

Digital Humanities (DH) and Libraries

Measuring the involvement of libraries and other core contributors to DH through an authorship study

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DH Conference 2015

IT'S A LIBRARY,
HONEY--
KIND OF AN EARLY
VERSION OF THE
WORLD WIDE WEB.


edSteIN '96
Rocky Mtn. News • Nea

Zara Stone's Blog (<http://www.almostzara.com/tag/ebook-library/>)

Research Questions

A red speech bubble containing the text 'Are librarians actually participating in DH development?'. The bubble is filled with faint, light-colored icons representing business and data, such as lightbulbs, bar charts, pie charts, and arrows.

Are librarians actually participating in DH development?

A dark grey speech bubble containing the text 'Do libraries have an important role to play in DH?'. The bubble is filled with faint, light-colored icons representing business and data, such as lightbulbs, bar charts, pie charts, and arrows.

Do libraries have an important role to play in DH?

Outline

- Methodology
 - Journal Selection
- Results
 - Co-authorship Trend
 - Overall Distribution of 13 Professions
 - Comparison of 3 Special Areas
 - Geographic Distribution
- Discussions / Observations
- The Current Status of the HKBU's Development

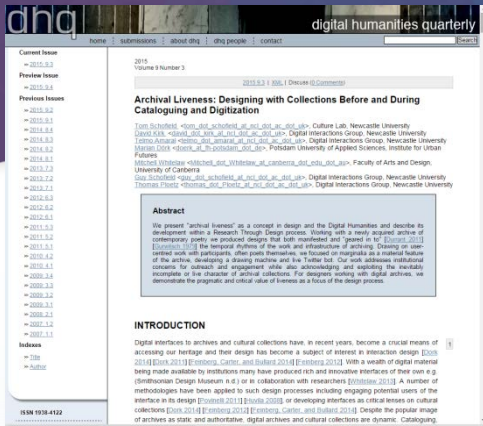


Journal Selection

Criteria

- DH is one of the major themes
- Coverage is broad enough
- Commonly selected as a core or recommended reading
- Peer-reviewed & currently active
- Author information is freely accessible

Journal Selection



Digital Humanities Quarterly

2007, 1:1 – 2015, 9:4

The Alliance of DH Organizations

26 Issues ; 213 Articles ; 374 Authors

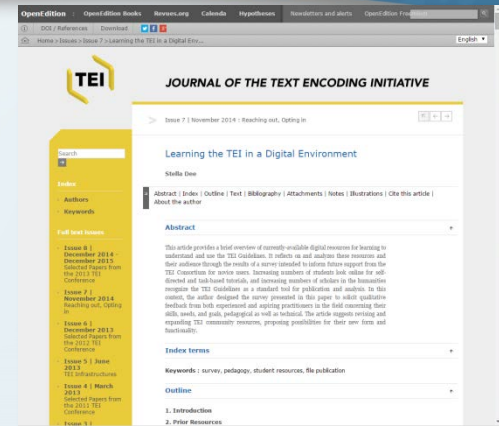


Journal of Digital Humanities

2011, 1:1 – 2014, 3:2

George Mason University

9 Issues ; 118 Articles ; 225 Authors



Journal of the Text Encoding Initiative

2011, 1 – 2015, 8

Text Encoding Initiative Consortium

8 Issues ; 54 Articles ; 132 Authors



Int'l Journal of Humanities & Arts Computing

2007, 1:1 – 2015, 9:2

Edinburgh University Press

15 Issues ; 158 Articles ; 316 Authors



Literary & Linguistic Computing

2011, 26:1 – 2014, 29:4

Oxford University Press

16 Issues ; 197 Articles ; 420 Authors

Journal Selection

Summary

- 740 original articles
- 9 years (2007 – 2015)
- 1,467 duplicated authors
- 1,148 unique authors



Co-Authorship Trend

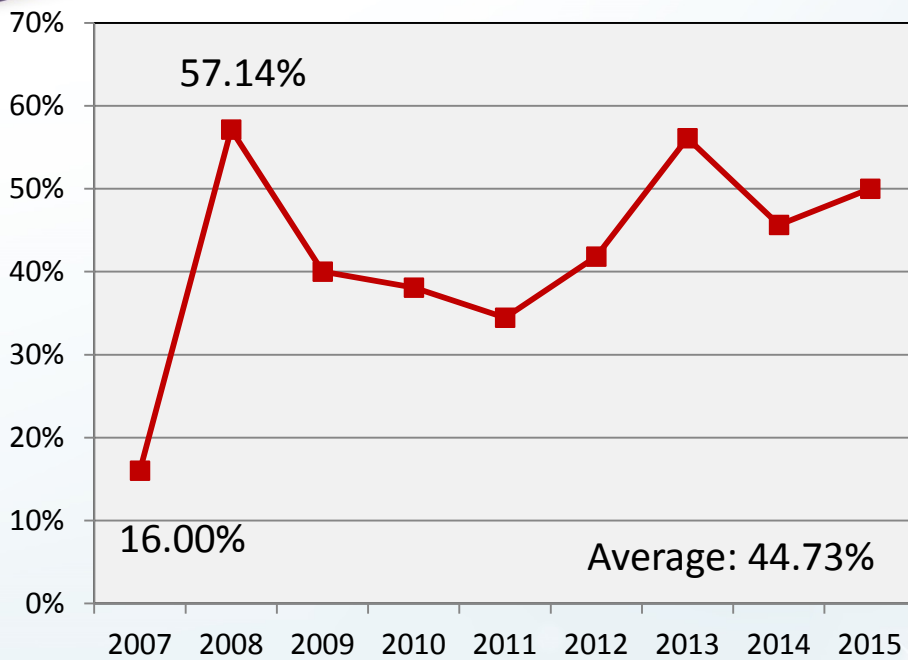
Result 1

- *Incidence* of co-authorship
 - The percentage of articles with multiple authors
 - **Collaboration Rate**
- *Extent* of co-authorship
 - The average number of authors per co-authored article
 - **Collaboration Extent**

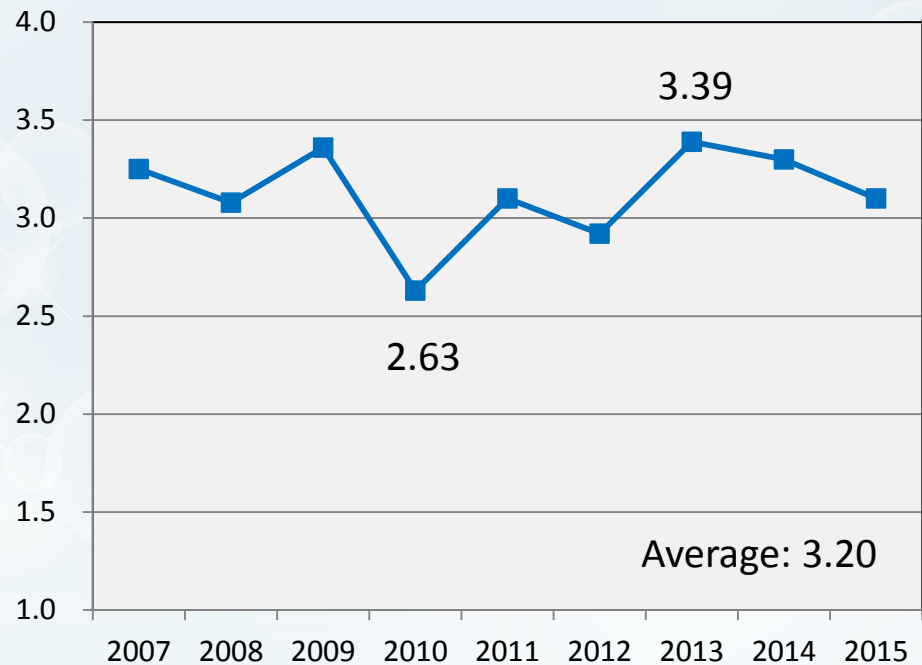
Co-Authorship Trend

Result 1

Collaboration Rate



Collaboration Extent



Co-Authorship Trend

Comparison of 10 Areas

Result 1

		Business		Science			Info Technology		Social Sciences	
	DH	Mgt ¹	Econ ²	Biomed ³	Math ³	Phys ³	Comp ⁴	Info Sys ⁵	Socio ⁶	Library ⁷
Time Period	2007 - 2015	1980 - 2002	1960 - 2010	1995 - 1999	1940 - 2004	1995 - 1999	1995 - 1999	1980 - 2012	1963 - 1999	2003 - 2008
Articles	543	11,022	20,321	2,163,923	---	98,502	13,169	3,821	281,090	8,320
Unique Authors	844	10,176	---	1,520,251	253,339	52,909	11,994	4,174	197,976	10,760
Articles per Author	1.24	2.04	---	6.4	6.9	5.1	2.55	---	2.08 ^{6a}	---
Collabrati on Rate	45%	---	38%	79%	34% ^{3a}	---	---	81%	33%	19%
Collabrati on Extent	3.20	1.88	---	3.75	1.45	2.53	2.22	2.38	2.4 ^{6b} - 2.7 ^{6c}	---

[1] Acedo, F. J., Barroso, C., Casanueva, C., & Galán, J. L. (July 2006). Co-authorship in management and organizational studies: An empirical and network analysis. *Journal of Management Studies*, 43(5), 957-983

[2] Kosnik, L. R. (2015). What have economists been doing for the last 50 years?: A text analysis of published academic research from 1960-2010. *Economics: The Open-Access, Open-Assessment E-Journal*, 9(2015-13), 1-38

[3] Newman, M.E.J. (2004). Coauthorship networks and patterns of scientific collaboration. *PNAS Early Edition*, 101(1), 5200-5205. doi: 10.1073/pnas.0307545100

[4] Newman, M.E.J. (2001). Scientific collaboration networks I: Network construction and fundamental results. *Physical Review E*, 64(016131), 1-8. doi: 10.1103/PhysRevE.64.016131

[5] Xu, J., Chau, M., & Tan, B. C. Y. (2014). The development of social capital in the collaboration network of information systems scholars. *Journal of the Association for Information Systems*, 15(12), 835-59

[6] Moody, J. (2004). The structure of a social science collaboration network: Disciplinary cohesion from 1963 to 1999. *American Sociological Review*, 69(2), 213-38

[7] Danesh, F., Abdulmajid, A. H., Afshar, M., & Farhadi, F. (2009). Correlation between scientific output and collaboration among LIS scholars around the world. *Iranian Journal of Information Processing and Management*, 25(1), 5-22

Co-Authorship Trend

- DH can provide more co-authorship / collaborative opportunities for...
 - Librarians
 - Scholars of theoretical areas

“collaborative authorship is more common in DH [than ‘traditional’ humanities].”

Spiro, L. (2009, April 21). Collaborative authorship in the humanities [Web log post]. Retrieved from <https://digitalscholarship.wordpress.com/2009/04/21/collaborative-authorship-in-the-humanities/>

		Business		Science			Info Technology		Social Sciences	
	DH	Mgt ¹	Econ ²	Biomed ³	Math ³	Phys ³	Comp ⁴	Info Sys ⁵	Socio ⁶	Library ⁷
Collabrati on Rate	45%	---	38%	79%	34% ^{3a}	---	---	81%	33%	19%

Co-Authorship Trend

- DH is an experimental practice

CE may reflect how research is done in a field. Purely theoretical papers tend to have fewer co-authors; experimental papers tend to have more co-authors.

Newman, M.E.J. (2001). Scientific collaboration networks I: Network construction and fundamental results. *Physical Review E*, 64(016131), 1-8.

“The language of experimentation runs throughout DH, demonstrating its support of risk taking... and innovation.”

Spiro, L. (2012). “This is why we fight”: Defining the values of the digital humanities. In M. K. Gold & L. F. Klein (Eds.), *Debates in the digital humanities* (pp. 16-34).

		Business		Science			Info Technology		Social Sciences	
	DH	Mgt ¹	Econ ²	Biomed ³	Math ³	Phys ³	Comp ⁴	Info Sys ⁵	Socio ⁶	Library ⁷
Collabrati on Extent	3.20	1.88	---	3.75	1.45	2.53	2.22	2.38	2.4 ^{6b} – 2.7 ^{6c}	---

13 Profession Groups



DH Specialists

1. Employees of **DH centers**
2. University **teachers** or **independent scholars** in DH or related fields

3. Employees of **libraries**
4. University **teachers** or **independent scholars** in information science or related fields



Info Sci Specialists

5. Employees of **IT departments** of universities
6. University **teachers** or **independent scholars** in computer science or related fields
7. Computer **programming specialists** hired by individual projects



IT Specialists

13 Profession Groups



Scholars -
Other

8. University **teachers** or **independent scholars** in all fields other than DH, info science, & IT



Archival Centers /
Museums

9. Employees of **archival centers** or **museums**



Researchers



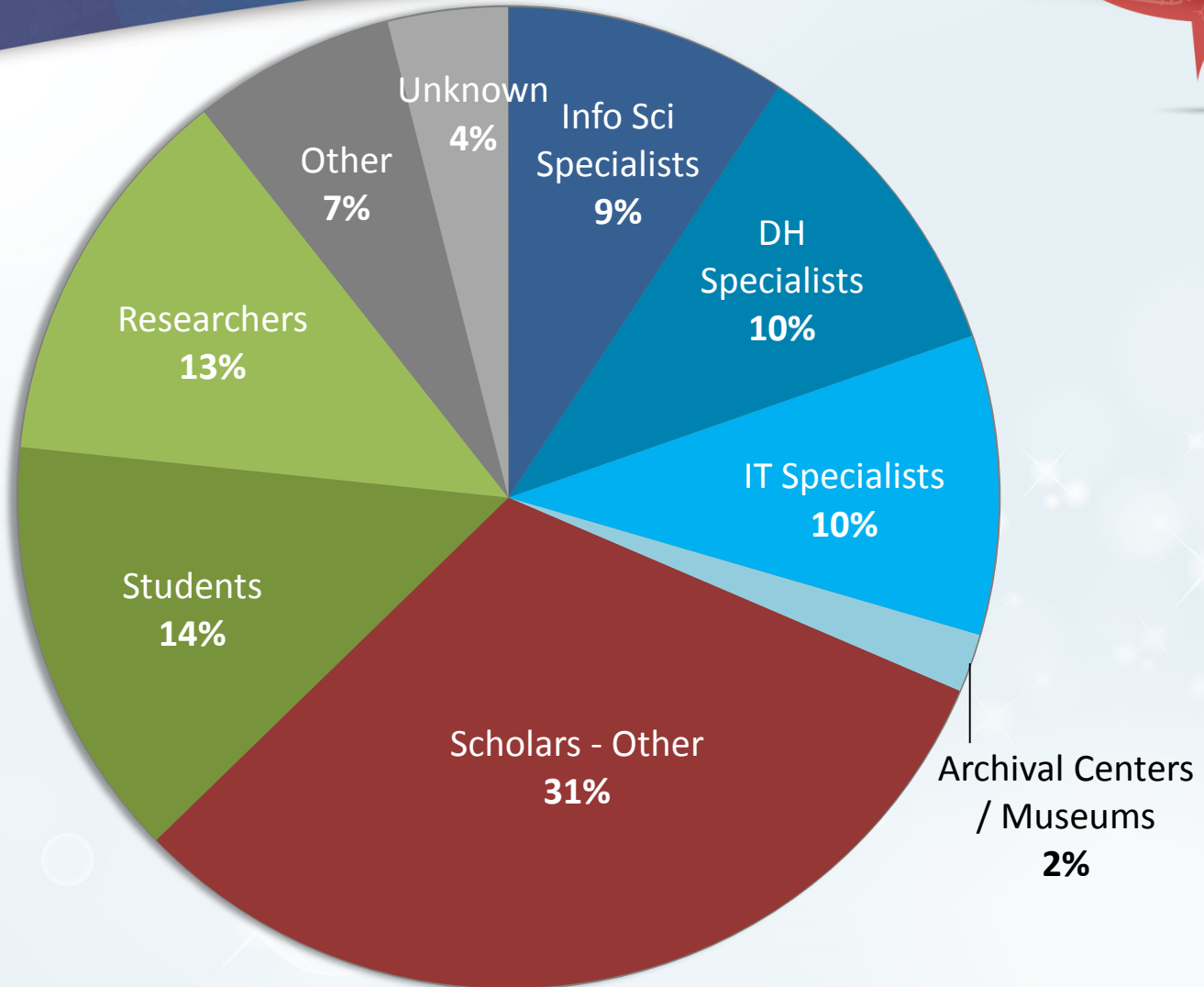
Students

10. Independent researchers or researchers hired by individual projects

11. Students

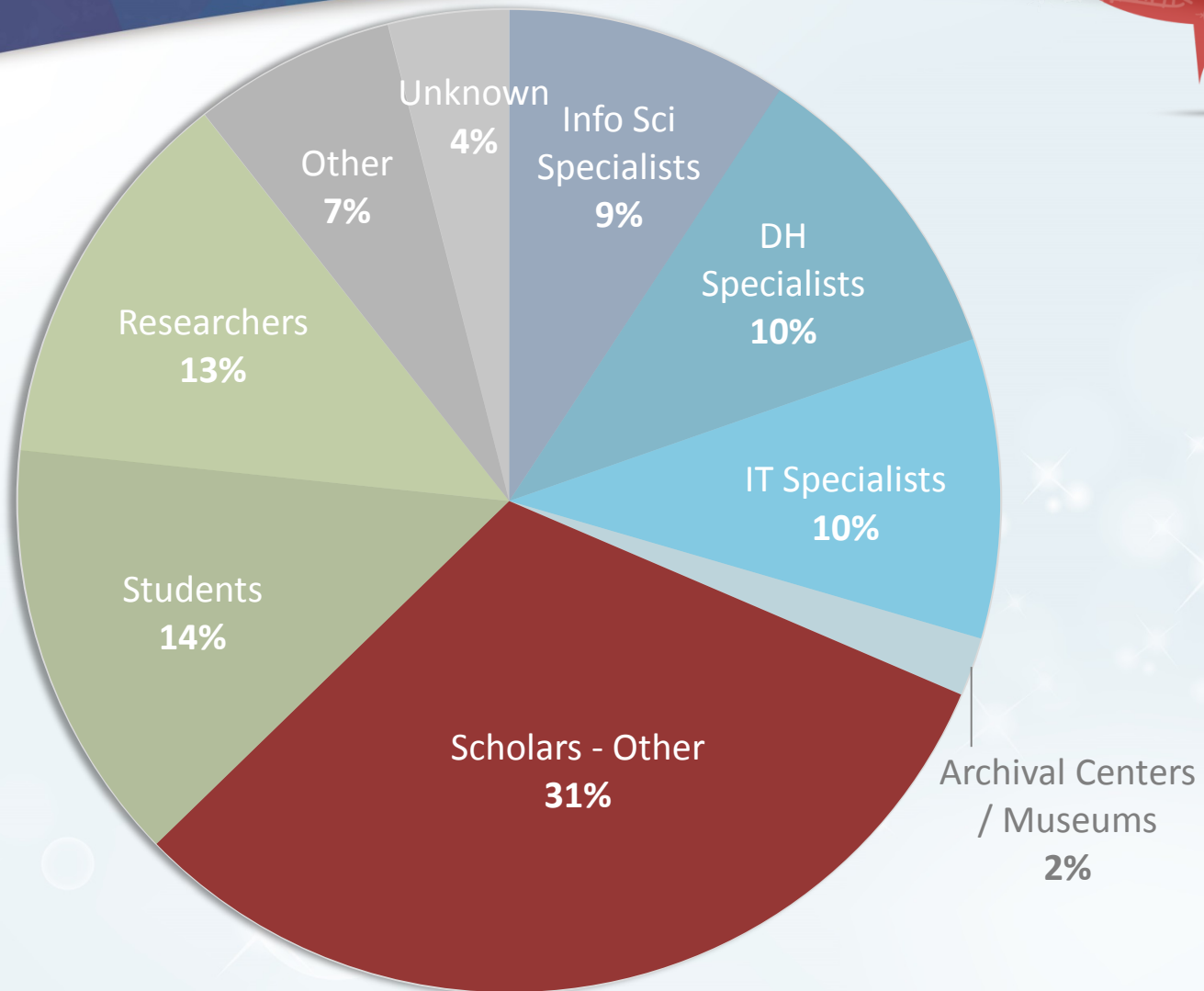
Overall Distribution

Result 2



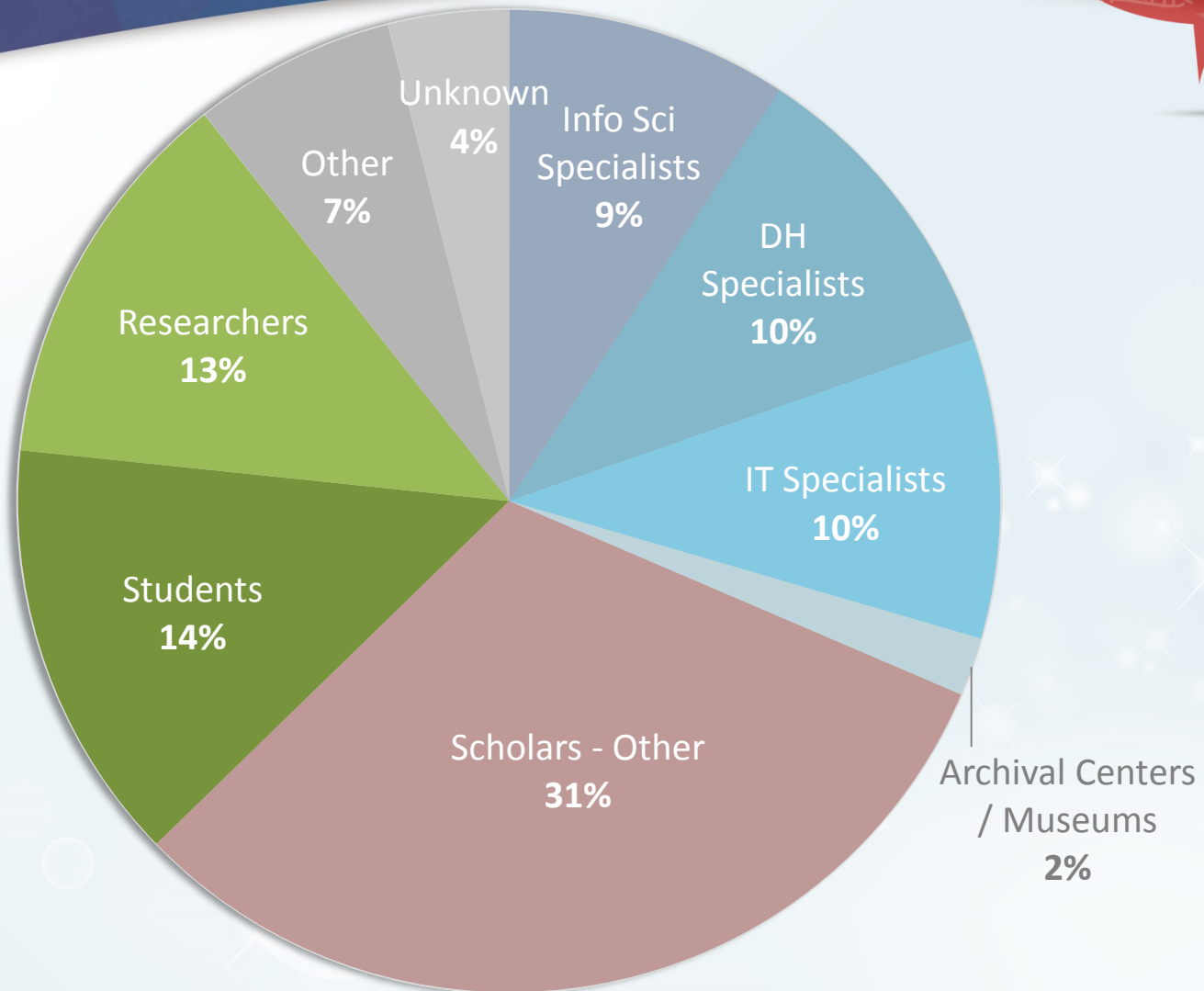
Overall Distribution

Result 2



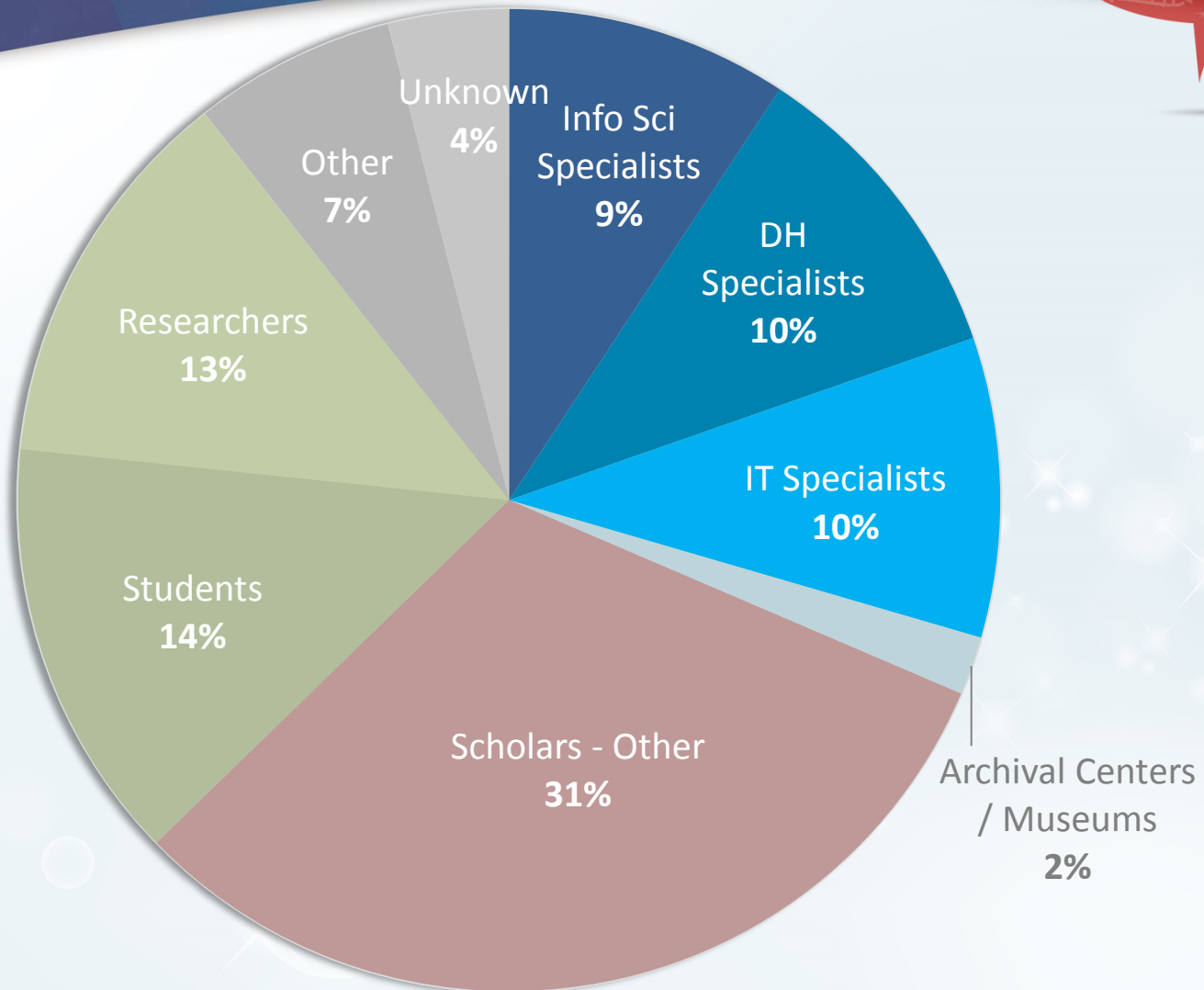
Overall Distribution

Result 2



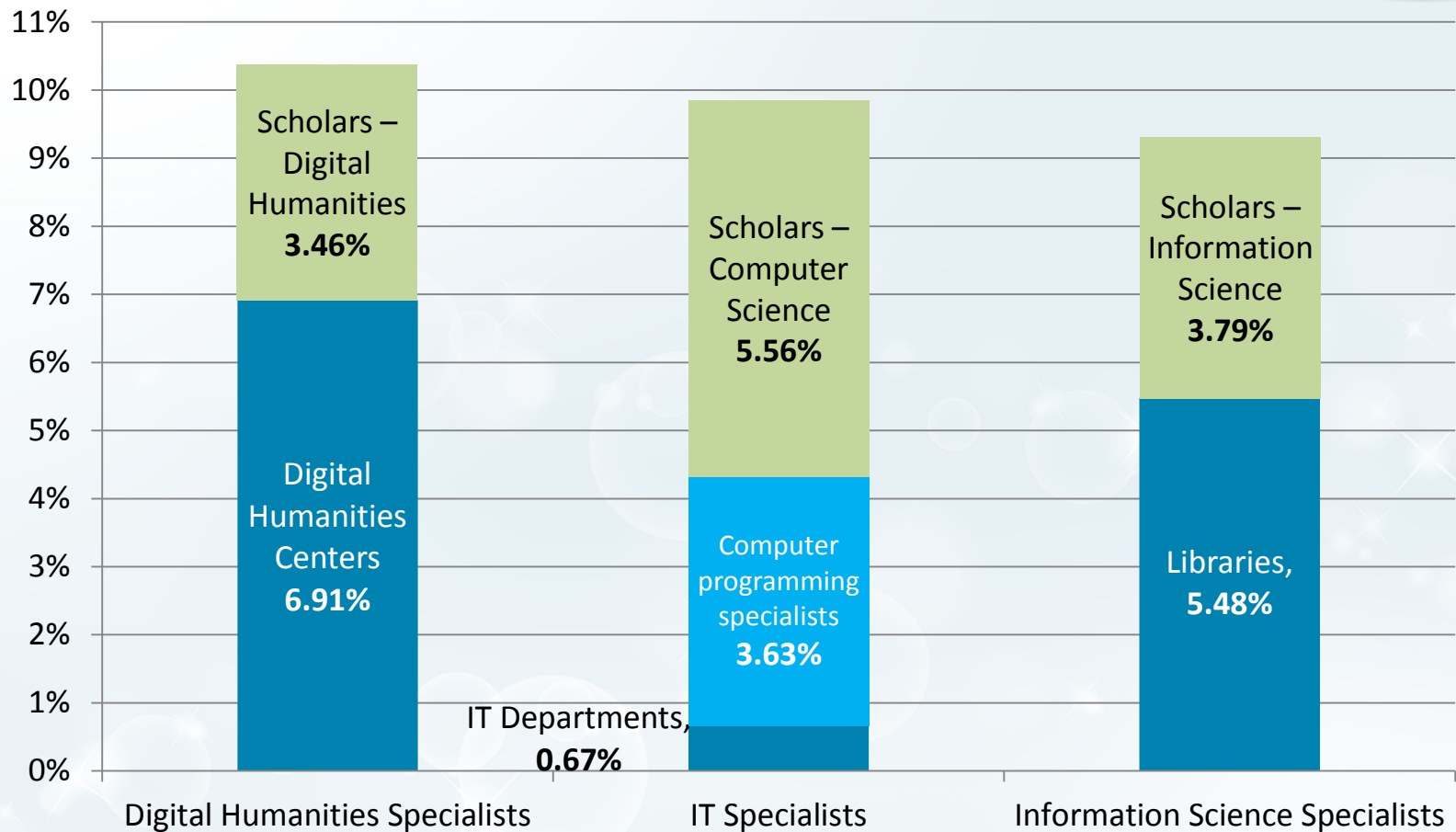
Overall Distribution

Result 2



Comparison of 3 Special Areas

Result 3



Comparison of 3 Special Areas

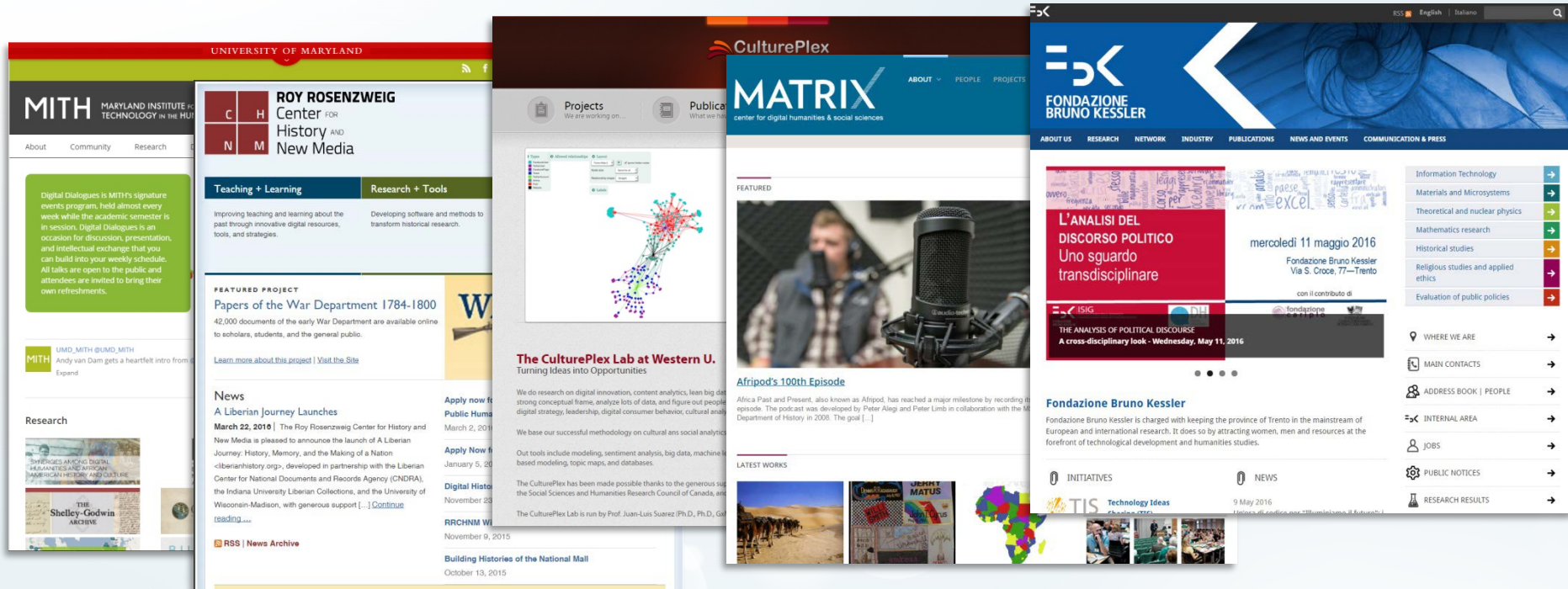
- An unclear role of IT departments
 - Provide IT infrastructure
 - May not directly involve in publishing

IT Services of the University of Oxford “help with the technical aspects of a funding [DH] proposal, support for making audio/video presentations, [and] help to scope and design web applications and websites for research projects.”

University of Oxford. (2016). *Digital Humanities @ Oxford: Support*. Retrieved from <https://digital.humanities.ox.ac.uk/support>

Comparison of 3 Special Areas

- Among the 3 types of functional units, DH centers accounts for the greatest proportion



- Their specific strength in pedagogical service

Comparison of 3 Special Areas

Libraries have our own edge

- Libraries have a wider user group

“The directors of DHCs... most often report to an academic or administrative dean of a school, college, or division at the university.”

Zorich, D. M. (2008). *A survey of digital humanities centers in the United States.*

Comparison of 3 Special Areas

Libraries have our own edge

- “Shared appointments” are common in DH centers

“92% of university-based centers have staff with faculty appointments... 88% [of joint positions] are fully funded by the academic department (not the center)”

Zorich, D. M. (2008). *A survey of digital humanities centers in the United States.*

“shared appointments also occur between the centers and various administrative departments and research centers”

Zorich, D. M. (2008). *A survey of digital humanities centers in the United States.*

Comparison of 3 Special Areas

Libraries have our own edge

- Libraries enjoy a more stable funding

“Most DH centers are established following some successful research grants... [their] pressing issues of sustainability are... securing reliable long-term funding to keep the center’s staff in place.”

Andrew Prescott, “Beyond the Digital Humanities Center: The Administrative Landscapes of the Digital Humanities,” in *A New Companion to Digital Humanities* (UK: John Wiley & Sons, 2016), 461-75.

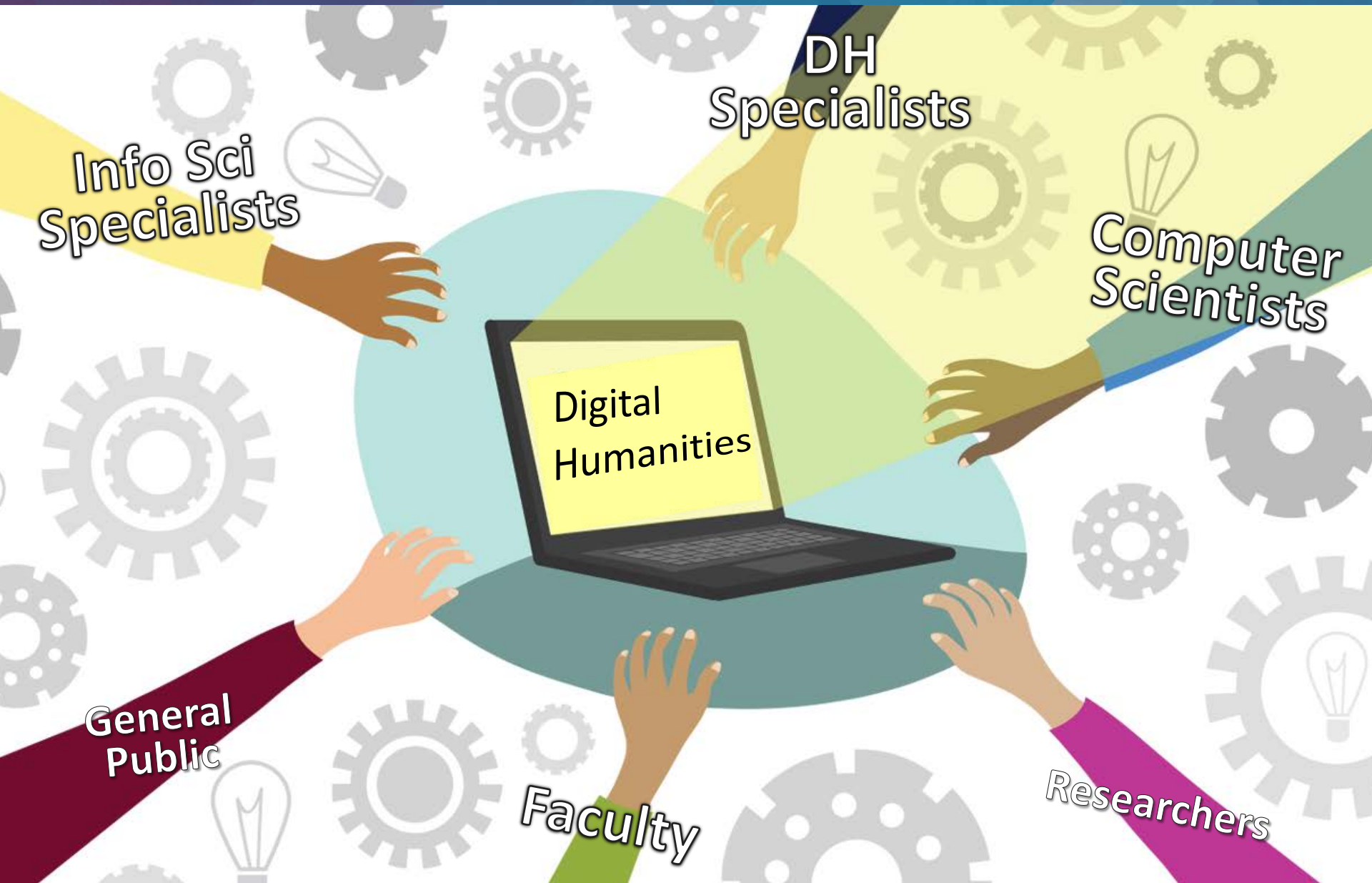
“It is difficult for DH centers to keep going 10/20 years.”

Andrew Prescott, “Beyond the Digital Humanities Center: The Administrative Landscapes of the Digital Humanities,” in *A New Companion to Digital Humanities* (UK: John Wiley & Sons, 2016), 461-75.

Comparison of 3 Special Areas

DH Centers are important

Libraries have our own edge



Info Sci
Specialists

DH
Specialists

Computer
Scientists

General
Public

Faculty

Researchers

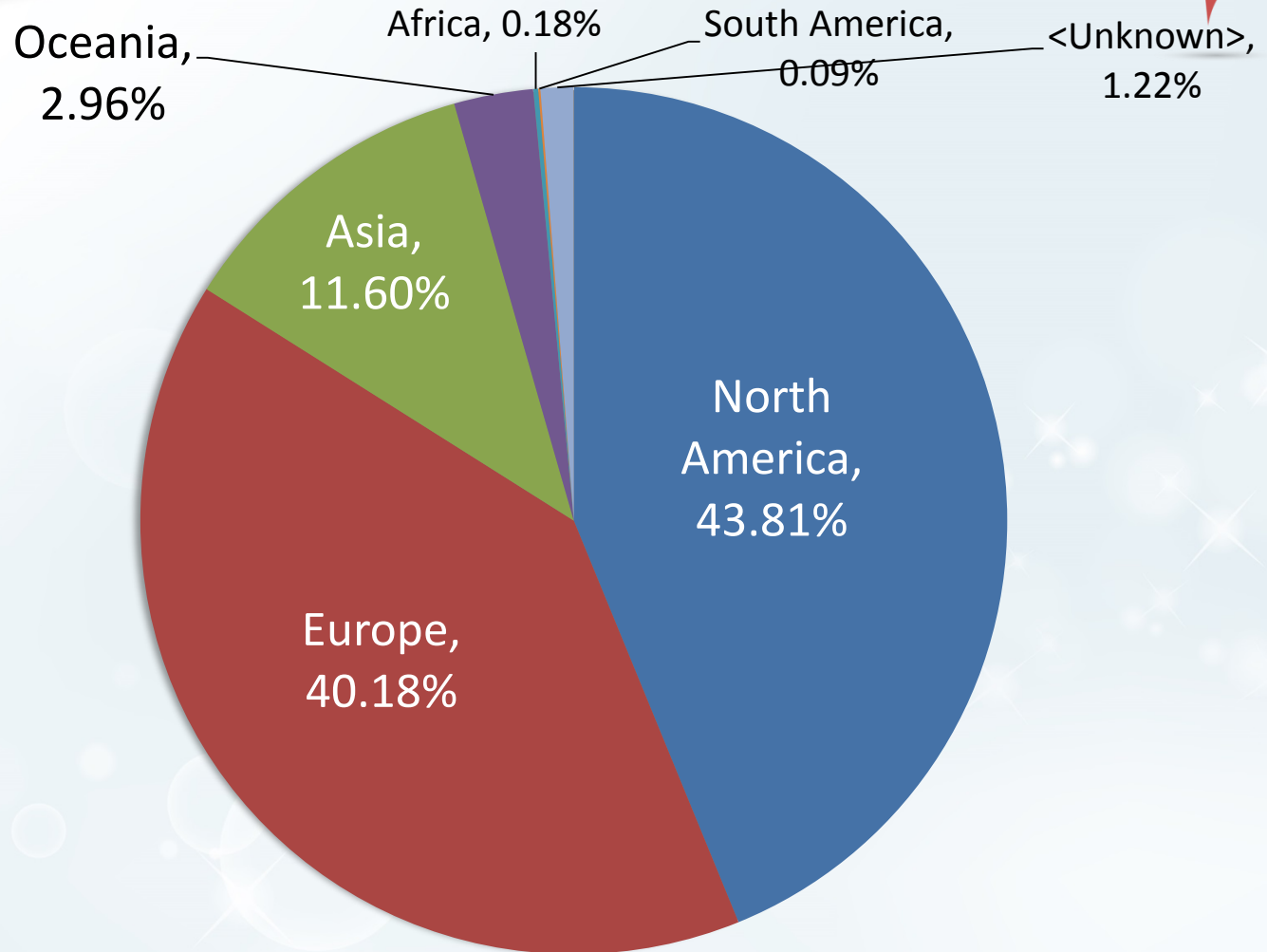
Geographic Distribution

Result 4

	Algeria	0.09%		Hong Kong	0.17%		Spain	1.66%
	Australia	2.61%		Hungary	0.09%		Sweden	0.78%
	Austria	0.61%		Iran	0.44%		Swiss	0.17%
	Azerbaijan	0.09%		Ireland	1.66%		Switzerland	0.26%
	Belgium	1.05%		Israel	0.44%	5	Taiwan	5.49%
	Botswana	0.09%		Italy	2.44%	2	Thailand	0.17%
	Brazil	0.09%		Japan	3.75%	1	UK	14.20%
3	Canada	7.84%		Malaysia	0.35%		USA	35.45%
	China	0.61%		Mexico	0.52%		<Unknown>	1.22%
	Croatia	0.09%		Netherlands	4.88%			
	Cyprus	0.17%		New Zealand	0.35%			
	Denmark	0.17%		Norway	0.44%			
	Estonia	0.26%		Philippines	0.09%			
	Finland	0.78%		Poland	0.35%			
	France	1.66%		Portugal	0.78%			
4	Germany	6.10%		Serbia	0.09%			
	Greece	1.05%		Slovenia	0.44%			

Geographic Distribution

Result 4



Geographic Distribution

- DH is a global movement
- North America and Europe are leading
- Asia is picking up



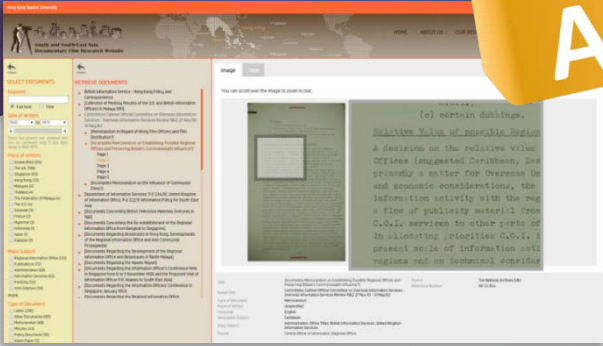
What Have HKBU Lib Done?



12 Academic Departments (41%)

29 Academic Departments

What Have HKBU Lib Done?



A | Text-Based

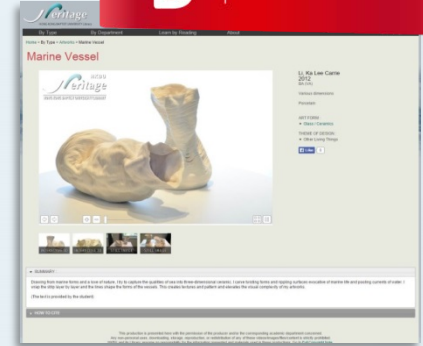
South & South-East Asia Documentary Film Research Website

<http://digital.lib.hkbu.edu.hk/documentary-film/>



Corpus of Political Speeches

<http://digital.lib.hkbu.edu.hk/corpus/>



B | Image-Based

HKBU Heritage

<http://heritage.lib.hkbu.edu.hk/>



C | GIS-Based

中山公園數據庫

<http://digital.lib.hkbu.edu.hk/sunyatsen/>



D | Data-Based

貢品數據管理

<http://digital.lib.hkbu.edu.hk/history/>



E | Crowd-sourcing

The Aleksis Kivi Brothers Seven Translation Assessment Project

<http://digital.lib.hkbu.edu.hk/translate/>

What Have HKBU Lib Done?

Grants received

- Teaching Grants X 3
- Research Grants X 1
- Conference grants / soft money X 3

Digital Scholarship Grant



MISSION & SUPPORT What Services Do We Provide?	KNOWLEDGE BASE Digital Humanities? Data Management? Open Access?	PROJECTS & EVENTS What Have We Done?	DIGITAL SCHOLARSHIP GRANT Guidelines & Application Procedures	OUR TEAM People & Contacts
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Digital Humanities, the next big thing in higher education

Digital Scholarship Grant

A. Background

Digital scholarship is an area of research and teaching that uses digital technologies to extend the life of scholarly sources, facilitate information sharing, serve as research and teaching tools, and help yield new findings. Sponsored by the University's Research Committee, the Digital Scholarship Grant aims to share the valuable scholarly sources academics create or gather throughout their research activities with the community. These primary sources, data, or academic information have a significant value beyond usage for the original research.

Sharing scholarly sources can contribute to the overall notability of the university via:

- Raising the visibility of the university and the corresponding academic department
- Promoting the research and its outcomes
- Providing a direct credit to the researchers
- Leading to new collaborations between source material users and researchers

It can also benefit the academia through:

- Promoting innovation and potential new uses of the source materials
- Reducing the cost of duplicating source material collection
- Providing important resources for education
- Encouraging new interdisciplinary fields

B. Application Criteria

Eligibility:
Only full-time HKBU academics at the rank of Research Assistant Professor or above are eligible to apply. Academics from all disciplines are invited. All Principal Investigators can hold only one Digital Scholarship Grant project at a time.

NEWS

New Projects
Corpus of Political Speeches

Brothers Seven Translation Assessment Project

THE ALEXIS KIVI BROTHERS SEVEN TRANSLATION ASSESSMENT PROJECT

Looking for your help to crowd-source the assessments

All are welcome to submit assessments!

GETTING INVOLVED

What Have HKBU Li

- Teaching
 - A required Year 1 course of the SSCD
- Co-authorship
 - Article X 1
 - Book chapter X 1
- Media Coverage
 - Campus magazines X 6
 - Local newspapers X 10



浸大設早期報載電影資料庫

【明報專訊】浸大傳理學院電影學院總監葉月瑜教授與浸大圖書館合作，開發一個名為「早期華文報紙電影資料庫」電子索引網站 (digital.lib.hkbu.edu.hk/chinese-films)，輯錄晚清至民國時期 (1900年至1949年)，超過2.2萬組跟電影或電影明星相關的新聞及廣告原始資料，來自香港、廣州、杭州和天津共8份華文報紙，全數以純文字摘要方式記錄在網站內，藉此修補及重構早期華語電影史，網站昨正式免費開放予公眾查閱。

陳蘊茜教授出席浸大講座分享中山公園的歷史意義

2016年歷史月主講之一位女學者，香港中文大學歷史系教授陳蘊茜，日前在「721 通識新世代」系列講座中，以「中山公園的歷史意義」為題，與在場人士分享。陳教授指出，除了中國歷年來的政治變遷，中山公園亦見證了香港社會的變遷。她指出，中山公園的歷史意義，在於它見證了香港社會的變遷，以及它如何成為一個具有歷史意義的場所。

數位學人文 數據講故事

浸大網站展清廷貢品 助研黑龍江政經歷史

香港文匯報【記者 鄒伊伊】科技發展日新月異，關於中國歷史文獻文物的研究，亦可與數碼技術結合，以「數位人文 (Digital Humanities)」方式，為傳統的人文學科賦予新生命。在香港澳先推動「數位人文」項目的浸會大學，去年推出「貢品數碼管理」網站，將清朝時期的黑龍江貢品研究數據，以數碼數據或圖庫等新形式展示。

浸大講師製網站 宗教論生態環保

近年經常在新聞聽到世界各地出現更多極端天氣，而社會亦愈來愈注重生態問題。袁效仁知道，浸會大學有講師製作了一個名為「靈性傳統，全球生態，香港環境」的網站，希望大眾反思宗教傳統與生態環保的關係。網站由十月開設至今，已經有過萬人瀏覽。

袁效仁同開設網站的浸大宗教及哲學系講師陳家富博士傾過，他話網站一為學生，二為公眾。任教「綠色生活與靈性傳統」課程的他指，開設網站本來是為了教學用途，方便學生在上課前備課，但他亦希望公眾可藉網站了解不同宗教對於生態環保的看法，並反思自己日常生活的方式。

羅列中西宗教觀點

陳博士指，社會上有好許多人關心生態問題，但他們很少從宗教角度去理解，「其實不同的宗教都對生態問題有不同的論述，能夠豐富生態問題的討論層次。」

陳博士同袁效仁介紹網站的特色，他指網站羅列出東西方各個主流宗教，包括天主教、基督教、佛教等，對生態環境、動物倫理的觀點，內有簡短文章的作品簡介，如果讀者有興趣繼續研究這個課題的話，可到圖書館閱讀建議參考書目，或者從網站中連接至其他參考網站。除了文章之外，陳博士亦上載了部分課堂的錄像片段，「如果你不想看文章，都可以只聽我講。」

反思個人生活方式

陳博士說，一般人對生態問題的理解，都不外乎全球暖化、空氣污染、水土流失、物種絕種等，大眾許多時只會用經濟、政治的角度去分析，其實宗教界都非常關心環境問題，例如佛教過去曾在多次公開演說中，都呼籲信眾關注生態問題。

用宗教角度去分析生態問題，其實即是了解宗教傳統對生態環境有所貢獻，例如該宗教如何看待人與自然之間的關係。他希望讀者可以藉此反思自己的生活，「生活是否要如此急速，經濟發展增長要如此快，以至犧牲環境，並付上沉重代價。」

網站由十月開設至今，已經有過萬人瀏覽，陳博士指大部分瀏覽人都是自己的學生。他希望網站能讓公眾知道宗教界並非各家自掃門前雪，只顧傳道，「不同的宗教有不同的貢獻，不是鐵板一塊。」

袁效仁期望社會以不同角度看生態保育，在環保上發揮更多效能。

袁效仁

Using technologies for
sustainable development

DH is one of the ways to **sustain**
the value of libraries



THANK YOU!