

# AUNILO Country Report Singapore 2023

Co-Creating the Future of Libraries: Empowering Academic Librarians for Innovation and Impact 1-3 Aug 2023



NUS



NTU



SMU

R Sukanya Naidu, Cluster Head, Education, Research and Enterprise Partnerships, NUS Libraries

	<b>NUS</b>	<b>NTU</b>	<b>SMU</b>
No. of Libraries	7	7	2
Undergraduate Students	30,700	24,630	9,883
Graduate Students	11,500	9,777	3,166
Faculty	2,400	1,635	437
Research staff	4,000	3,108	215
Other staff	5,600	2,869	1,116

## University Profile in Numbers

## For Nation/NUS:

- Lifelong learning for everyone
- Personalised education for learners
- Sharing economy for instructors

# #NUS

## For Learners:

- Improved learning flexibility learn anytime, anywhere, any pace
- Improved quality teaching materials
- Personalised learning learn to desired depth or breadth



The New BL2.0 Initiative aims to create a **responsive personalised education experience** through the **meaningful integration of technology** in education.

## For Instructors:

- Higher teaching effectiveness leveraging digital assets, enhancing student centred teaching
- Higher productivity make once use repeatedly
- More time to pursue research & other impactful activities

## New BL2.0: Key Considerations

$$\frac{1}{3} \leq \frac{\text{Digital Contact Time}}{\text{Total Contact Time}} \leq \frac{2}{3}$$

Min threshold to qualify as BL2.0

Max limit for strong F2F engagement

### The NUS Blend Ratio

Digital Contact Time should account for between one-third and two-thirds of Total Contact Time.

Type of Contact Time	Definition and Modes of Delivery
In-person Contact Time	<ul style="list-style-type: none"> <li>Reflected by instructor-paced in-person learning</li> <li>F2F lectures, seminars, tutorials, workshops and lab classes</li> </ul>
Digital Contact Time	<ul style="list-style-type: none"> <li>Reflected by self-paced online or digital learning</li> <li>Video lectures, supplementary videos, and other digital assets (e.g., games, software)</li> </ul>
Total Contact Time	<ul style="list-style-type: none"> <li>Combination of in-person and digital contact time</li> </ul>

## 1. Digitisation and Curation of materials to support teaching and learning activities

Digitized content used in more than 25 courses and for digital scholarship projects  
<https://digitalgems.nus.edu.sg/>

## 2. Creating Online Learning Courses /objects

[The National University of Singapore: The Art and Science of Searching in Systematic Reviews | edX](#) was created after being awarded the NUS Learning Innovation Fund Technology Grant .

It been integrated as an asynchronous resource to support learning in over 11 courses in 6 faculties.

### Module-Embedded workshops:

1. SLP5112 / SLP5116 (Department of Speech and Language Pathology)
2. NUR4104B, NUR 5806G, NUR 6002 & NUR 6004 (Department of Nursing)
3. PR4195 / PR4196 (Department of Pharmacy)
4. GRMM- General Research Methodology Module (Faculty of Dentistry)
5. SPH5005 & 6770 (School of Public Health)

### MOOC – “The Art and Science of Searching in Systematic Reviews”

#### Evidence-based workshops for:

- Dentistry Year 2 students
- Researcher Unbound – MedSoc
- Year 1 – common healthcare curriculum

#### Consultation requests:

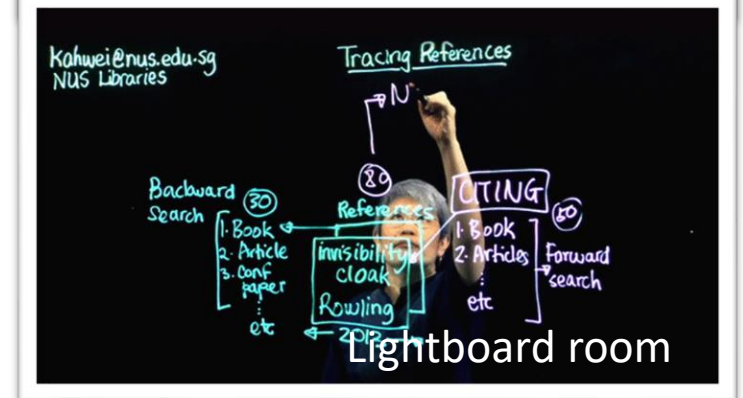
- Alice Lee Centre of Nursing Studies
- Yong Loo Lin School of Medicine
- Saw Swee Hock School of Public Health (SSHSPH)
- Faculty of Dentistry
- Duke-NUS
- Faculty of Science (Department of Pharmacy, Department of Food Science and Technology)
- NUHS Cluster

## 3. Provision of Spaces, Facilities and Loan of equipment to create blended learning materials / provide immersive learning experience



Tech Central

<https://nus.edu.sg/nuslibraries/spaces/tech-central/360imx>



## Immersive Technology for Teaching developed by Librarians

**FSC4203 Forensic Toxicology and Poisons:** VR (Meta Quest) and AR apps were developed to simulate of crime scene for this class

## Digital Media Literacy content taught in Curriculum

**ACE5411: Cultural Analytics and Informatics:** classes on 360 photography, augmented and virtual reality, 3D scanning and digital storytelling through web-based interfaces for students to develop their projects

## 6. Building Capacities

- **Blended learning team** comprising of 3 librarians was formed to provide training and explore the use of tools and to build capacity within the team.
- Libraries attended external course to get **certified in use of immersive learning and digital scholarship tools**

## 7. Building Capacities within NUS Community

- **Blended learning resource toolkit:** <https://libguides.nus.edu.sg/blendedlearning>
- **Jumpstart Minis** workshops on immersive technology such as AR, VR and 360° technology. Participants can earn Digital badges



## Library

- Information literacy expertise
- "Trans"-disciplinary reach across faculties and schools
- Teaching and learning facilities and equipment / spaces
- Digital media literacy
- Scholarly communication
- Copyright awareness
- Digitised content

## Faculty

- Deep subject knowledge
- Sometimes unfamiliar with blended learning / use of immersive learning tools

Embedment of information/digital media literacy in course

**BL2.0 in the Classroom**

Aligned to University's BL 2.0

Alignment with university BL 2.0

## University Departments BL 2.0. Team, \*CIT, \*CDTL

- Setting and implementation of guidelines, governance structure, funding and resources

# Forging Partnerships/ Networks

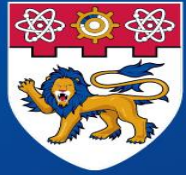
\*Centre for Information Technology  
\*Centre for Development of Teaching and Learning

# THANK YOU



**NUS Libraries**

This presentation shows the collective work of NUS Libraries, faculty partners and department collaborators



**NANYANG  
TECHNOLOGICAL  
UNIVERSITY**  
SINGAPORE

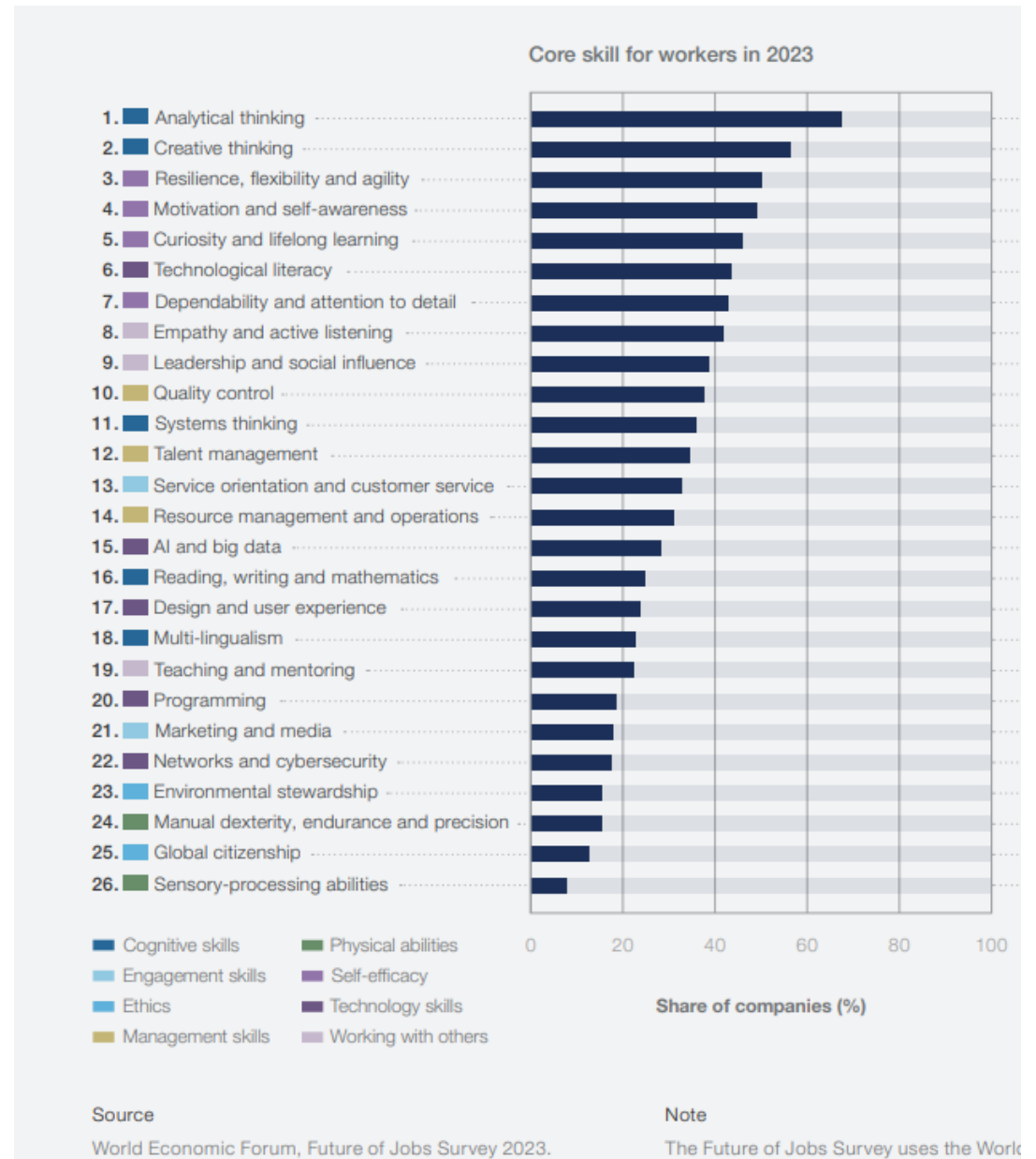
# NTU Report AUNILo Meeting 1-3 August 2023

Caroline Pang  
Nanyang Technological University  
Office of Information, Knowledge & Library Services



# Core Skills in 2023

## Co-Creating the Future of Libraries: Empowering Academic Librarians for Innovation and Impact



URL : [https://www3.weforum.org/docs/WEF\\_Future\\_of\\_Jobs\\_2023.pdf](https://www3.weforum.org/docs/WEF_Future_of_Jobs_2023.pdf)

# NTU Research Data Storage System (RDSS)

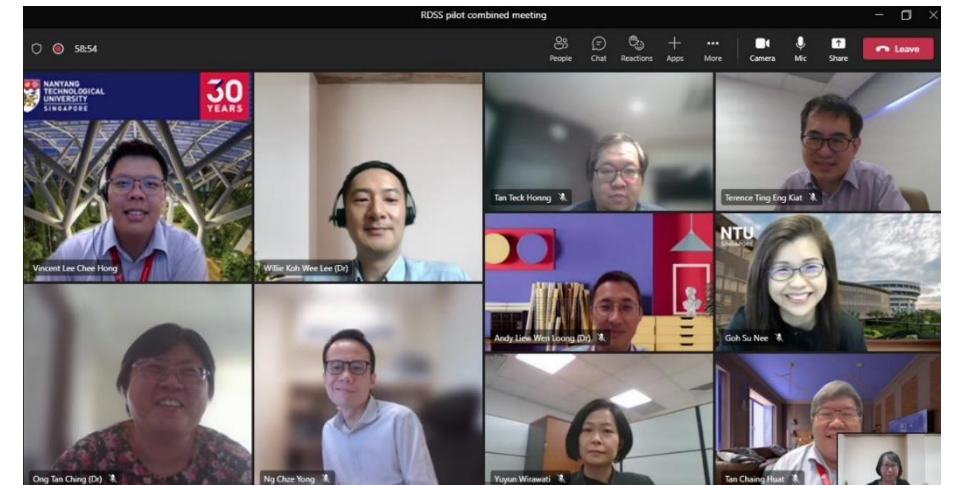
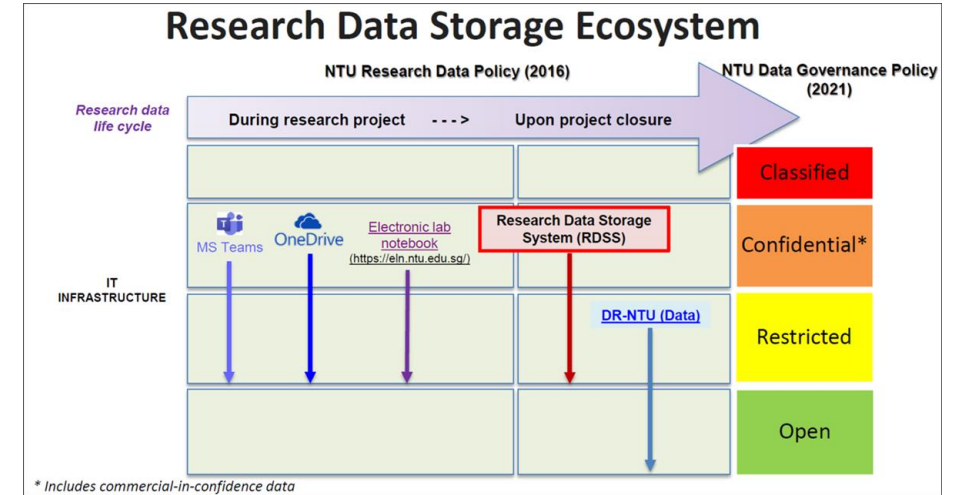
A centrally managed research data storage solution which supports principal investigators' need to fulfil their 10-year research data storage requirements, for both the NTU Research Data Policy and the NTU Data Governance Policy.

4 offices came together to form the project team:

- **Library:** Sharing of best practices of DR NTU (Data) and RDSS (project manager)
- **Centre for IT Services:** IT infrastructure (project manager)
- **Research Support Office:** Outreach for 10-year data storage retention requirement by the NTU Research Data Policy
- **Research Integrity and Ethics Office:** Communicating the research integrity needs for research data retention

The RDSS project team has demonstrated that various NTU offices could produce much more effective solutions for the university than compared to working in silos.

## 3. Resilience, Flexibility & Agility



**NTU Admin Award 2022 : Esprit de Corps  
Merit Award Winner**

# “Fascinature” in Hygge

**Fascinature** combines elements of soft fascination and nature to facilitate mental rejuvenation

- The Library team collaborated with
  - Faculty and student from School of Social Sciences, Dept of Psychology and School of Art Design and Media
  - NTU Alumnus and photographic artist
  - University Wellbeing Office
- Many students visit to get some shut-eye, take mental break or simply to be in a soothing space



## NTU Admin Awards 2022 “Esprit de Corps” Champion

The team who has displayed great synergy –working collaboratively to achieve impactful results

# 8. Empathy & Active Listening



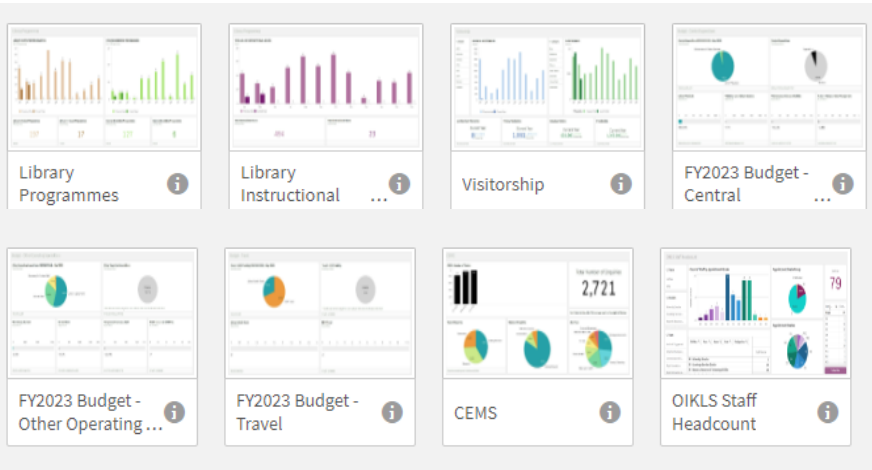
**Hygge**  
a Danish word for wellbeing

A well-being space designed to encourage the campus community to:

- engage in reflection
- contemplation
- mental relaxation



**Secret Forest**  
an immersive conceptual installation reminiscent of a forest clearing



The Library Operations Dashboard

- Library Dashboards created using Qlik Sense
  - Library Operations Dashboard
  - Library Collections Analytics Dashboard

- Started with Descriptive Analytics  
Giving an account of what has already occurred over the past months and years.

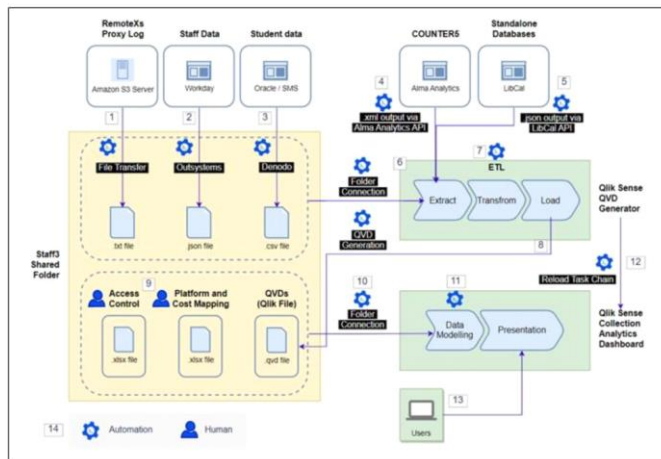
- Moving into Prescriptive Analytics  
Providing guidance on what to do next
- Allows the library to understand our users through usage-based data and create evidence-based strategies.

- Improve customer service, Improve efficiency, Reduce processing time

Appendix 1: Data architecture diagram for data flow

The Library Collection Analytics Dashboard uses multiple data sources, including Workday and Oracle.

Automated data flow enables the Dashboard to be updated at pre-set intervals.



(Source: Technical Documentation created by the Project Team)

The Library Collection Analytics Dashboard Project  
**Winner : Student & Academic Services Department (SASD)**  
**Service Innovator Award**



Winner : 'POW Hat Protecting our workers from the heat.  
A hat from the future to protect our worker's future"

The winning team integrated ideas drawn from material science, wearable technology, social policy and physiology in the proposed solution to mitigate the problem of heat stress experienced by migrant workers

Mentor : Chia Yew Boon (Librarian)

- Developing academic literacy in an interdisciplinary learning environment  
A study by librarians and faculty to gain a clearer understanding of the academic literacy skills which are required for interdisciplinary teaching and learning, and to evaluate the interdisciplinary learning development of NTU learners through NTU teaching approaches
- Library together with Language and Communication Centre were awarded the NTU EdeX Faculty Learning Communities Grant
- This 18-month long study has completed Phase 2 : Testing of the interdisciplinary assessment rubric through the Undergraduate Interdisciplinary Competition.
- Students were assessed on their understanding of interdisciplinary research and their ability to work beyond disciplinary boundaries.
- Phase 3: Finalising the assessment rubric and sharing with NTU for use in curriculum development and course design will be completed in Dec 2023.



# Singapore Open Research Conference 2022

## 25. Global Citizenship



NTU Admin Award : Trailblazer Award  
Merit Award Winner

- “Accelerating Research with Responsible Open Science”  
1<sup>st</sup> Conference on Open Science in Singapore  
to create awareness of Open Research/Open Science
- The Committee developed Singapore’s 1<sup>st</sup> interactive [open research checklist](#).  
Subsequently, NTU was invited to join the writing group to develop a UNESCO open science checklist.
- 1st in Singapore to give away open research awards to recognise researchers who have demonstrated outstanding open research practices.
- Jointly organized by NTU Library, Research Integrity and Ethics Office, and Lee Kong Chian School of Medicine.

*Thank  
you*



# AUNILO 2023

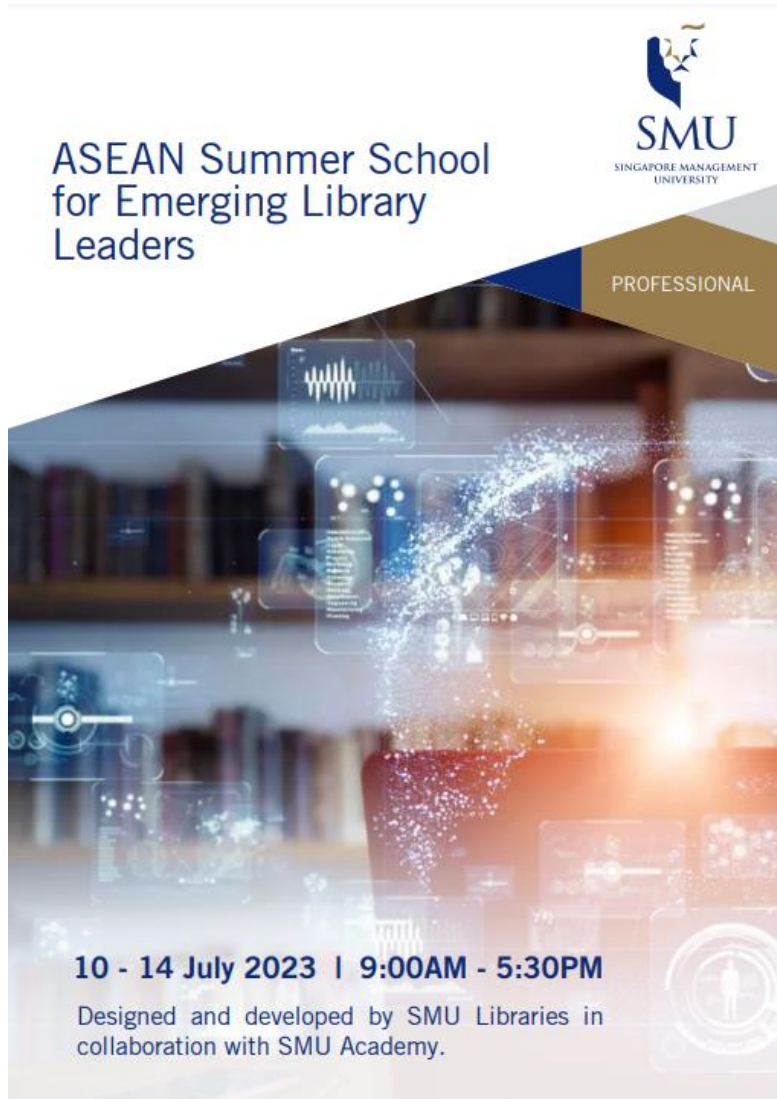
## Country Report: Singapore Management University (SMU)

Co-Creating the Future of Libraries: Empowering Academic Librarians for Innovation and Impact

Heng Kai Leong

Head, Collections, Access and Technology





ASEAN Summer School  
for Emerging Library  
Leaders

SMU  
SINGAPORE MANAGEMENT  
UNIVERSITY

PROFESSIONAL

10 - 14 July 2023 | 9:00AM - 5:30PM

Designed and developed by SMU Libraries in  
collaboration with SMU Academy.

- Recently completed programme in partnership with SMU Academy and Taylor & Francis (5 scholarships of SGD1,000)
- **19 librarians:** Brunei (1), China (1), Kazakhstan (1), Indonesia (3), Malaysia (2), Philippines (4), Thailand (3), Singapore (4)
- **Target Audience:** Mid-career librarians and/or librarians identified by their institutions as having high potential as part of their talent management
- **Instructional methods:** Seminars, group work, case studies, presentations, panel discussions, library visits, mentoring programme
- **Objective:** To identify trends in digital libraries, acquire skills in digital transformation strategies and embrace the digital transformation of their libraries
- Next run in 2024



*“...Well-prepared programme in term of facilitators, instructors, content, and learning materials. Can interact with librarian from ASEAN country. Able to learn the leading trend in library from SMU, NTU, and NUS...”*

*“...The organizer include success story of how they implement digital transformation in their library (SMU). The best programme I have ever attended in my entire career...”*

# Research Method Workshop for SMU Librarians



- 3-day workshop with **Professor Lisa Hinchliffe** from University of Illinois Urbana-Champaign
- **Objective:** Learn practical research methods commonly used in library projects and assessment activities (Survey, interview, focus groups, observations)
- To better engage faculty, researchers, and postgraduate students on their research activities
- **Post-workshop activity:** 1-to-1 research consultation

# Head start: Academic Transition Programme

- Pilot programme by SMU Libraries, in collaboration with the Student Success Centre (SSC)
- Aligned to the SMU Holistic Student Development Framework focusing on academic and learning success
- **Target audience:** National Servicemen (NS-men), polytechnic and international and postgraduate students
- **Objective:** To equip students with essential tools and knowledge to ease their transition into SMU and higher education
- **Coverage:** 1-day workshop comprising: Succeed in Learning: Tools and Mindsets + Researching your First Assignment
- Co-facilitated by Library Peer Advisors (LPA) as part of peer-to-peer learning

# Snapshots



**Students in the workshop & LPAs in action**



**Gallery Walk from Knowledge Café Activity**



**Deep into their Research**



**Flipped Learning: Recalling elearn topics**



# Using visual abstracts to promote research



Our faculty wanted help with promoting their research



Piloted a project to create visual abstracts for use on their social media, publicity, engagement with industry partners



Librarians learnt new skills to translate text into a visual object



Librarians conducted a workshop to share their knowledge with post-graduate students



Michael Schaerer @michaelschaerer · May 30  
 Our amazing @SMULibraries team created a visual abstract for our paper on concession patterns in #negotiations. This is a pilot (inspired by @andrewmibrahim @youngallianceAC), so let us know what you think in the poll below...



Jerrold Soh commented on this  
 Jerrold Soh · 1st  
 Asst Prof, SMU Law; Dy Dir, SMU Centre for Computational Law; Co-founder, Lex ...  
 4mo · Edited ·

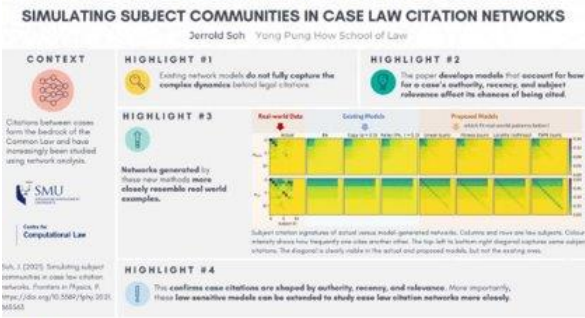
The good folks at [SMU Li Ka Shing Library](#) helped me summarise into a handy visual abstract my recent (by scientific standards) paper on simulating citations between cases.

Singapore Management University and 2 others  
 3 4 20

I'd sheepishly asked for help on this paper in particular because its content was probably the least accessible to lawyers and other non-scientific audiences (ironically, since we paid good money for the "open access" option).

Let us know what you think. Those interested in the gory mathematical details can easily find the full paper using the citation info in the graphic below (or just click the link in the comments). I'm also hoping to put out a librified version of the code I used therein so you too can simulate your own case law network :)

SMU Centre for Computational Law SMU Yong Pung How School of Law



You and 71 others 2 comments · 1 repost

# Confidence is sexy and it can be trained:

## Examining male social confidence in initial, opposite-sex interactions

### Background

Confidence may be beneficial in many social contexts, particularly in romantic interactions

Can men's social confidence be trained and improved in a speed-dating context?

If a man is perceived to be more confident, does it make him more romantically desirable?

### Methods

**Empirical experiment 1 & 2**

68 males 61 females

Males participants are randomly assigned to 3 groups that receive training on speed dating, conversation, or nothing (control)

Males are rated by their partner on social confidence, social dominance, social status, romantic desirability and interest for future contact

**Empirical experiment 2**

A replication of experiment 1 (Sample size N=60)

### Findings

**Confidence is trainable.**

Trained men are perceived to be higher in social confidence, status and dominance

Higher social confidence is associated with higher romantically desirability, especially as a short-term partner

A potential downside of training is lower perceived trustworthiness as a long-term partner

Li et al. (2020). Confidence is sexy and it can be trained: Examining male social confidence in initial, opposite-sex interactions. *Journal of Personality*, 88(6), 1235–1251. <https://doi.org/10.1111/jopy.12568>

## THE ATTENTIONAL BENEFITS OF VOICE NUMEROSITY

# MORE VOICES PERSUADE

By analysing multiple datasets\* using machine learning and text mining techniques, we found:

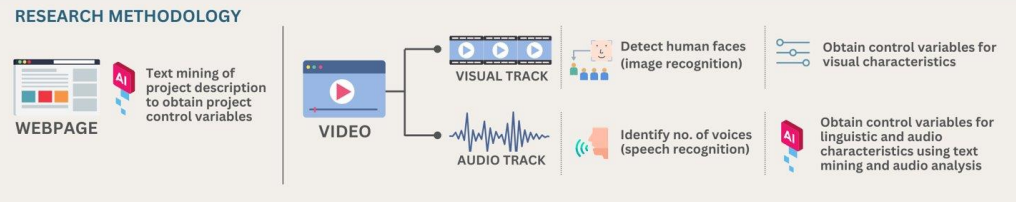
- The persuasive power of a marketing video is enhanced when a video employs more narrators, particularly when it conveys a simpler message
- Voice numerosity occurs because the use of more (different) narrators helps draw consumers' attention to the spoken message
- Voice numerosity exerts consistent and economically significant effects on a wide array of downstream behaviours including purchase

\*Including a dataset with 11,000+ product videos and over 3.6 million transactions in Kickstarter, a leading crowdfunding platform

Chang, H., Mukherjee, A., & Chattopadhyay, A. (2022). More voices persuade: The attentional benefits of voice numerosity. *Journal of Marketing Research*. <https://doi.org/10.1177/00224372211341115>

WHAT IS AT WORK?  
 THE "VOICE NUMEROSITY EFFECT"

Consumers tend to be more persuaded, when they hear a message narrated by different voices in succession in a video than when they hear the same message narrated by a single voice.



# Knowing our faculty through Ithaka Survey

## Why we did it?

- Faculty specific and detailed questions
- Benchmarked against US Libraries

- To assess our performance and effectiveness
- To identify areas for improvement and potential opportunities for growth.

Q14 - Please use the 10 to 1 scales below to indicate how well each statement describes your point of view.

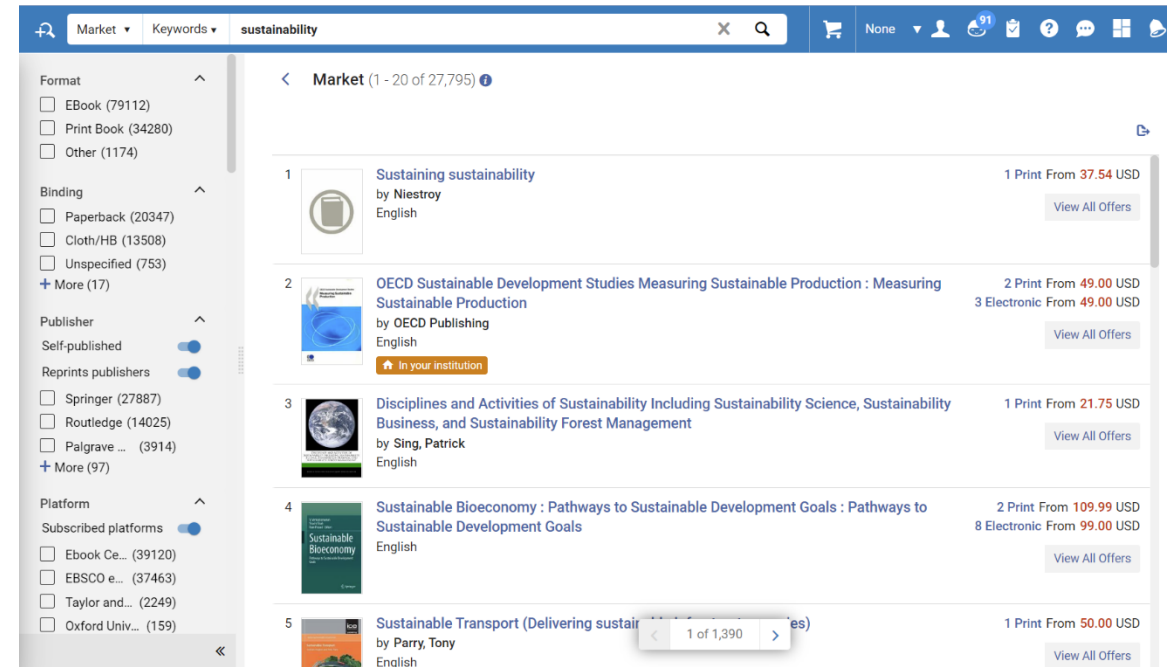
Response	8 - 10	4 - 7	1 - 3	Total
Circulating pre-print versions of my research outputs is an important way for me to communicate my research findings with my peers	45	41	8	94
Scholarly publishers have been rendered less important to my process of communicating scholarly knowledge by my increasing ability to share my work directly with peers online	30	39	25	94
I clearly understand the criteria that are used to evaluate me in tenure and promotion decision making	65	27	2	94
I shape my research outputs and publication choices to match the criteria I perceive for success in tenure and promotion processes	65	21	8	94
I would be happy to see the traditional subscription-based publication model replaced entirely by an open access publication system in which all scholarly research outputs would be freely available to the public	62	27	5	94
If the traditional subscription-based publication model is replaced entirely by an open access model, I would be happy to see the same publishers stay involved in the open access model	62	28	4	94
My college or university incentivizes and / or promotes publishing scholarship in formats that are available at no cost to the reader	23	45	26	94
Societal impact, or the benefit of scholarly work and research products to society, should be a key measure of research performance	55	32	6	93

Q15 - You previously indicated you would be happy to see the traditional subscription-based publication model(s) replaced entirely by an open access publication system in which all scholarly research outputs would be freely available to the public. What payment model would you most prefer under an open access publication system? Please select all that apply.

Response		
Faculty members pay publishers using personal funds	1.61%	1
My college or university library pays publishers	50.00%	31
My college or university office of research pays publishers	35.48%	22
Research funders allocate funds as part of their awards	30.65%	19
My college or university library invests in a new or existing repository where pre-prints are made available	40.32%	25
My college or university library provides services to help faculty select external/disciplinary repositories where my pre-prints are made available outside of my institution	22.58%	14
My college or university library invests in open journal platforms and infrastructure (e.g. Open Library of the Humanities, ScholarLed, UbiquityPress)	48.39%	30
Other (please specify):	1.61%	1
I don't know / I'm not sure	9.68%	6

# Innovative selection tool for librarians

- First to implement in the region
- One-stop marketplace for selection and acquisition (Rialto)
- Print books, ebooks, media resources from a variety of publishers, aggregators and platforms
- End-to-end library workflow from requests and searches, to selection, acquisition, and discovery



## Upcoming Webinar

# OER SPECIAL INTEREST GROUP

**Title** : Open Educational Resources in Higher Education

**Date** : 28th Sep 2023 (Thurs)

**Time** : 4 pm (SG Time)

**Speaker:** Dr Carina Bossu, Senior Lecturer in Academic Professional Development, Institute of Educational Technology, Open University, UK

Registration details will be shared with AUNILO Member Libraries when available



**THANK YOU**