



香港中文大學圖書館

The Chinese University of Hong Kong Library

TAKING A STEP FORWARD FROM BUILDING A DIGITAL SCHOLARSHIP LAB – GROWING DIGITAL SCHOLARSHIP SERVICE AT THE CHINESE UNIVERSITY OF HONG KONG LIBRARY

Dr. Louisa LAM

Head of Research Support & Digital Initiatives

The Chinese University of Hong Kong Library

October 18, 2017

CUHK LIBRARY'S RESPONSE TO THE GLOBAL CALLING

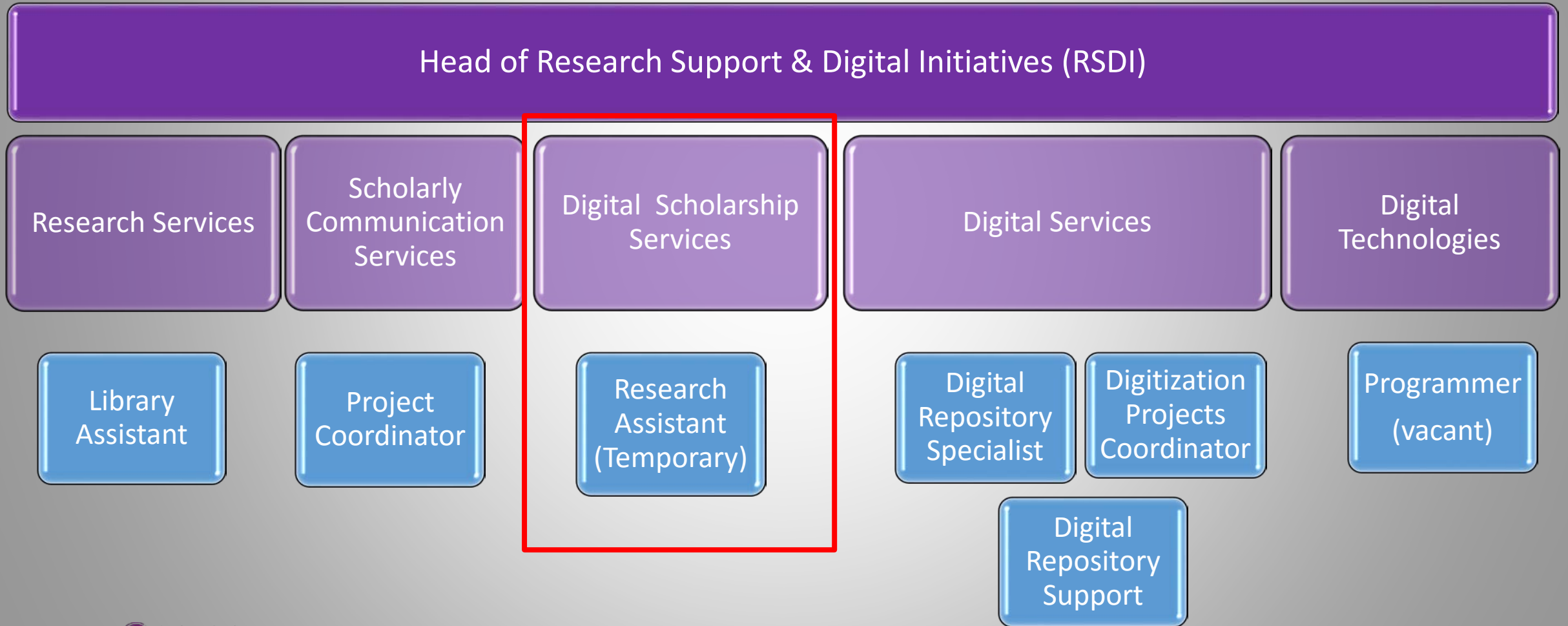
Strategic themes and objectives

1. Realising the potential of our collections	2. Transforming our research support	3. Supporting the student journey	4. Sustainability	5. Working in partnership
<p>1.1 Build our research collections to fit with University priorities</p> <p>1.2 Promote Special Collections as a source for primary research</p> <p>1.3 Ensure students have access to their core learning materials</p> <p>1.4 Facilitate discovery and easy access to collections and resources</p>	<p>2.1 Create specialist services, reflecting the University's research priorities</p> <p>2.2 Build capacity in ULS to support e-research</p> <p>2.3 Lead discussion on changes in scholarly communications</p> <p>2.4 Grow Library services to research postgraduate students</p>	<p>3.1 Enhance our students information and digital literacy skills</p> <p>3.2 Continue to develop innovative, technology-rich study spaces</p> <p>3.3 Deliver seamless services that encourage independence.</p> <p>3.4 Cultivate students by offering project work, volunteering, internships and employment</p>	<p>4.1 Progress towards environmental sustainability wherever possible</p> <p>4.2 Deliver and demonstrate value and fiscal responsibility</p> <p>4.3 Optimise collection space, storage and preservation</p> <p>4.4 Secure the organisational structure and staff skills needed to deliver the ULS mission and vision</p>	<p>5.1 Work with faculty to understand their Library needs throughout the research life cycle</p> <p>5.2 Engage with students and faculty to identify how the Library can best support the student journey</p> <p>5.3 Deepen collaboration with our internal partners, and with libraries and consortia locally, regionally and beyond.</p> <p>5.4 Develop a supportive Library working environment</p>

CUHK Library Strategic plan
2013-2016

Partnering for Success

ESTABLISHMENT OF A NEW TEAM – RESEARCH SUPPORT & DIGITAL INITIATIVES



BUILDING DIGITAL SCHOLARSHIP SERVICE

Mission

- Promote and support digital scholarship research through its entire research life-cycle

Strategy

- Foster collaborative partnership with Faculty and researchers

Action Plan

- Build a Digital Scholarship lab with a package of services, collaborative space, tools, and projects

Approach

- The Lab – Flexible, Easy to use, Sustainable
- Staffing – start from small
- Services – innovative, bold to experiment, quick response

CORE SPACE DESIGN PRINCIPLES

- A technology-rich hub for scholars to immerse in their research
- Able to support multitude of research-related activities on personal and collaborative basis, in particular, digital scholarship research
- All equipment should be easy to use to encourage self-service
- Must have flexible setting to fully utilize the space and accommodate different needs
- Be sustainable in the long-term

DIGITAL SCHOLARSHIP LAB

- Location: G/F,
University Library
- Open: 17 March, 2016
- Floor Area: $\sim 180\text{m}^2$
- Seating Capacity: ~ 75



Previous CUHK Repository on G/F of UL



VISUALISATION ROOM & SEMINAR ROOM

- Two different space that can be used individually and separately
- A technology-rich space to support:
 - digital information visualisation for research projects;
 - collaborative research
 - application of digital scholarship software & tools for research data analysis, processing and online display



DIGITAL DISPLAY WALL

- 12 nos. of 55-inch LED TVs made into a 5m wide x 2m high video wall
- Extremely high resolution of 24,883,200 pixels
- From 1- 12 input sources with different layout choices to allow comparison of data or information from different sources to facilitate research discussion and collaboration
- Best for visualization of large images, exploring big data
- Support of various format of inputs allows users to bring their own mobile devices for connection



SOFTWARE & TOOLS

Software in PCs

- ArcGIS Teaching & Research Lab Kit - Geographic information system (GIS) software for mapping & geospatial data analysis
- Adobe Creative Cloud - Includes Photoshop, Dreamweaver, Illustrator, Premiere Pro and all the available apps in the package
- AutoCAD - For 2D and 3D computer-aided design and drafting
- Cytoscape - For visualising molecular interaction networks and biological pathways
- Gephi - For visualisation and exploration of graphs and networks
- Google Earth Pro
- GRASS GIS - GIS software
- IBM SPSS - For statistical analysis
- MALLET - For statistical natural language processing and different machine learning application to text
- MS Office
- R - For statistical computing and graphics
- TreeAge Pro Healthcare - For visualizing data by creating and analyzing decision trees

Software in iMacs

- Adobe Creative Cloud - Includes Photoshop, Dreamweaver, Illustrator, Premiere Pro and all the available apps in the package
- AutoCAD - For 2D and 3D computer-aided design and drafting
- Gephi - For visualisation and exploration of graphs and networks
- Google Earth Pro
- NVivo - For qualitative research analysis (iMac No. 1 & 2)
- MS Office
- R - For statistical computing and graphics
- TreeAge Pro Healthcare - For visualizing data by creating and analyzing decision trees

The following are online tools available in workstations:

- Omeka - For online exhibitions
- T-PEN (The Transcription for Paleographical and Editorial Notation) - Allow users to contribute images of manuscripts and transcription
- Voyant Tools - A web-based reading and analysis environment for digital texts
- MARKUS - For tagging personal names, place names, temporal references, and bureaucratic offices automatically in classical Chinese files uploaded by users



FLEXIBILITY AND EASE OF USE (1)

- A 80" interactive whiteboard that is linked to the digital display wall
- Tablets and notebooks available for lending upon request
- Power and AV outlets are available on table top
- Movable tables and chairs for easy configurations
- Easily configurable control panel for layout of digital display wall





FLEXIBILITY AND EASE OF USE (2)

- The Visualization Room can be used separately / simultaneously with Seminar Room by using partition between the two rooms
- Writable Partitions facing Visualization Room have white board for idea generation



SPACE FOR COLLABORATIVE RESEARCH

- Easily configured tables for discussion
- A multi-purpose photocopier for printing, photocopying and scanning
- A small help desk for assistance in the use of the lab / equipment
- A small consultation room to provide advice on digital scholarship projects



STAFFING FOR THE SERVICE

- Start from small to ensure sustainability
- More staff might be added when the service grows
- One Digital Scholarship Librarian that comes to the team through internal transfer after studying staff skills
 - A graduate in Geography with a Postgraduate Diploma in Applied Geoinformatics
 - External recruitment encountered great difficulties
- One Research Assistant (project-based) (temporary) to assist with digital scholarship research projects
- Other services such as copyright, digitization, technological support are supported by other professionals in the team

OPERATIONAL MODE

Mainly Self-Service

- Briefing on the use of the lab prior to the booking; technical support might be provided on request
- Help Desk available for offering assistance in the use of the facilities
- IP Phone connected to RSDI Office directly for emergency assistance

Opening Hours

- Mon – Fri: 9:00 am – 5:30 p.m.
- Saturdays, Sundays, public holidays closed
- Free to all users if the lab is not reserved

Reservation for Activities

- Online reservation
- Restricted to Current academic, research & administrative staff and postgraduates

SERVICES

- Support for Digital Scholarship projects
 - Sourcing of research data and information
 - Consultation
 - Project Planning and Management
 - Technology Support
- Training Workshops & Seminars
- Consultation on Digital Scholarship research
- Data services
- Promotion Events
- Provide learning resources

(<http://lib.cuhk.edu.hk/en/research/digital-scholarship/services>)

ENGAGEMENT WITH FACULTY & RESEARCHERS - OUTREACHING

- Attend their internal meetings in which Faculty members will attend
- Tailored-made presentations and briefings on specific services
- Proactively liaised with department organizers and offered the lab for their research seminars or conferences
- Meet with individual faculty at the Lab



ORGANIZED FIRST DIGITAL SCHOLARSHIP SYMPOSIUM 31.03.2017



- Academics from CUHK and other institutions presented their digital scholarship research and explore the roles of the Library

Digital Scholarship Symposium

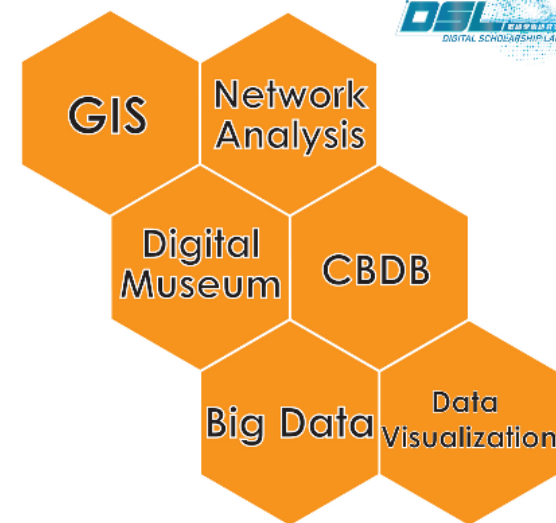
Exploring Digital Scholarship Research at CUHK and Beyond

31 March, 2017 (Friday)

Digital Scholarship Lab,
University Library

Registration: <https://goo.gl/Bu0Ih2>

Enquiries: dslab@lib.cuhk.edu.hk



Symposium

9:00 a.m. - 12:35 p.m.

GIS and Big Data for Urban Applications
Prof. HUANG Bo
Department of Geography and Resource Management
Faculty of Social Science

Guangzhou Daoist and Popular Temples Studies and the Development of Daoist Digital Museum
Prof. LAI Chi Tim
Department of Cultural and Religious Studies
Faculty of Arts

A Cyberinfrastructure for Studying Chinese History: A Proposal based on the Experience of the China Biographical Database Project
Dr. TSUI Lik Hang
China Biographical Database
Harvard University

Re-presenting Web Use as Networks
Prof. WU Xiao, Angela
School of Journalism and Communication
Faculty of Social Science

The Social Network of an Early Republican Literary Magazine: a Visualization with Gephi
Prof. YE Jia, Michelle
Department of Translation
Faculty of Arts

A Collaborative Project in Opening Research Data: Archaeological Sites Mapping in China with GIS
Ms. Kitty SIU (co-authored with Prof. Celine LAI)
Library

Post-symposium Workshop

2:30 p.m. - 4:00 p.m.

Digital Tools for Chinese Studies: The China Biographical Database (CBDB) and More
Dr. TSUI Lik Hang
China Biographical Database
Harvard University

Join us to explore the possibilities in conducting digital scholarship research!



Digital Scholarship Consultation Hours

Data, Tools and Beyond

NEW




The Digital Scholarship team offers help to your digital scholarship research projects and ideas!

- Digital Scholarship Lab facilities
- Identify sources of research data and materials
- Research software and other tools, e.g.



- Data visualisation



- Copyright advice on the use of research data and materials 

Hours: Every alternate Tuesday, 3:00 – 5:00 p.m. during term time starting from 10 October, 2017

Dates: October: 10, 24
November: 7, 21
December: 5, 19

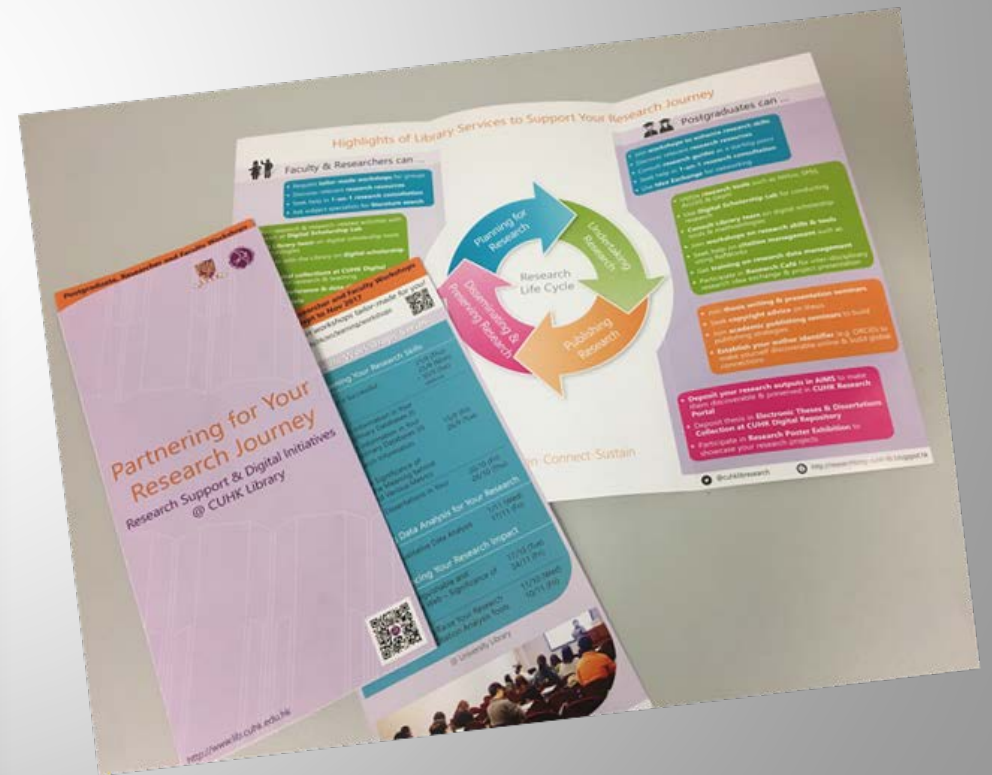
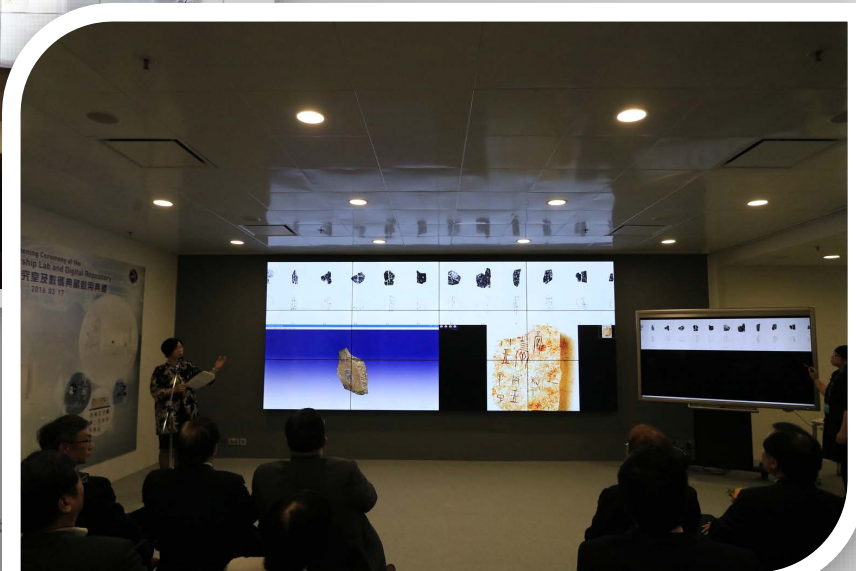
Venue: Digital Scholarship Lab, G/F, University Library

Contact: dslab@lib.cuhk.edu.hk ¹⁹

ENGAGEMENT WITH FACULTY & RESEARCHERS - PROMOTION (1)

Grand Opening Ceremony Of The Digital Scholarship Lab

Creation Of Promotion Materials: Pamphlets, Newsletters



ENGAGEMENT WITH FACULTY & RESEARCHERS - PROMOTION (2)

Use Of Social Media

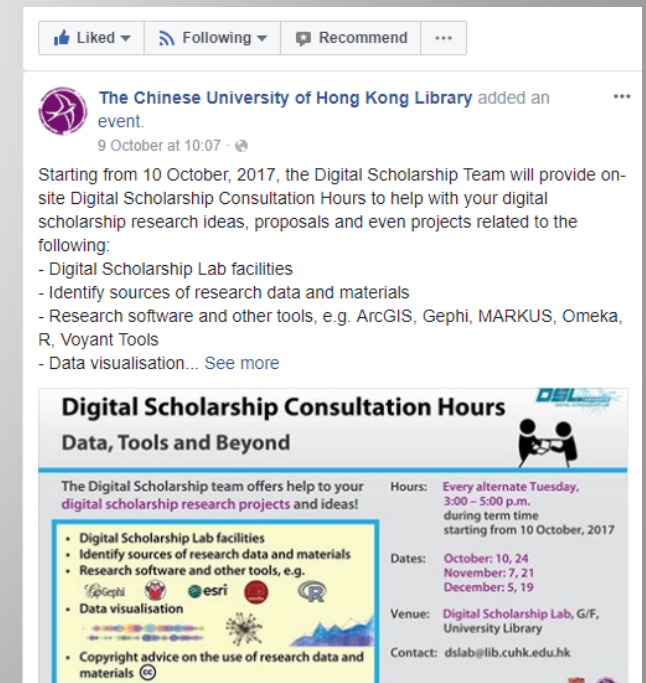
- Research Blog (<http://researchblog-cuhk-lib.blogspot.hk/>)



- Twitter @cuhklibresearch



- Library Facebook (<https://www.facebook.com/CUHKLibraries>)



SOME SUCCESS IN THE PAST 18 MONTHS (1)

- A total of 62 events and activities were held for about 1,700 participants at the lab: research seminars, conferences, classes, tutorials, and other research-related activities
- A total of 300 visitors including Faculty
- Growing no. of users attend library workshops:
 - 2016 Mar – June: 7 workshops, 43 participants
 - 2016 – 2017: 24 workshops, 142 participants
 - 2017 Sep to Oct – 7 workshops, 212 participants

SOME SUCCESS IN THE PAST 18 MONTHS (2)

- More workshops on digital scholarship tools



Introducing Digital Humanities (Jan - Apr 2017)

Introducing Digital Scholarship Lab Facilities
20 Jan (Fri) 2:30 - 4:00 p.m. | 14 Feb (Tue) 11:30 a.m. - 12:00 noon
22 Jan (Wed) 2:30 - 3:00 p.m. | 15 Apr (Thu) 11:30 a.m. - 12:00 noon

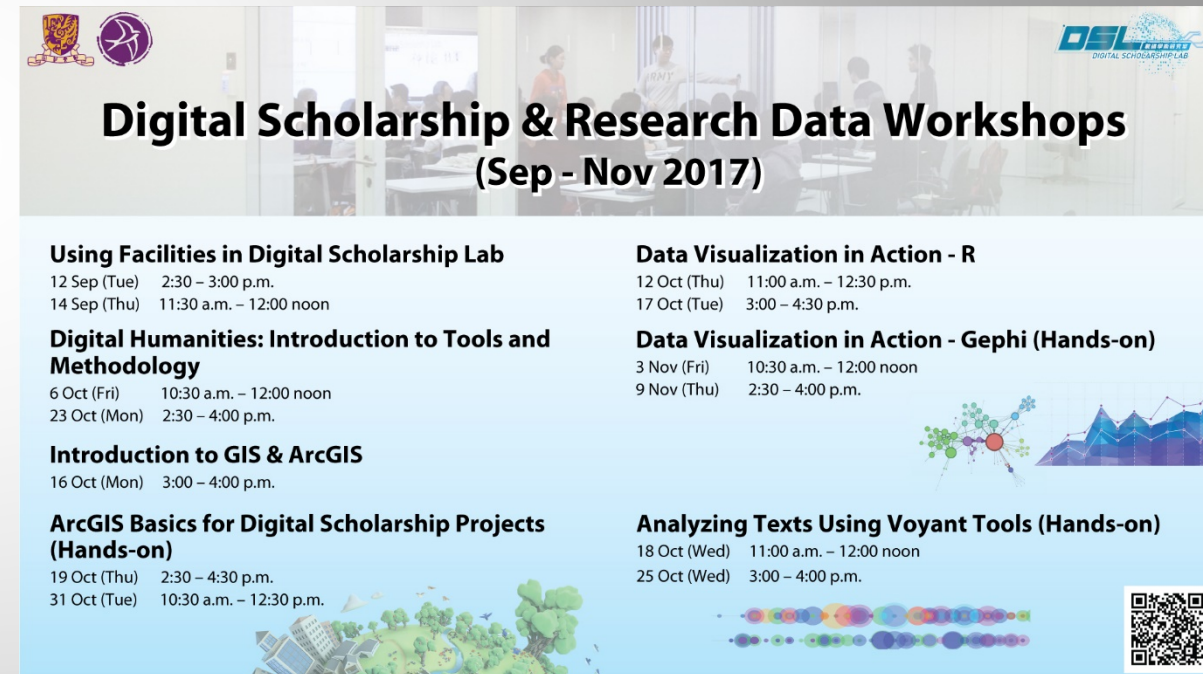
Digital Humanities: Introduction to Tools and Methodology
17 Jan (Tue) 2:30 - 4:00 p.m. | 06 Feb (Thu) 11:00 a.m. - 12:20 p.m.
12 Apr (Wed) 2:30 - 4:00 p.m.

GIS for Digital Scholarship Research
21 Feb (Tue) 11:00 a.m. - 12:00 noon
03 Mar (Thu) 2:30 - 3:30 p.m.

Data Visualization
28 Feb (Tue) 2:30 - 3:30 p.m.

Analyzing Texts using Voyant Tools
17 Feb (Fri) 10:30 - 11:30 a.m.
6 Mar (Mon) 4:00 - 5:00 p.m.

Details & Registration : www.lib.cuhk.hk/en/learning/workshops/ds-ab



Digital Scholarship & Research Data Workshops (Sep - Nov 2017)

Using Facilities in Digital Scholarship Lab
12 Sep (Tue) 2:30 - 3:00 p.m.
14 Sep (Thu) 11:30 a.m. - 12:00 noon

Digital Humanities: Introduction to Tools and Methodology
6 Oct (Fri) 10:30 a.m. - 12:00 noon
23 Oct (Mon) 2:30 - 4:00 p.m.


Introduction to GIS & ArcGIS
16 Oct (Mon) 3:00 - 4:00 p.m.

ArcGIS Basics for Digital Scholarship Projects (Hands-on)
19 Oct (Thu) 2:30 - 4:30 p.m.
31 Oct (Tue) 10:30 a.m. - 12:30 p.m.

Data Visualization in Action - R
12 Oct (Thu) 11:00 a.m. - 12:30 p.m.
17 Oct (Tue) 3:00 - 4:30 p.m.

Data Visualization in Action - Gephi (Hands-on)
3 Nov (Fri) 10:30 a.m. - 12:00 noon
9 Nov (Thu) 2:30 - 4:00 p.m.

Analyzing Texts Using Voyant Tools (Hands-on)
18 Oct (Wed) 11:00 a.m. - 12:00 noon
25 Oct (Wed) 3:00 - 4:00 p.m.



FIRST COLLABORATIVE PROJECT WITH FACULTY OF ARTS

Introduction

Map of Archaeological Sites

Methodology

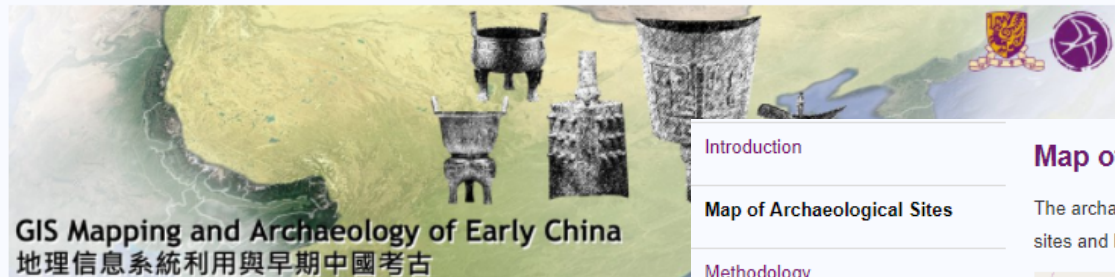
Dataset Use Guide

[Dataset - Northern China, ca.1200 – ca.1050 B.C.](#)

[Dataset - Hunan Province, ca.1300 – ca.1000 B.C.](#)

Terms of Use

GIS Mapping and Archaeology of Early China - Phase I: Shang Archaeology



GIS Mapping and Archaeology of Early China 地理信息系統利用與早期中國考古

This project is collaboration between the Digital Scholarship Lab and archaeologists. Since 2015 and the present, the officers of the Lab have been working with Professor [Name] to document her research data collected between 2005 and the present, regarding the Yellow River valley during the first millennium.

Introduction

Map of Archaeological Sites

Methodology


Dataset Use Guide

[Dataset - Northern China, ca.1200 – ca.1050 B.C.](#)

[Dataset - Hunan Province, ca.1300 – ca.1000 B.C.](#)

Terms of Use

Map of Archaeological Sites

The archaeological sites studied in this project are displayed in this map. Please click on the  and read the information of the sites and bronze nao found.



FLIP CLASSROOM FOR TUTORIAL CLASSES



STUDENTS LEARNING TO USE 3D GLASSES TO DESIGN A COMPUTER GAME FOR A SPECIFIC COURSE



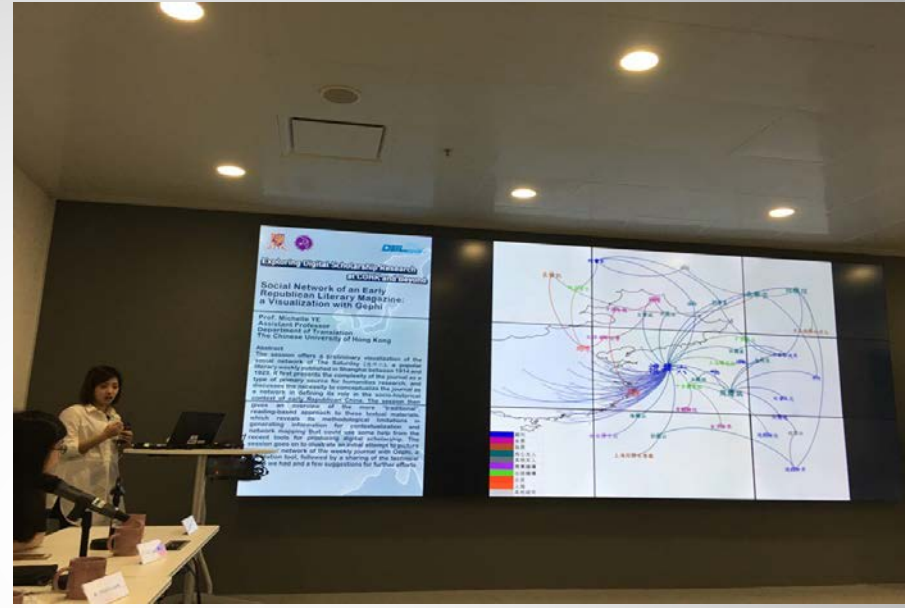
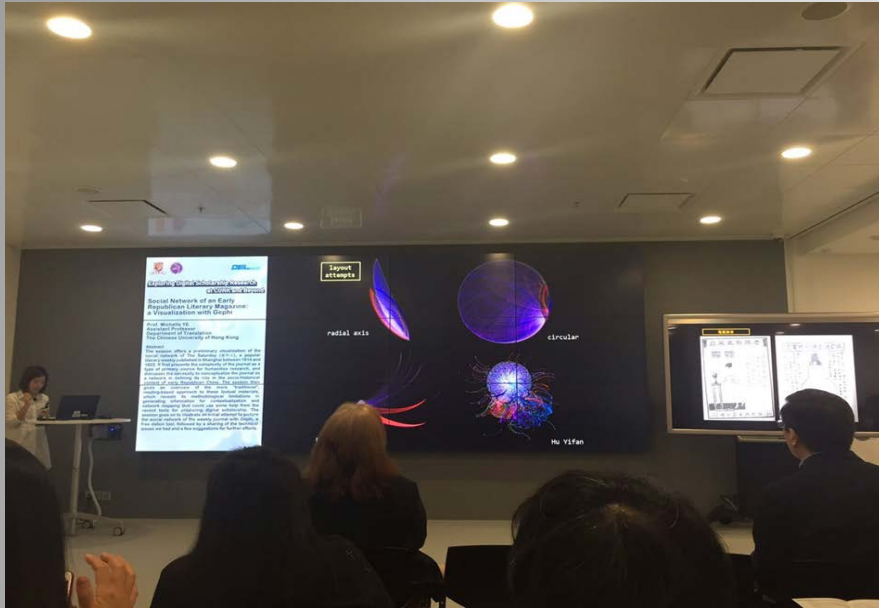
VISUALIZE MUSIC ON THE VISUALIZATION WALL



CONFERENCES MAKING USE OF VISUALIZATION WALL (1)



CONFERENCES MAKING USE OF VISUALIZATION WALL (2)



CHALLENGES

Nurture research work at the Digital Scholarship Lab

- Two mini-surveys found that most users are undergraduates that use the lab mainly for the new computers

Engagement with Faculty

- Digital scholarship research at CUHK is still a silo, library is evolving to find its own roles

Staffing

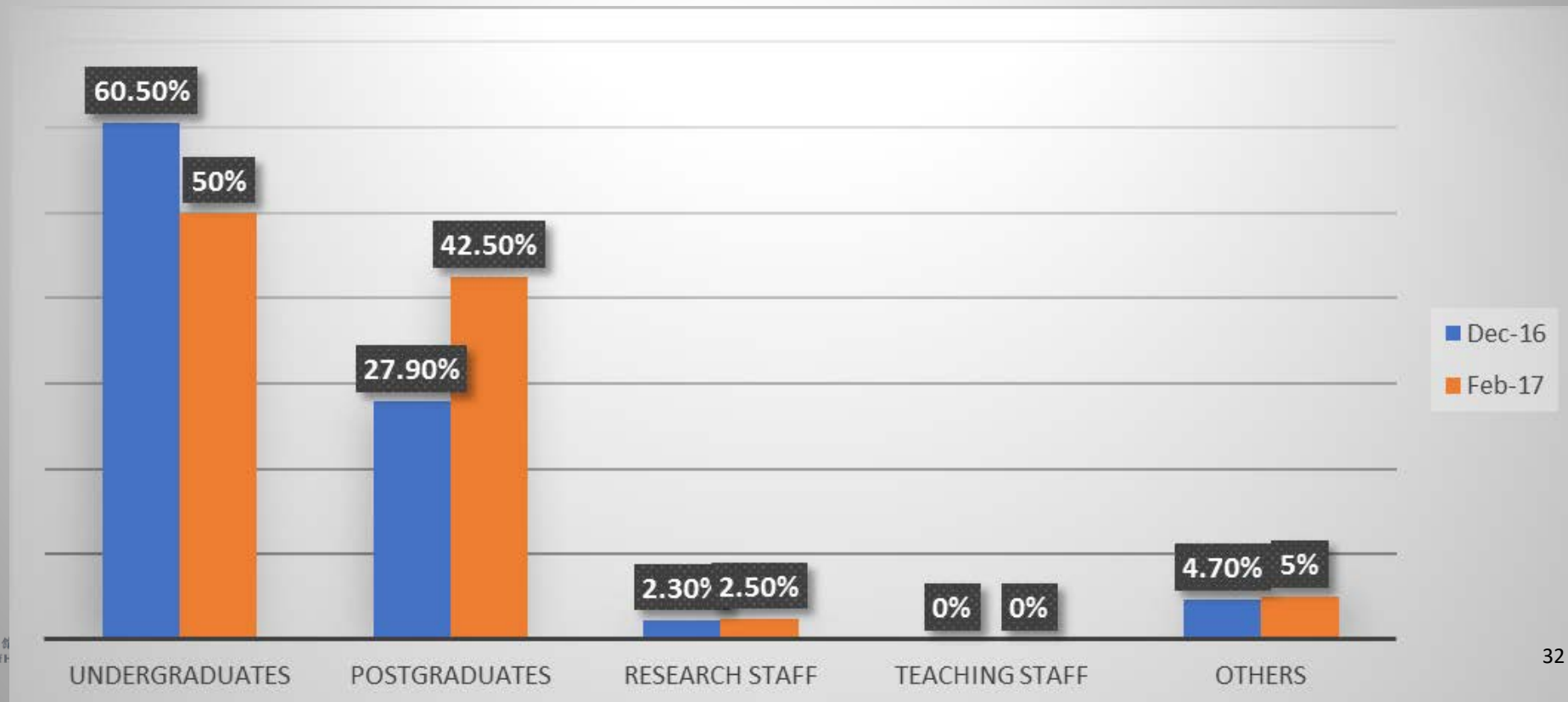
- Great difficulty in recruiting the right staff

Capacity building for staff

- Staff needs to acquire the new skills of digital scholarship services

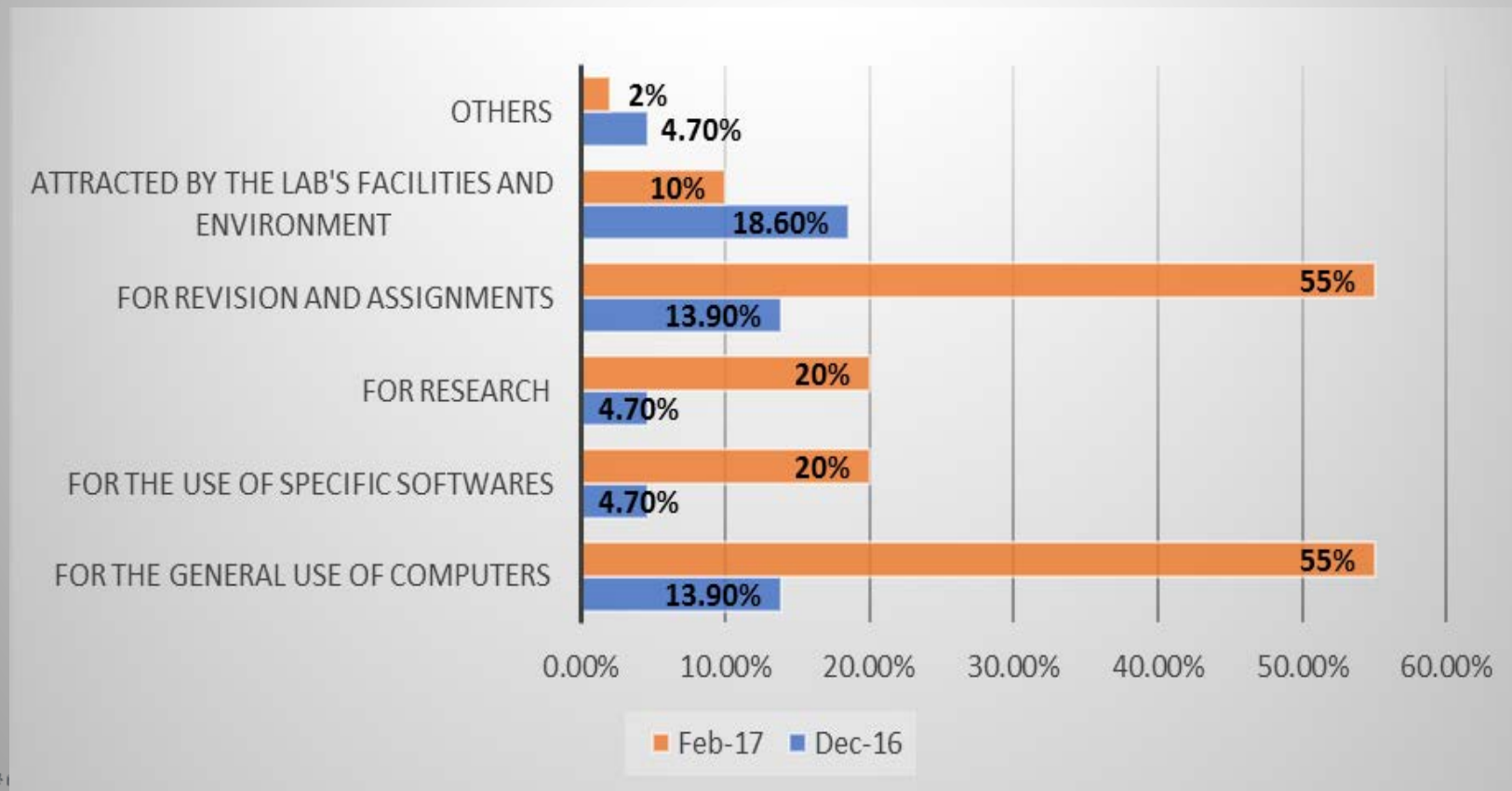
TWO MINI-SURVEYS FINDINGS (1)

- Two mini-surveys were conducted on the Lab users in Dec 2016 (43 users responded) and February 2017 (40 users responded)
- More than half are undergraduates



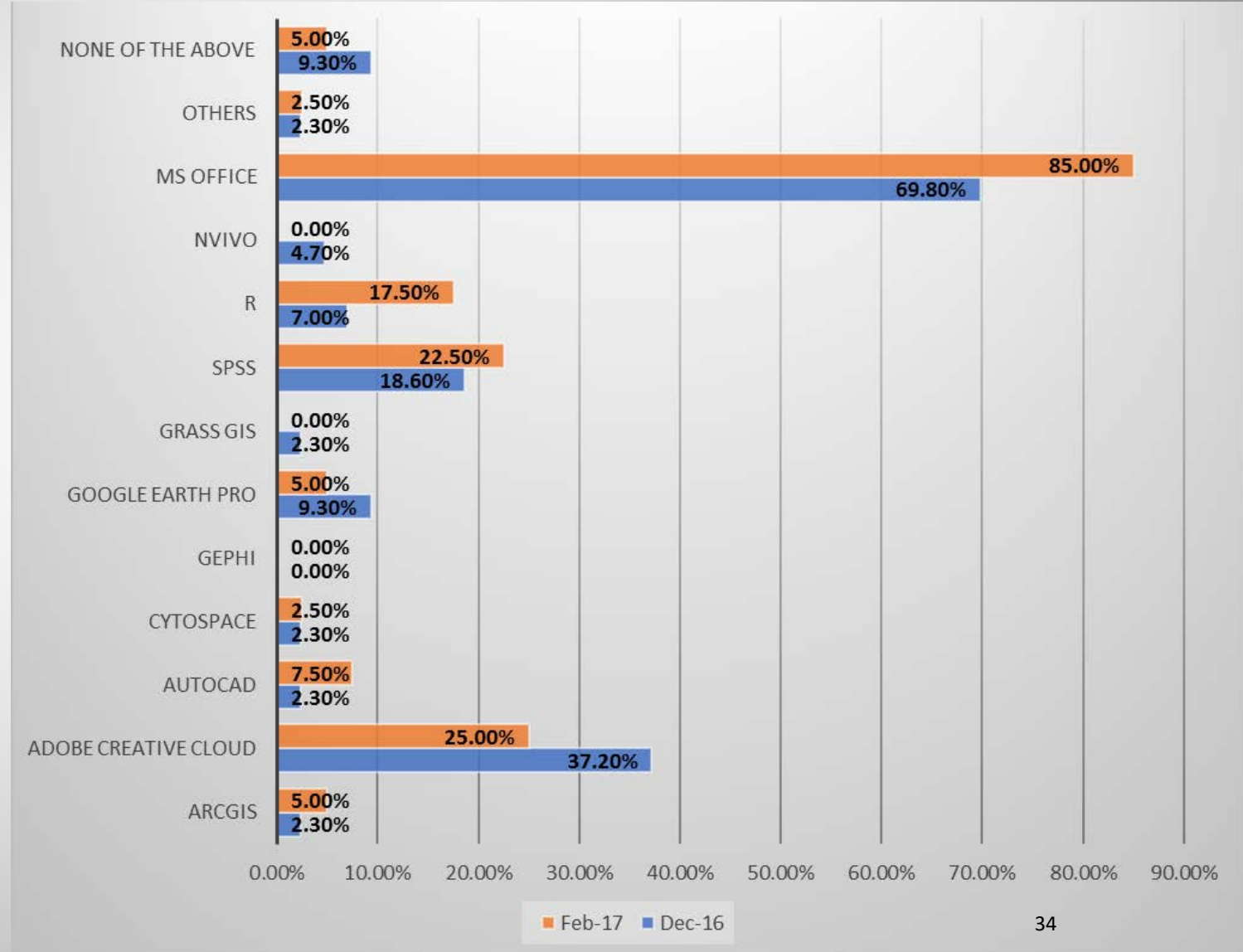
TWO MINI-SURVEYS FINDINGS (2)

- Most users used the lab for general use of the computers and revision / doing assignments



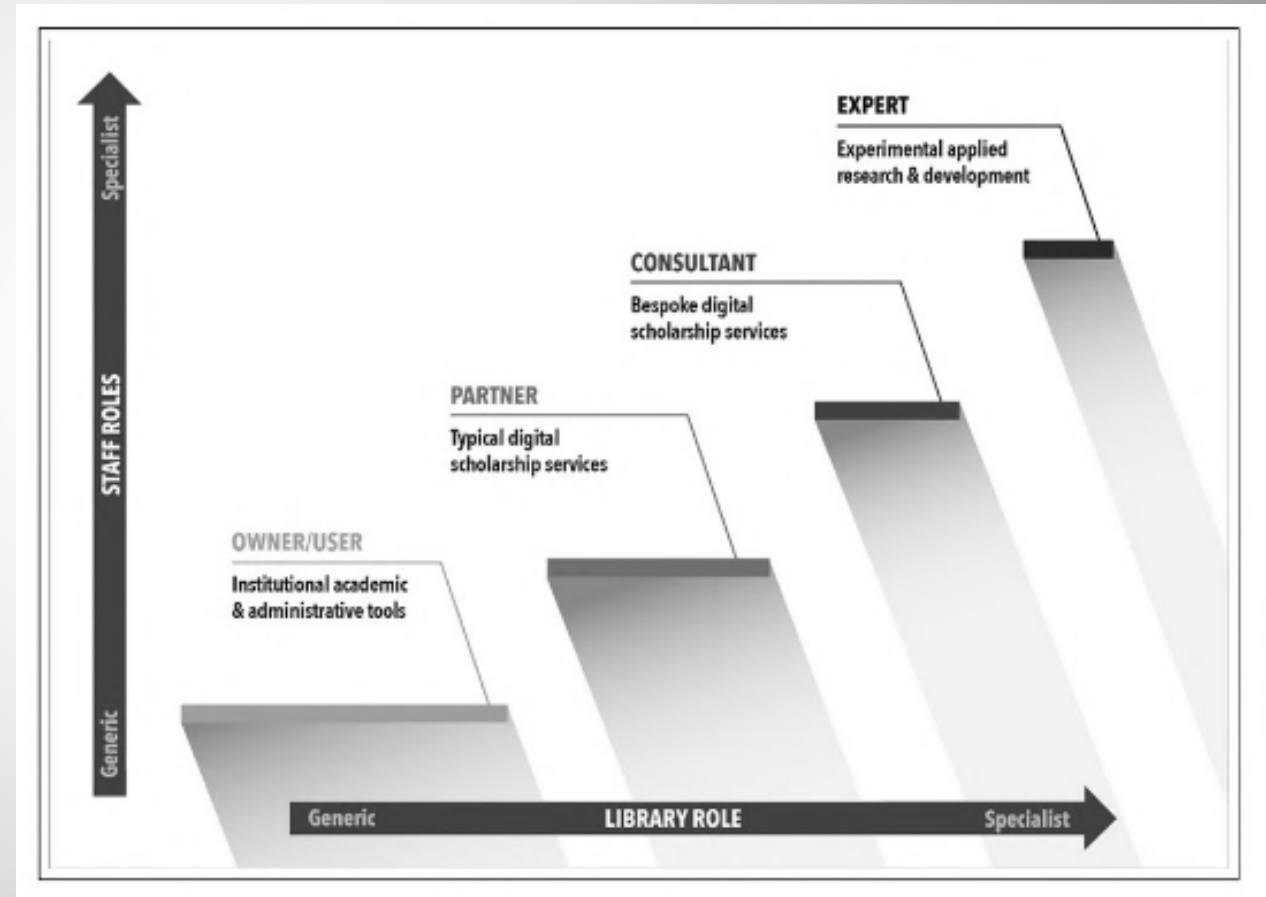
TWO MINI-SURVEYS FINDINGS (3)

- The majority used general software like MS Office and Adobe Creative Cloud



LIBRARY ENGAGEMENT WITH FACULTY

- Do we grow the service or respond to the demands for the service?
- No more “Build it, they will come”.



Source: Mackenzie, A. (2016). Digital scholarship: scanning library services and spaces. In *Developing digital scholarship: Emerging practices in academic libraries*. Edited by A. Mackenzie & L. Martin. London: Facet Publishing.

RESEARCHERS' NEED

'Scholars doing digital work require kinds of support that many more traditionally oriented humanists do not: access to technical resources for both their teaching and scholarship, as well as help maintaining those resources. They need access to collaborators--to other scholars in the humanities and to a range of developers, designers, project managers, and librarians--to produce and preserve their projects. How many programs hiring young digital humanists are prepared to provide them with those resources?'

Kathleen Fitzpatrick, Chronicle of Higher Education 9/30/11

WHERE ARE DHERS?

- Stephen Ramsay, “in order for the library to do digital humanities it must embrace the charge to become *‘a bunch of people who had found each other through various means and who were committed to the bold and revolutionary project of taking to one another about their common interests outside the four walls of the library.’*”
- Bethany Nowviskie, “*“Librarians” working in and across digital areas, who have been called many things over time, need to proudly identify themselves as DHers, and fully expect to be regarded as such by peers, colleagues, faculty and administrators, and let the broad work they do engage with that community.*”

Successful DHers require:

- Attitude to innovate
- boldness to take calculated risk
- quick action
- bravery to experiment
- courage to face failure, move on and grow your services in trial and error

REFLECTIONS & FUTURE DIRECTIONS (1)

- It is a right approach to support digital scholarship research with a package of services, collaborative space, tools and resources.
- It is essential to foster Faculty-Librarian partnership
- As a new service, it takes time for the service to grow and reap the benefits
- First year laid the foundation on space and initial connection building with Faculty
- The Lab can serve as a neutral platform for faculty collaboration
- The Lab helps to reposition the Library's commitment to support e-Research, in particular, digital scholarship research
- Essential to continuously enhance the lab facilities, review and innovate service provision, promotion & outreaching

REFLECTIONS & FUTURE DIRECTIONS (2)

- More roles can be assumed by the Library to satisfy the needs of digital scholarship researchers
 - Project Managers
 - Advisors of the latest tools
 - Technology providers
- Continue to recruit, re-skill and upskill library staff -
- The first postdoctoral fellow outside of US has assumed duty on August 1, 2017

The screenshot shows the CLIR website with a search bar at the top right containing "Search Site" and "Submit->". A navigation menu includes "Home", "About Us", "Initiatives & Partnerships", "Publications", "DLF", "Awards & Fellowships", and "Connect (Login)". The main content area is titled "Awards & Fellowships" and features a sidebar with a tree view: "Digitizing Hidden Special Collections and Archives", "Mellon Fellowships for Dissertation Research in Original Sources", "Postdoctoral Fellowship Program" (selected), "Recordings at Risk", and "Rovelstad Scholarship in International Librarianship". The "Postdoctoral Fellowship Program" sidebar lists sub-items: "General Information", "For Hosts", "For Applicants" (selected), "Fellowships in Academic Libraries", "Frequently Asked Questions", "Fellowships in Data Curation for Latin American and Caribbean Studies", "Chinese University of Hong Kong" (selected), "For Recipients", "Current and Previous Fellows", and "Fellows' Projects and Publications". The main content area displays the "Chinese University of Hong Kong CLIR Digital Scholarship Postdoctoral Fellowship" page. It includes a breadcrumb trail: "Home / Awards & Fellowships / Postdoctoral Fellowship Program / For Applicants / Chinese University of Hong Kong". The page text states: "The Chinese University of Hong Kong (CUHK) Library invites applications for a two-year CLIR Postdoctoral Fellowship in Digital Scholarship from 2017 to 2019." It describes the CUHK Library's commitment to digital scholarship, the establishment of the Research Support & Digital Initiatives (RSDI) team in July 2015, and the opening of the Digital Scholarship Lab in March 2016. It lists the library's rich materials, including Shang dynasty oracle bones and modern Chinese literary archives, and mentions the CUHK Digital Repository. The text notes that the CLIR Fellow will report to the Head of RSDI to promote digital scholarship research by leveraging the library's expertise, collections, and services. A key success factor is outreach to faculty to foster working partnerships. The fellow will be encouraged to explore enhancing the library's digitized materials to support different research and learning pedagogies, in particular, digital scholarship research. The page also lists "Responsibilities" and "Qualifications".

Home / Awards & Fellowships / Postdoctoral Fellowship Program / For Applicants / Chinese University of Hong Kong

Chinese University of Hong Kong

CLIR Digital Scholarship Postdoctoral Fellowship

The Chinese University of Hong Kong (CUHK) Library invites applications for a two-year CLIR Postdoctoral Fellowship in Digital Scholarship from 2017 to 2019.

CUHK Library is committed to supporting digital scholarship as one of our key strategies for transforming our research support services. A new team, Research Support & Digital Initiatives (RSDI), was established in July 2015 to focus resources in this area. A Digital Scholarship Lab was opened in March 2016 to provide a cutting-edge space and tools including a data visualization wall for researchers and students to immerse themselves in digital scholarship research. The Library also provides rich materials for digital scholarship research. Our Special Collections range from Shang dynasty oracle bones to modern Chinese literary archives. Digitization of these precious materials started in the 1990s and is ongoing. The digitized images are accessible at [CUHK Digital Repository](#). With all these resources and investment, the CLIR Fellow will report to the Head of RSDI to promote digital scholarship research by leveraging our expertise, collections and services. A key success factor is outreach to faculty to foster working partnerships. The fellow will be encouraged to explore enhancing the Library's digitized materials to support different research and learning pedagogies, in particular, digital scholarship research.

Responsibilities

- Lead CUHK Faculty and researchers in discussions about digital scholarship research in order to promote and raise awareness of this new kind of scholarship on campus.
- Explore areas requiring library research support and propose strategies meeting the needs identified.
- Identify current and emerging digital scholarship projects at the University and foster collaboration with faculties on these projects.
- Work collaboratively with Faculty and relevant library staff to deliver agreed research projects including advice on project management, and the use of digital scholarship tools and software on GIS, text-mining, data visualization, text analysis, etc.
- Organize training activities and events including workshops and research seminars on digital scholarship methodologies, tools and emerging trends, or other topics related to digital scholarship.
- Conduct research in digital scholarship independently.

Qualifications

Required

- PhD in any discipline relevant to digital scholarship/digital humanities obtained within the last five years of the beginning of the fellowship in July 2017.
- Ability to communicate and interact with Faculty and researchers; and to foster collaboration in digital scholarship research.
- Understand the application of digital technologies and tools in research projects and able to provide consultation and guidance to Faculty and researchers to promote digital scholarship research in the campus.
- Fluent in Chinese (Mandarin and/or Cantonese), including reading traditional script.
- Excellent communication, presentation, interpersonal and problem-solving skills.
- Ability to work independently and collaboratively with relevant units of the Library and the University.

Preferred

- A good track record in digital scholarship research or related research projects.
- Experience in research project management.
- Knowledge of trends and tools in data visualization.