simply an **electronic** version **thesis** or **dissertation** 
  - Open Access ETD makes research immediately accessible globally
- Increasingly students are producing and submitting intellectual works beyond the PDF
  - Accompanying research datasets
  - Music recitals
  - Lab videos
  - Other complex digital contents

## **Stakeholders: ETD Organizations**

#### International

- NDLTD: Networked Digital Library of Theses and Dissertations
- National
  - USETDA
- Statewide
  - California ETD (CAETD)
  - Florida ETD Association (FLETDA)
  - Ohio ETD Association (OETDA)
  - <u>Texas ETD Association (TxETDA)</u>
- Internal
  - Graduate Schools, Libraries, IT Offices, etc.

## **ETD Conferences**

### International Conferences

- NDLTD's ETD annual Conference
- National Conference
  - USETDA Annual Conferences (2011 to Present)
- Regional Conferences
  - <u>TxETDA</u>

### **ETD Awards**

#### NDLTD Awards

- Innovative ETD Awards
- NDLTD Leadership Awards

#### Professional Societies' Awards

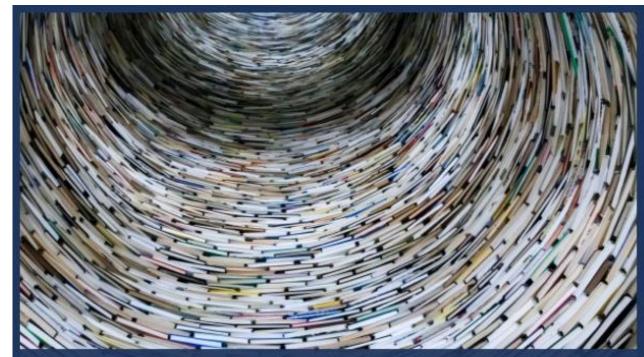
- ASIS&T's ProQuest Doctoral Dissertation Award
- ALISE's Eugene Garfield Doctoral Dissertation Award
- iSchools **Doctoral Dissertation Award**

### Institutional Awards

- UNT's Innovative ETD Award (2013 to present)
- Many more ...

## **ETD Projects**

- ETD Plus (Educopia Institute)
  - ETDplus Toolkit
  - ETDplus Virtual Workshops
- IMLS <u>ETD Lifecycle Management</u> Project
  - The guidance documents
  - The software tools
  - The Educational materials and workshop

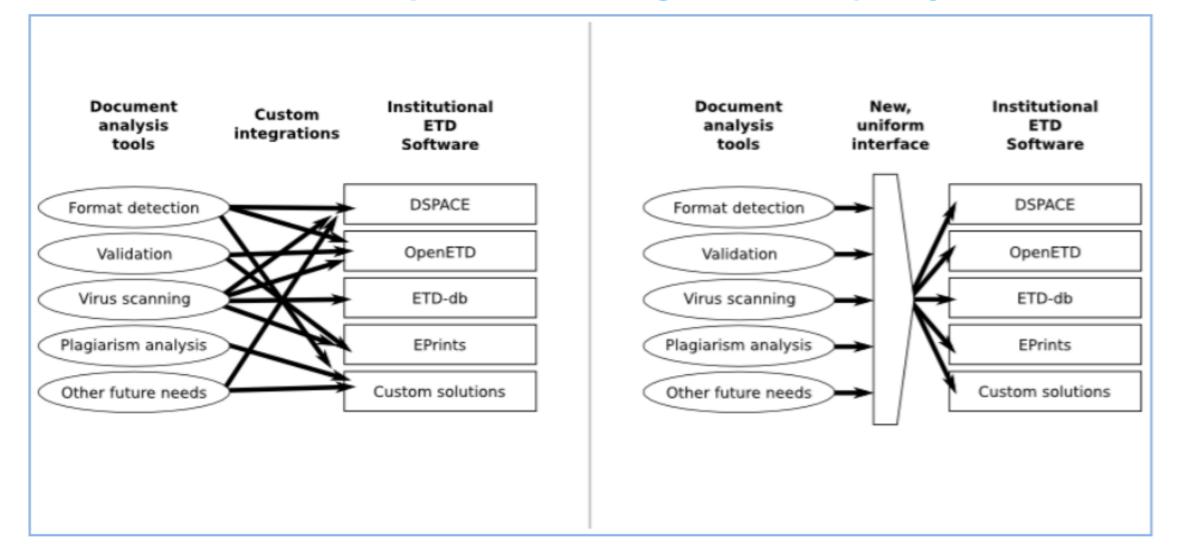


### **ETD Lifecycle**

Understanding, documenting, and addressing the preservation challenges presented by ETDs



### **Tools development for ETDs:** ETDs lifecycle management project



Sources: IMLS ETD Lifecycle Management Project : <u>http://metaarchive.org/imls/index.php/Main\_Page</u> The lifecycle management of ETDs Project: Multi stakeholders national partnership. iConference 2013 Proceedings (pp. 869-873). doi:10.9776/13444

### **Tools development for ETDs:** ORCID

- ORCID (Open Researcher and Contributor iD) offer unique virtual identifiers that track users' real-time achievements.
- Any submission embedded with an iD is tracked by ORCID through its online registry, ensuring that users are given proper accreditation.
- DSpace 5 came with an ORCid lookup option for author and editor, which allow to look people up by ORCid

### **ETD** at **UNT**



#### At a Glance

	19,291 <sub>Items</sub>	<b>1</b> Type
<b>1</b>	<b>9</b>	5
Partner	Decades	Languages
225	45	108
Counties	States	Countries
<b>11,706,485</b>	9 years, 5 months ago	4 months ago
Usage	Collection Created	Last Updated

## Looking Closely

- UNT is one of the early adopters of ETD in 1999. UNT also digitized all of its theses and dissertations retrospectively.
  - The oldest UNT ETD was from 1936.
  - Provide multiple format access and integrated associated files
- 2,363,147 pages or file sets / 19,291 ETDs
  - 122 average pages per ETD (129 weighted Averages of File sets)
- The page number is ranged from 41 to 1096.
  - The highest frequency is 177 (59 pages), then 176 ETDs have 114 pages.
  - 87 ETDs have more than 500 pages and two ETDs have 1,000+ pages.

Exce	el Online		
	A	В	
1	#Filesets In ETD	Count	
2	41	120	
3	43	106	
4	44	119	
5	45	119	
6	46	110	I۳
7	47	108	In
8	48	157	8
9	49	135	p
10	50	142	E
11	51	132	
12	52	137	
13	53	136	
14	54	143	
15	55	138	
16	56	168	
17	57	157	
18	58	164	
19	59	177	
20	60	144	

Top 20 (lowest page numbers)

Interesting to note that only 87 ETDs have more than 500 pages and of which only two ETDs have 1,000+ pages.

5286341529637153065115316541532655153366815346711535681153674715377711538797153984315408591
5306511531654153265515336681534671153568115367471537771153879715398431
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538 797 1   539 843 1
539 843 1
540 859 1
541 907 1
542 948 1
543 960 1
544 967 1
545 <b>998</b> 1
546 1090 1
547 1096 1
548

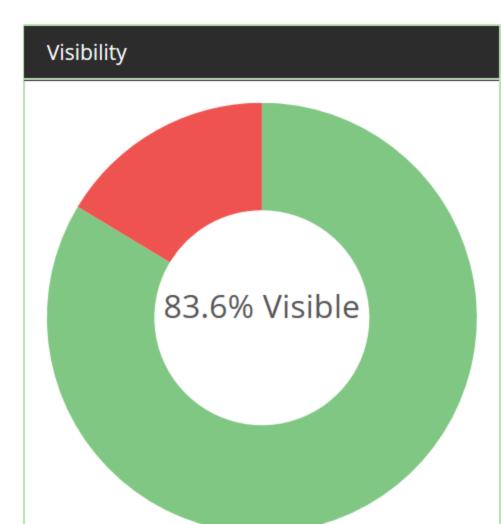
#### Bottom 20 (highest page numbers)



#### **Statistics: Digital Library**

#### **Overview**

838,817 Total Items 26,791,268 Total Files 39,191,731 Total Uses 1,122,299 Uses Last 35 Days



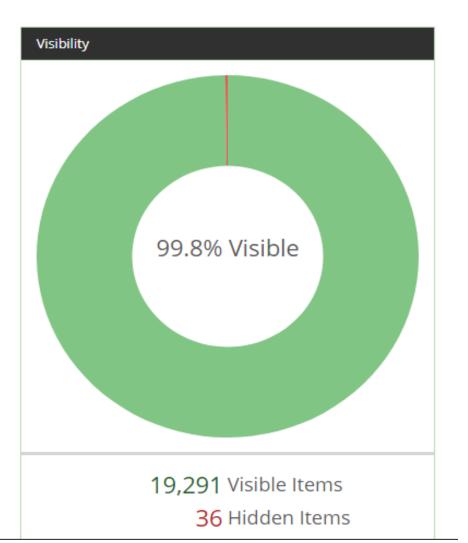
#### About 30% of UNT Digital Libraries' usages (~12 M. out of 40 M.) came from UNT-ETDs

You Are Here: home / explore / collections / unt theses and dissertations / stats

**Statistics: UNT Theses and Dissertations** 

**Overview** 

19,327 Total Items 2,363,147 Total Files 11,706,485 Total Uses





- Electronic theses and dissertations (ETDs) comprise one of the most widely used collections in the UNT <u>Digital Library</u>.
  - Our global users come from more than 220 countries.
  - The most used ETD has been accessed <u>52K times</u>.
  - Users via handheld devices are growing continuously.

# Thank you! Daniel.Alemneh@unt.edu