

3 April, 9:00am

Creating innovative library spaces

Peter Sidorko / Esther Woo





Bad Libraries

- Build Collections



Good Libraries

- Build Services (of which collection is one)



Great Libraries

- Build Communities



Redefining the Academic Library

Managing the Migration to Digital Information Services



CHAPTER 4

Academic Library Futures in a Diversified University System

Lorcan Dempsey and Constance Malpas

UNIVERSITIES (AND LIBRARIES) IN TRANSITION

Following World War II, the higher education sector grew rapidly. The creases in college attendance were dramatic. For example, in 1949, 4 million students attended US colleges and universities; by 1969, total enrollment had grown to 8 million students; and by 1994, enrollment had risen to 14.3 million students. And this growth continues. Between 2004 and 2014, enrollment increased 17%, from 17.3 million to 20.2 million.¹ As the higher education sector has grown, the number of US academic libraries has increased as well, growing by 6% from 2002 to 2012, and totaling more than 4000 in 2015.²

¹Thomas D. Snyder, Cristóbal de Brey, and Sally A. Dillow, *Digest of Education Statistics 2015* (Washington D.C.: National Center for Education Statistics, 2016), 460.

²Snyder, Brey, and Dillow, *Digest of Education Statistics 2015*, 881.

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EDUCAUSE

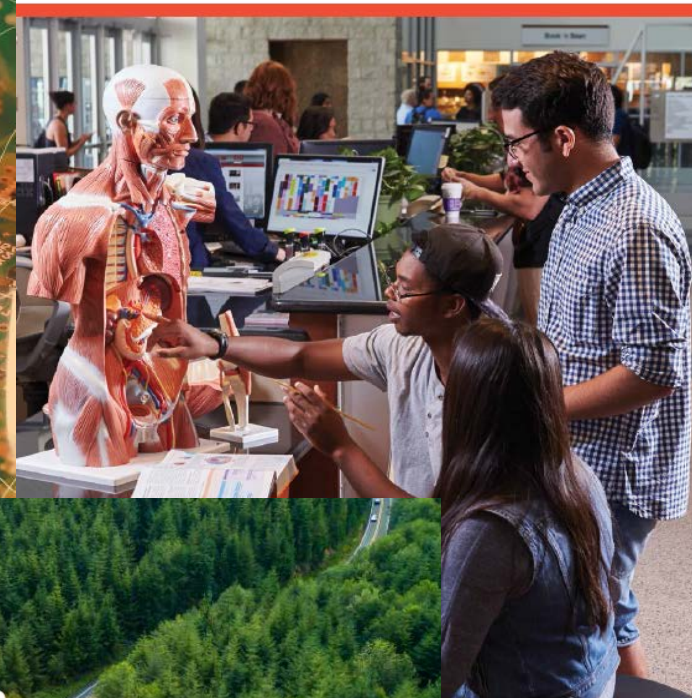
Horizon Report Preview | 2019 Higher Education Edition

HIGHER EDUCATION IN THE ERA OF THE FOURTH INDUSTRIAL REVOLUTION

Edited by Nancy W. Gleason



Horizon Report • 2017 Library Edition



SCONUL
Society of College, National & University Librarians



Mapping the Future of Academic Libraries A Report for SCONUL

Stephen Pinfield, Andrew M Cox & Sophie Rutter

#mappingacademiclibraries

November 2017

WILEY

2019 Librarian Aspirations Survey

Outlook of library goals and priorities in Asia Pacific



The University of Hong Kong
Libraries

The Most Valuable Space on Campus

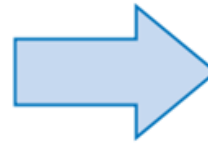
Converting Library Space to Meet Patron Needs

Current State

- Most library space taken up by physical books and journals in open stacks
- Typically 50% of volumes have never circulated (some institutions as many as 80%)



Space



Preferred End-State

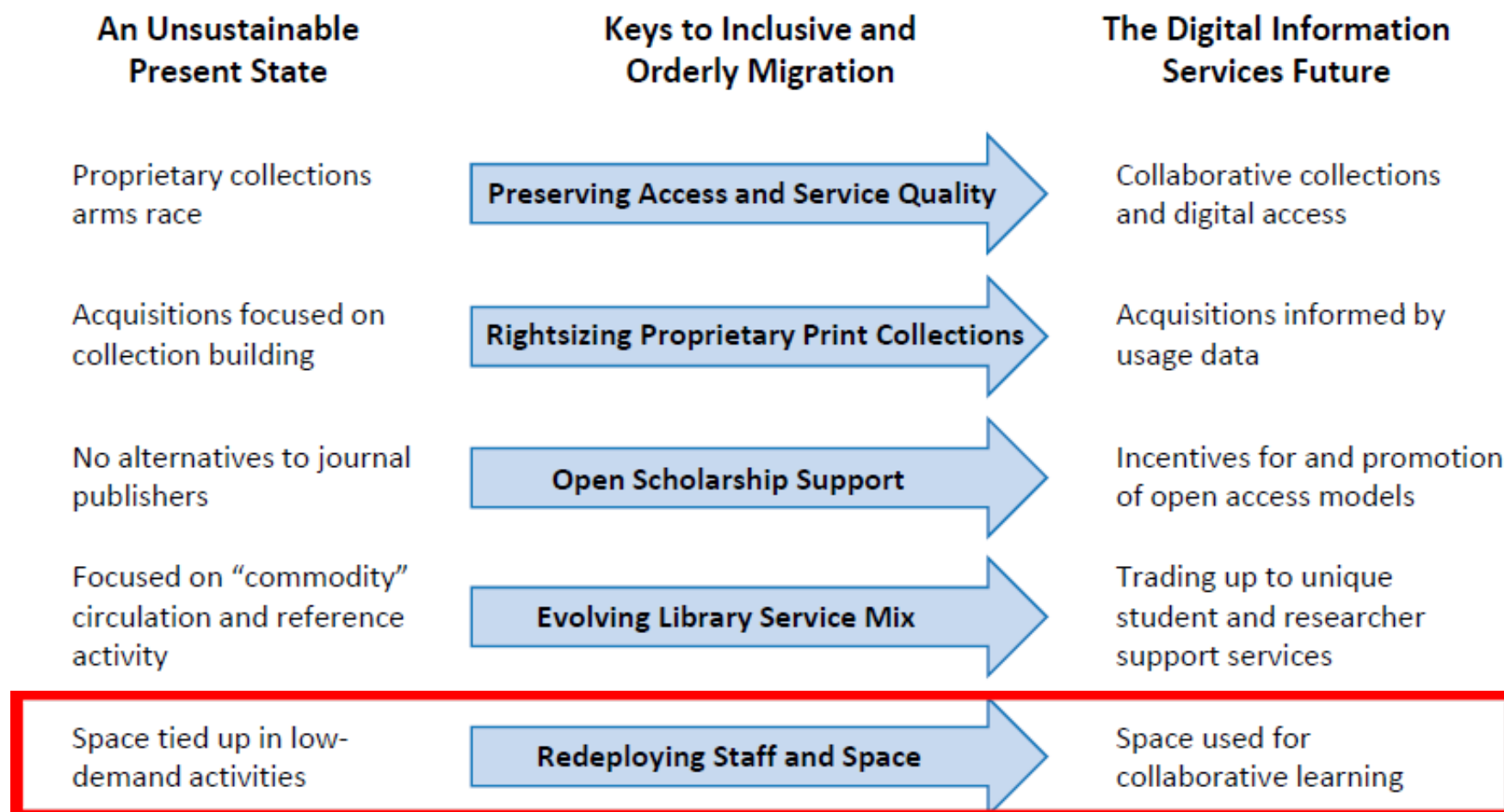
- Ebooks and e-journals provide instant access to needed resources
- Physical volumes are removed when possible to free up space for collaborative learning and other activities
- Other academic support services (e.g., teaching and learning centers) move into the library space

Barriers to Change

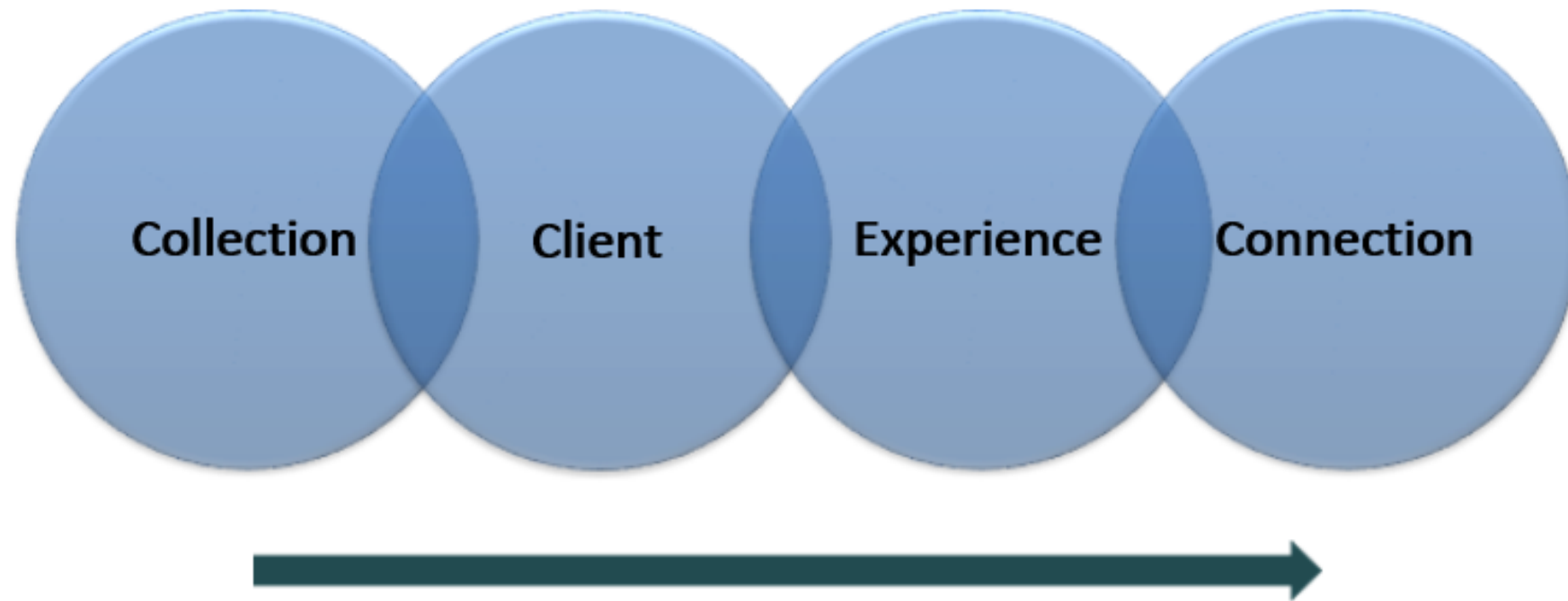
- Ebooks and discovery tools not yet an acceptable substitute for browsing open stacks
- Vocal groups of faculty strongly oppose reducing onsite physical collection
- Deselecting books and journals can be expensive and time-consuming
- Often expensive to renovate libraries to accommodate new uses

Transforming the Library

Defining and Removing On-Campus Barriers to a Preferred End-State



The evolution of the Library as place



Freeman, G. T. (2005) The Library as place: Changes in learning, patterns, collections, technology and use. In *Library as place: rethinking roles, rethinking space*. Washington, CLIR.

Trends Accelerating Technology Adoption in Academic and Research *Libraries*

Short-Term (1-2 years)	Mid-term (3-5 years)	Long term (5+ years)
Research Data Management	<i>Patrons as Creators</i>	Cross-Institution Collaboration
<i>Valuing the User Experience</i>	<i>Rethinking Library Spaces</i>	Evolving Nature of the Scholarly Record

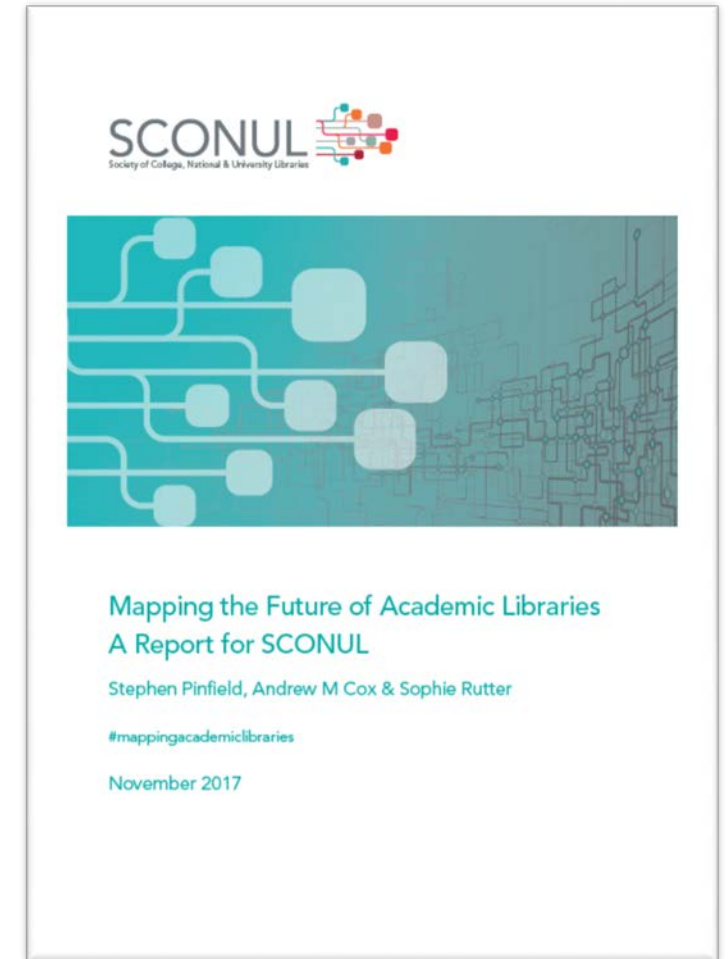
Key Trends Accelerating Higher Education Technology Adoption

Short-Term (1-2 years)	Mid-term (3-5 years)	Long term (5+ years)
<i>Redesigning Learning Spaces</i>	<i>Advancing Cultures of Innovation</i>	Rethinking How Institutions Work
<i>Blended Learning Designs</i>	Growing Focus on Measuring Learning	Modularized and Disaggregated Degrees

[EDUCAUSE Horizon Report Preview: 2019 Higher Education Edition Edition](#)

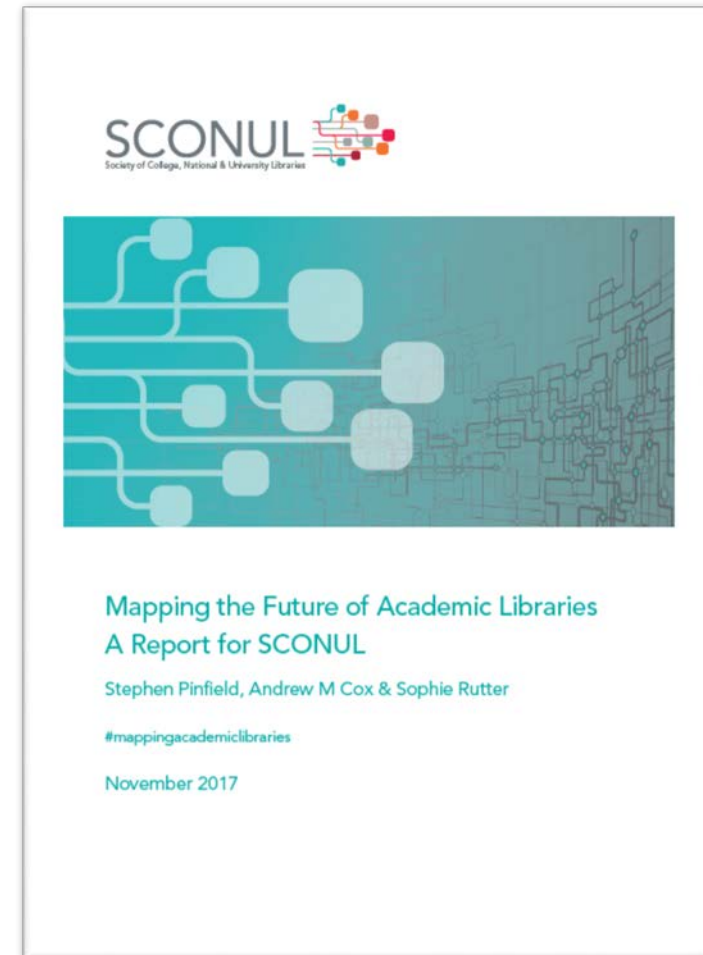
Questioning old 'mantras'

- The library is a strong brand
- The library is neutral
- The library is trusted
- *Library spaces are unique*
- The library provides for discovery of information.



Building new paradigms

- *The hybrid library*
- The inside-out library
- *The library in the life of the user*
- The library as platform
- The library as infrastructure
- The computational library
- *The service-oriented library*
- *The library as digital third space*
- The globalised library
- *The boundaryless library*



Changing functions of the library

Term	Collections-based library	Services-based library
Library	Defined by library operation metrics (collection, reference)	Defined by university needs (research support, student success and community engagement)
Organization	Bureaucracy: reproduction of their system of means is their main organizational goal	Enterprise: goals, and the change of goals, shape and endlessly reshape the structure of means
Expertise	Subject, process	Partner in research and learning, creation etc.
Systems	Back office	Workflow, digital scholarship and shared systems
Space	Configured around collections	Configured around user experiences
Collections	Just in case, central, institutional, consumption	Facilitated (just in time), one service among others, collective and creation

WILEY

2019 Librarian Aspirations Survey

Outlook of library goals and priorities in Asia Pacific

06

1st

Top-voted Aspiration

Enhancing discovery and access of library's digital resources

No surprises there – really, **63%** of poll participants raised their hands and voted “**Enhancing discovery and access to the library's digital resources**” as their top aspiration in 2019.

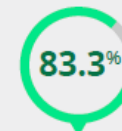
The information age that we live in snowballs at an increasing speed every day. Taking medical knowledge produced for instance - the amount of information that took **3.5 years to produce in 2010** will only take **73 days in 2020**.¹

To provide a seamless user experience for its users through the trove of resources, libraries are spearheading metadata strategies to tackle challenges such as of legacy metadata, metadata structures, user experience and more.^{2,3}

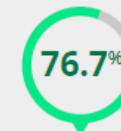
Voted by
63.0%
of all librarians



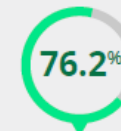
Most voted by librarians in...



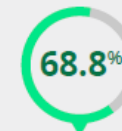
Singapore



Thailand



Malaysia



Taiwan

Revamping parts of my current library space

Makerspaces, fast casuals, incubators, event halls and more – **46.7%** of librarians aspire to revamp parts of their library to open up more space and engagement to its visitors.

Key steps for planning a new learning space

- Scan the environmental (e.g. Performance gaps, emerging needs of the institution or patrons, space planning trends)
- Align with vision & mission of mother institution
- Support the role and development strategies of the library
- Consult stakeholders
- Draft planning brief
- Estimate budget
- Source funding
- Project management



The first wave

Information Commons in the 90's

“[A] cluster of network access points and associated IT tools situated in the context of physical, digital, human, and social resources organized in support of learning”

Beagle et al. (2006, p. viii)



Beagle, D., Bailey, D. R., & Tierney, B. (2006). The information commons handbook. New York: Neal Schuman.

The second wave Learning Commons in the 21st century

Level 3

Thanks to the generous contribution by Dr Tam Wah Ching and his vision and commitment to supporting student learning, the 3rd floor of the Main Library has been transformed into *Level 3*, a technology rich, collaborative and flexible environment suited to today's students.

Located on the 3rd floor of the Main Library, *Level 3* is now a learning commons style facility providing a variety of spaces suitable for different learning styles including reflective self-study as well as collaborative study. With a floor area of 3,100 square metres, *Level 3* comprises five zones, namely TECHNOLOGY, BREAKOUT, MULTI-PURPOSE in the new wing and COLLABORATION, and STUDY in the old wing of the Main Library.



TECHNOLOGY Zone offers over 80 computers with Internet connection and software applications in support of study and research. Users can search for information amidst the myriad electronic resources available through HKUL and produce assignments or projects with the software provided. Some computers are equipped with flat bed or high speed scanners as well.

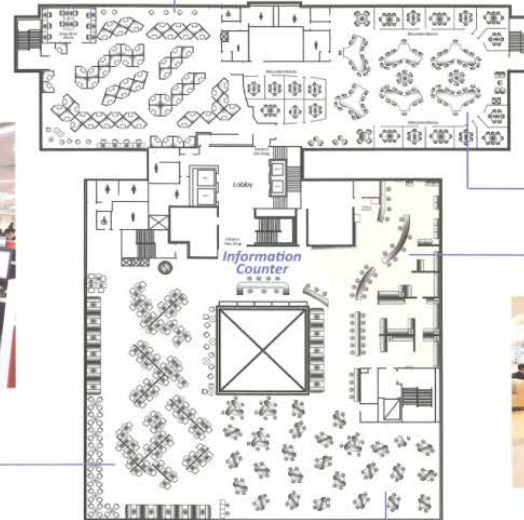


STUDY Zone serves as an ideal place for private and reflective research as it provides a variety of single study places including research carrels for higher degree students, study tables in the open area and the deep quiet room.

COLLABORATION Zone provides an environment that fosters group discussion. In the centre of this zone are open clusters for group discussions. Users can gather around these clusters which feature 12 all-in-one computers with touch screen monitors mounted on movable arms. Of significance in this zone are the 19 discussion rooms, each equipped with state-of-the-art technology, such as interactive whiteboards, webcams, HD camcorders, interactive TV panels.



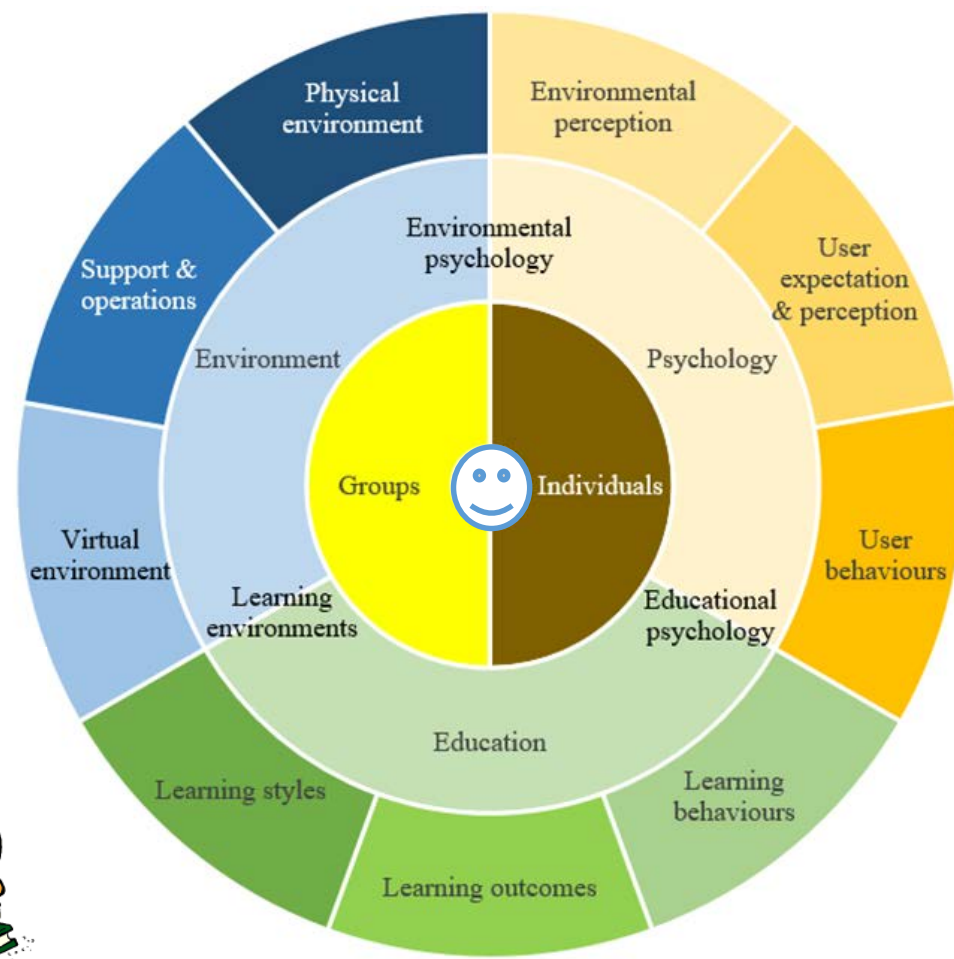
BREAKOUT Zone is the place for chatting and relaxation where users can watch TV or read newspapers and magazines. Vending machines are also available for purchase of selected snacks and drinks. This is the only area where food that leaves minimum mess is permitted on *Level 3*.



MULTI-PURPOSE Zone is a venue offering flexible space management. Users can choose their preferred spot as the study tables and chairs are on wheels. When there is a library event, such as exhibitions, conferences and book talks, the area can be partitioned and transformed to sound-proof rooms. With its state-of-the-art technology, the various pieces of equipment, such as sound and recording, electronic curtains, and projection screen digital podium, can easily be controlled through a central system using an iPad.

“The physical, digital, human, and social resources supporting IC that are “organized in collaboration with learning initiatives sponsored by other academic units, or aligned with learning outcomes defined through a cooperative process” Beagle et al. (2006, p. viii)

A new learning space – An ecosystem that means a lot of things



The process of planning

- Dichotomy of approaches

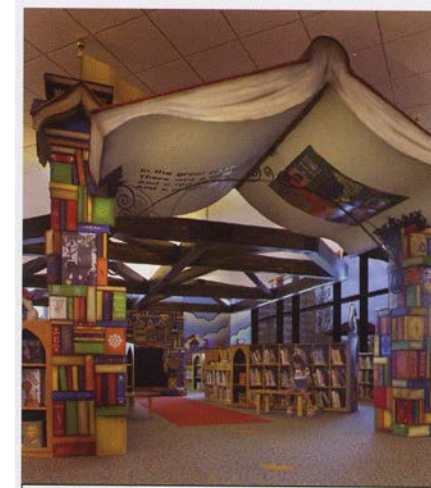
 **Architectural approach**

Design work



 **Educational approach**

**Concerns of the institution,
library users and staff**



Designing for a future full of changes & uncertainty

- Government policy; curriculum & pedagogical reform
- Access to the internet and e-resources anywhere anytime
- Daily/seasonal fluctuation in use
- Ever-changing needs of users
- Diverse behaviours of users
- Competing needs of different library collections and services



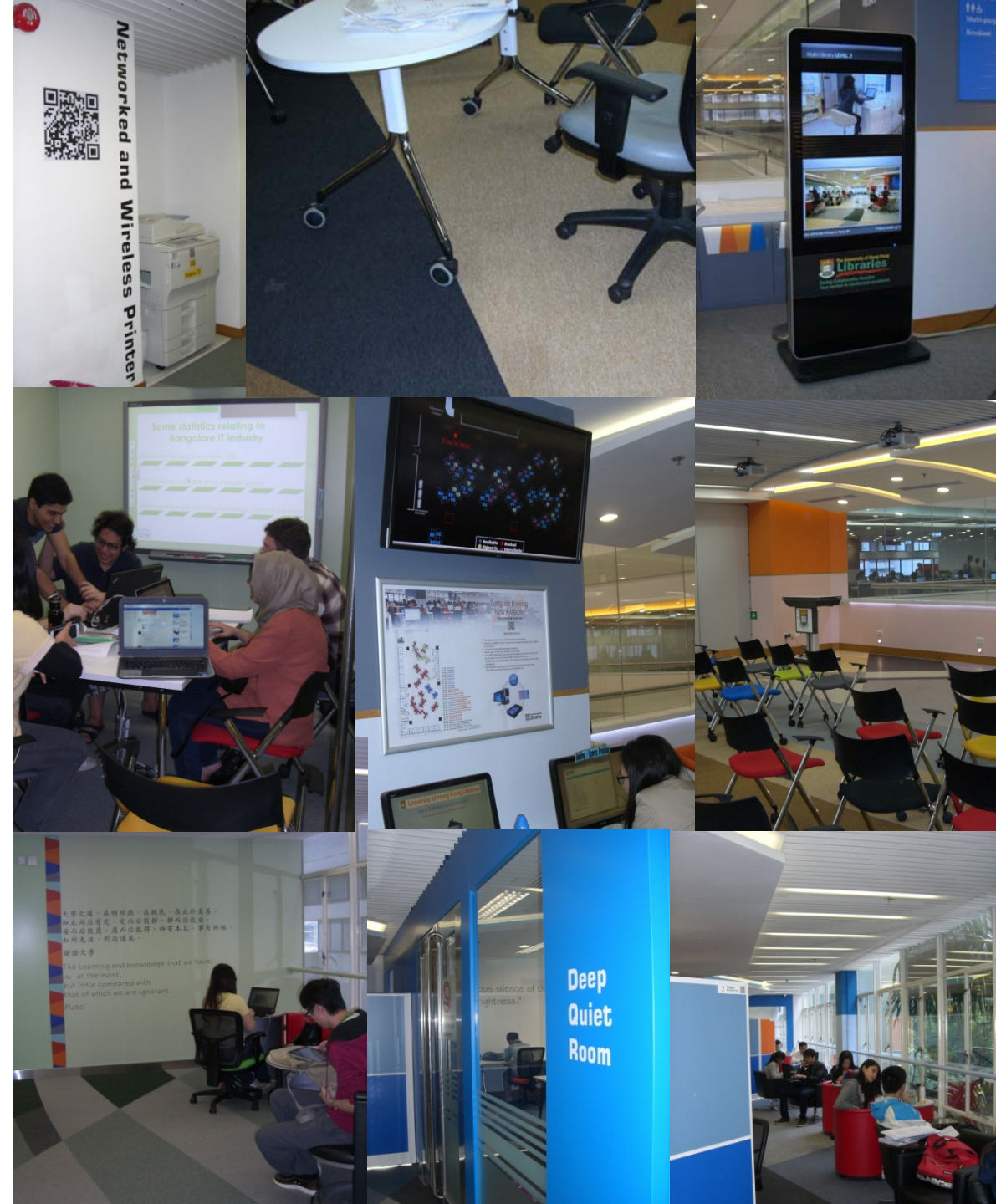
Planning DNA

- Zoning
- Operating hours
- Flexibility
- Technology
- Inspirational ambiance
- Integrated service point
- Self-service
- User friendliness
- Safety and security
- Future maintenance
- Sustainability



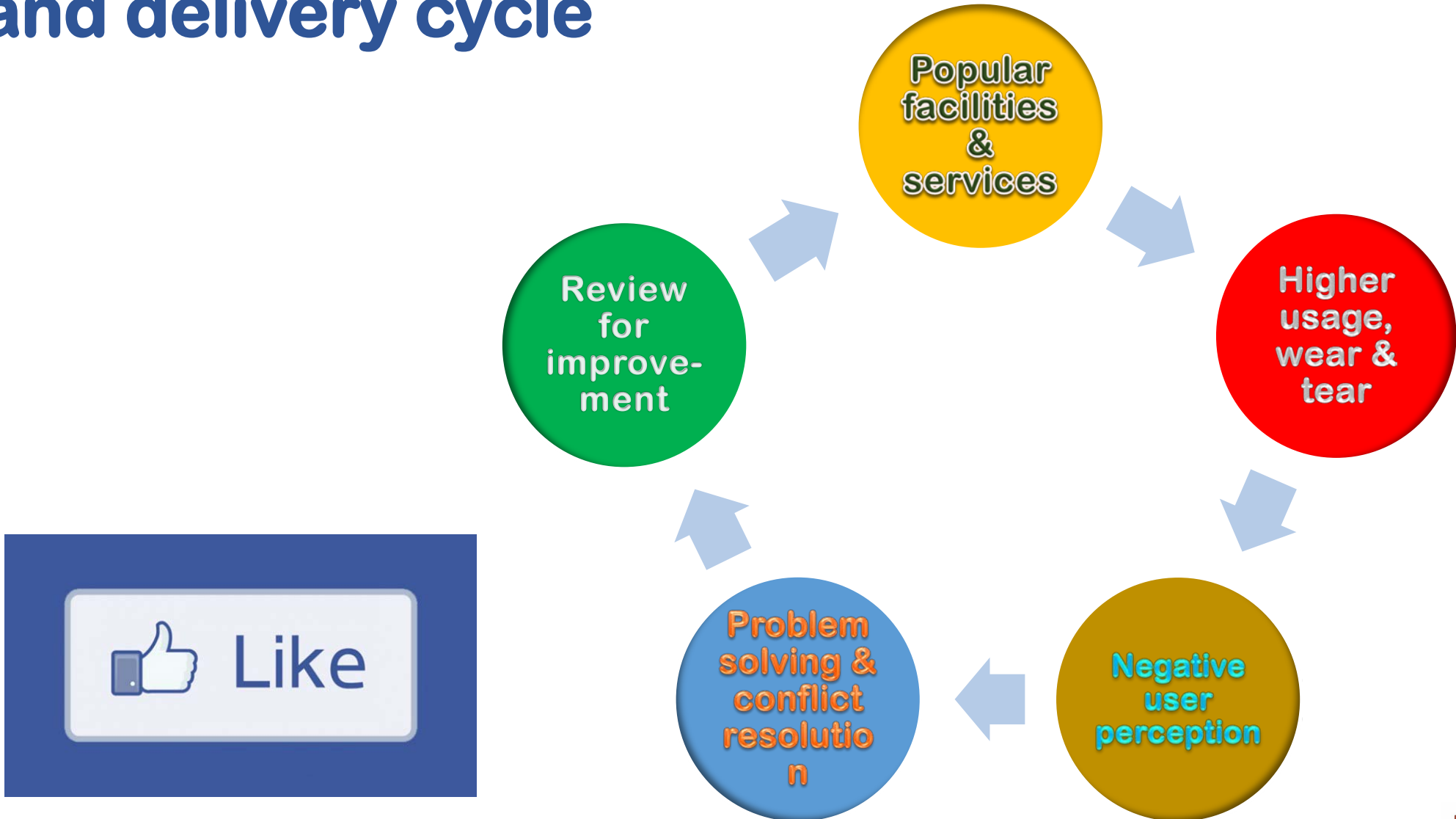
Popular features

- Zones for different types of learning behaviours
- Customized noise, food & drink policy
- Better acoustics for group & social activities
- Round-the-clock facilities
- Flexible furniture & partitions for routine activities & events
- Efficient WiFi connection and coverage
- Wireless services and online booking
- Learning technologies
- Effective directional and instructional signage
- Counter supported by roving service



Stakeholders	Service/ facility	Major issues/concern
Individual users (Quiet study, research, relaxation)	Deep quite room, research carrels, study tables, individual workstations & seats, etc.	More seats, quiet environment, software support, printing & scanning
Group users (Robust discussion & collaboration, socialization)	Discussion rooms, mobile tables, chairs & sofa, diner booths, breakout spaces, etc.	Sufficient provision and optimal use of facilities, food & drink policy
Staff (Service provision, problem solving & conflict resolution)	One stop shop services at integrated information counter, patrol	Conflict resolution for users, upkeep of facilities, teamwork and upgrade of staff competencies
Management (Strategic planning and service review)	Facility booking system, technology rich environment, user- friendly signage, new food & drink policy, etc.	Conflicting needs of users, resource constraints, facility and service maintenance

Feedback loop of service design and delivery cycle



The third wave

Makerspace/hackerspace, innovation centre

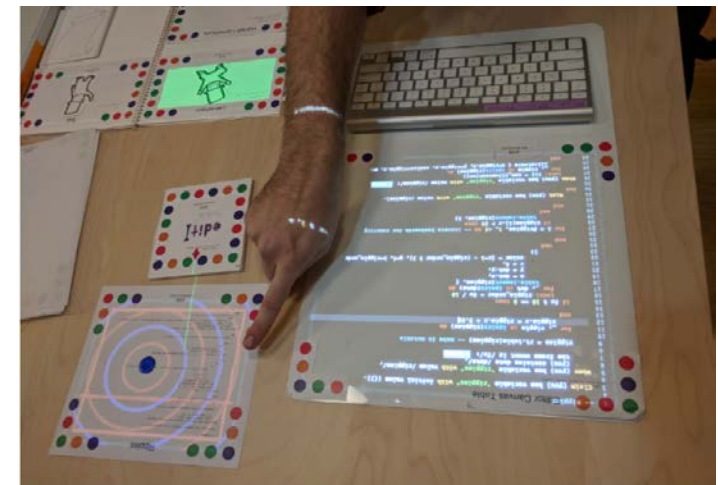
Maker movement and entrepreneurship

“anyone can make... anyone can change the world.”
Hatch, M (2014). The maker movement manifesto.
McGraw-Hill. p. 10.



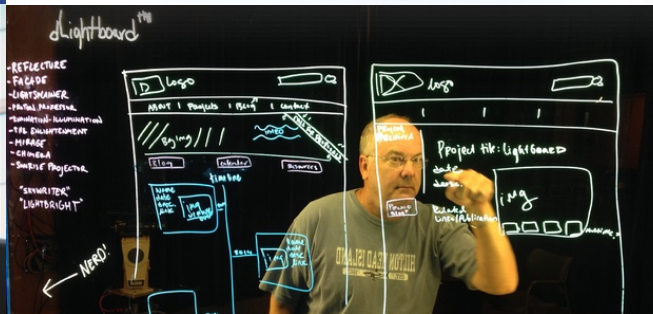
NYU Tandon MakerSpace

Space for
collaboration
connection
inspiration
innovation



<https://thenewstack.io/dynamicland-rethinks-computer-interfaces/>

The University of Hong Kong Libraries



We see the
possibility



Ideas for new library spaces

- Book talks and book sale
- Exhibitions and other cultural activities
- Library café
- Social space
- Indoor exercises
- Therapy sessions
- Napping pods
- Digital literacy (fluency) training
- STEAM education
- GIS lab and data visualization
- Flipped classroom
- Artificial intelligence, extended reality...



The sky is the limit

Community building

Engage people in innovative spaces with user-centred services and facilities for new experiences:

- Acquire knowledge and skills
- Participate in activities / events
- Socialize and interactive with others
- Create new ideas
- Make a change



Ingenium, 2/F Main Library, HKU (1,457 sq.m.)

Design intent: A centrepiece of HKU to support and showcase the interdisciplinary learning, teaching and research of students and staff with library resources, innovative technology and inspirational environment.

INSPIRATION → CONCEPTUALIZATION → VISUALIZATION → PRODUCTION → EXPOSITION

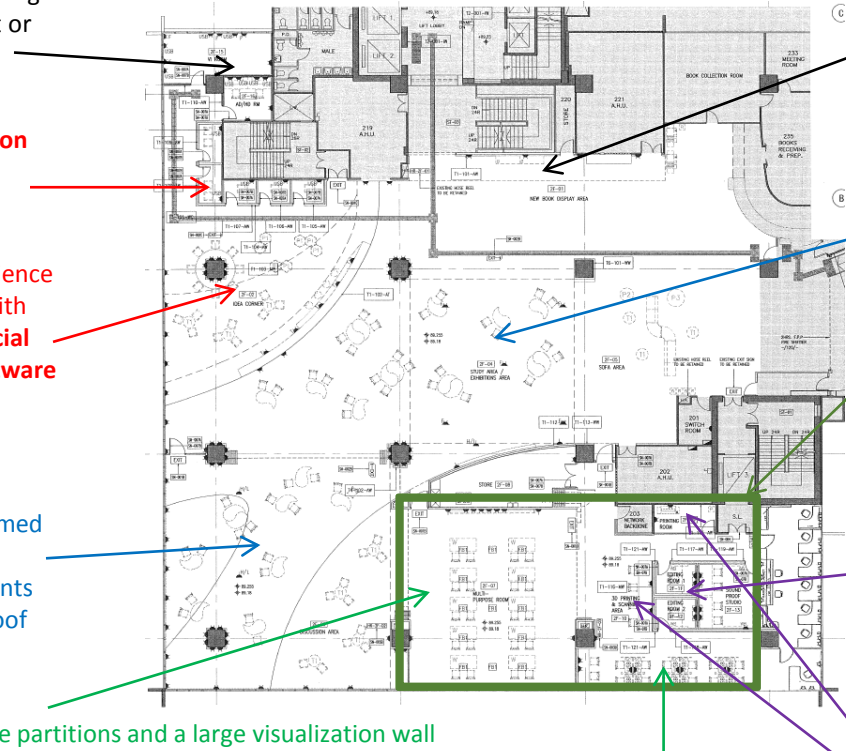
Two **SEN rooms** for individual learning of students with visual impairment or other special education needs

Five sound proof **Concept & Creation rooms** for brainstorming new concepts and ideas

Tech@Ingenium for users to experience and conceptualize creative ideas with **workstations equipped with artificial intelligence and virtual reality software**

Flexible space that can be used for study on normal days and transformed into a large venue for conferences, seminars, book talks and other events with the help of foldable sound proof partitions

Digital Interactive Lab with foldable partitions and a large visualization wall comprised of twelve 55" LCD TV that can support data visualization and presentation of high definition images for digital scholarly research and knowledge exchange in meetings, seminars, workshops, instructional classes, etc. It can also be converted into a discussion area with the provision of a portable digital whiteboard system and whiteboard tables for idea/concept generation.



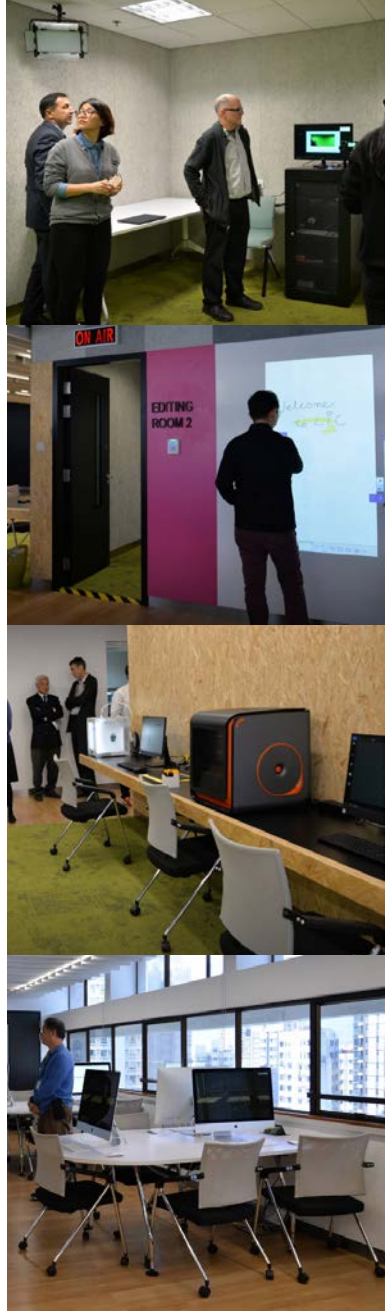
Recent additions of e-resources (info kiosk) and print books (bookshelves), plus self-service stations to check out/in library materials and process express print jobs.

An **exhibition and event space** featuring a hanging virtual reality dome with high end projection systems to display normal and 360 degree videos/images under a three-storey tall atrium

Library Innovation Centre (LIC): A space managed by the Media Services

One button studio and two editing rooms for creating, recording and editing digital audio/visual files. Users can produce audiovisual materials/assignments for blended learning and different kinds of campus activities. Students can also use the studio as a means to improve their public speaking and presentation skills.

3D scanners to facilitate data collection for constructing digital 3D models; **3D printers, vinyl cutter and laser cutter** to produce actual prototypes.



HKUL existing partners & collaborators

All faculties
Animal Asia
Centre for Applied English Studies (CAES)
Centre for Development and Resources for
Students (CEDARS)
Centre for Sports and Exercise (CSE)
Information Technology Services (ITS)
Mingde Project
Student Union
Technology-Enriched Learning Initiative (TELI)



Opportunities & benefits

- Community building with more patrons, partners & events
- Different service expertise & connections
- New knowledge and skills for both patrons and staff
- Ideas & inspiration for future developments of the library and the community

Optimized use of space +





Challenges of execution

1. Project management (time, money, expertise, site restriction, bureaucracy, etc.)
2. Service model design
3. Teamwork between service providers
4. Change management
5. Staff development
6. Relationship building

Life at its best is a series of challenges. A big enough challenge will bring out strengths and abilities you never knew you had. Take on challenges and you will bring yourself to life.





Useful websites

ALA - Library Buildings & Space Planning

http://www.ala.org/tools/atoz/buildingandspaceplanning/buildings_and_space_planning

Designing libraries

<http://www.designinglibraries.org.uk/?PageID=43>

Learning Spaces Collaboratory

<http://www.pkallsc.org/>

FLEXspace

<http://flexspace.org/>

Libraries and maker culture: A resource guide

<https://library-maker-culture.weebly.com/makerspaces-in-libraries.html>