



University
of Glasgow

EUNIS Conference 7th June 2019

Developing the Campus of the Future: A game of Snakes & Ladders

Eleanor J. Magennis Estates & Commercial Services
Gill Ferrell EUNIS

**WORLD
CHANGING
GLASGOW**

THE SUNDAY TIMES
GOOD
UNIVERSITY
GUIDE
2018
SCOTTISH
UNIVERSITY
OF THE YEAR

Overview of Session

UCISA TOOLKIT

The UK Higher Education Learning Space Toolkit: a SCHOMS, AUDE and UCISA collaboration



1. Overview of Toolkit

2. Follow on Case Studies



3. Let's play Snakes & Ladders
4. HEDQF Research
5. FLEXspace

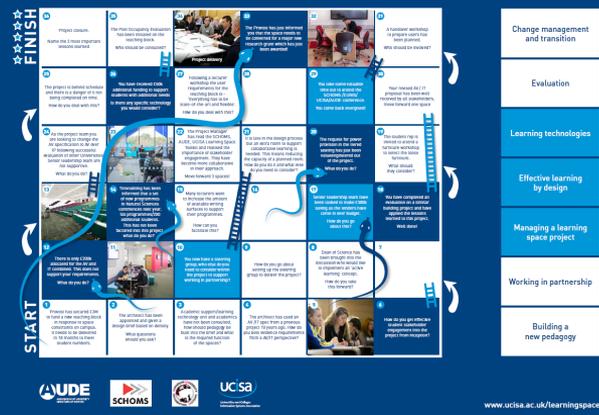


HEDQF

SOCIAL LEARNING ENVIRONMENTS

Student views of their university





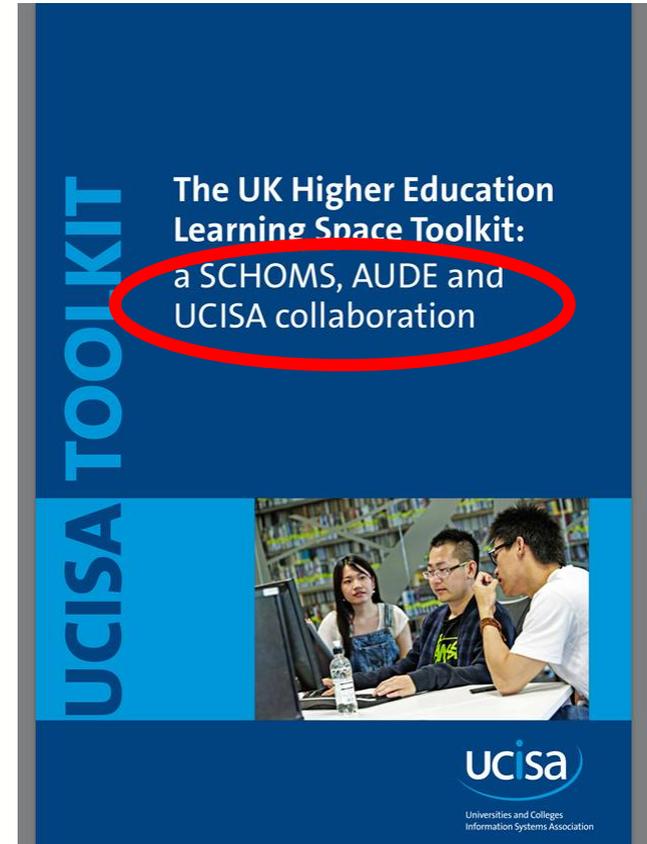
The Original Toolkit

<https://www.ucisa.ac.uk/learningspace>

Key chapters are:

1. Building a new Pedagogy
2. Working in partnership
3. Managing a learning space project
4. Effective learning by design
5. Learning Technologies
6. Evaluation
7. Change management and transition

Follow on project of in-depth case studies



Pedagogy led at Loughborough

<https://www.youtube.com/watch?v=UR6ajPbQDI8>

STEM Ideas Factory 221m²

“Encourage students to learn by conversation not isolation.”

Create a home for STEM

“It’s an absolutely fantastic building. It’s not just a building: it’s about the culture: it’s about bringing together all the STEM activities.”



Pedagogy at London School of Economics

Not only a space but a Life: Life before the LSE, during LSE, and post LSE.

It was felt that the space was needed to facilitate everything, from the welcome of a new student, retaining students all the way through to careers.

Multi-use space that can be re-configured by the students

14 dedicated staff



Bespoke space on ground floor of the library for 560 people

Partnership working at University of Glasgow



James McCune Smith Learning Hub

Size: 16640m² Opening 2020

Architects: [HLM](#)



Partnership working at University of Glasgow

<https://www.youtube.com/watch?v=SbF7pMVIcsU>

“It’s about behaviours changing, culture changing, supporting what staff said they’d like to do.”

Assistant Vice
Principal
(Learning & Teaching)

Key principle was to
support Active
Learning



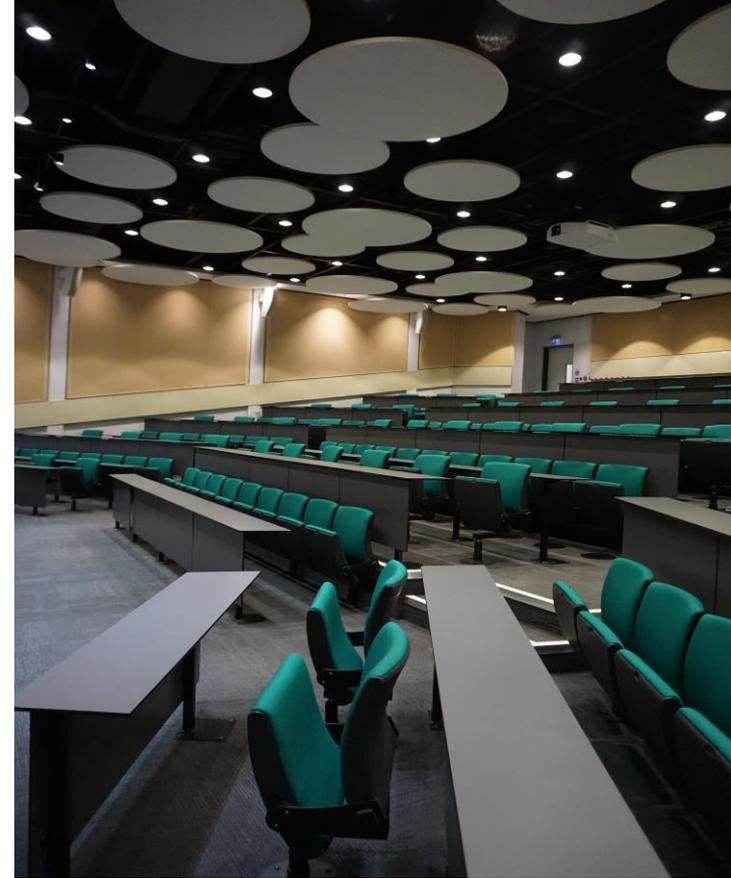
<https://www.gla.ac.uk/myglasgow/estatesandcommercialservices/timetabling/>

Design at Kingston University

£500k a year on 4-6 pilot classrooms since 2014

Design ethos is for stimulating rooms that avoid gimmicky decoration or furniture

Facilities directorate monitors social media channels to pick up on student comments on learning spaces and have a special hashtag for feedback



Design at Kingston University

Outreach Centre

Diverse range of people from the Women's Institute to Primary School children attend.

Cater for testing flight of model planes to molecular biology.

Storage to support changing sets

Links to their Lab in a Lorry project which can be parked in the Service Yard or it can go out into the local community.



www.kingston.ac.uk/.../07-oct-2016-kingston-universitys-lab-in-a-lorry-takes-to-the-road-to-nurture-school-childrens-passion/

Design at University of Wolverhampton

Bridged the gap between theory and practice in a group setting avoiding cadavers or real people

Central virtual dissection table so students can gather round and then practice immediately

Decoration minimal to avoid distraction

“It’s so good that I can’t see how the course could work without the room.”

Student on the Physician Associate Course



Occupancy for 30 students in 156m²

Learning Technologies at Aberdeen

Flexible furniture on wheels

Auto tracking/switching video cameras for video and web conferencing, lecture capture and the ability to wirelessly connect your device onto any of the displays in the room and share this with any or all displays

Digital learning brings GP surgery to the classroom



<https://www.youtube.com/watch?v=9j4HHVGiLTY&feature=youtu.be>

Med Chi Hall 100m², six groups of 7 but can be extended
Physically and virtually

Evaluation at Liverpool University Central Labs

Lab utilisation 48%
(Sector average 20%)

Outreach events for up to 120
pupils a day
Accommodates 35% increase
in student numbers
1st & 2nd Year Physics students
have 30-50% more practical
work
150 students in groups for
tutorials

Revised curriculum & staffing
model making use of
interdisciplinary working



Link to

https://www.youtube.com/watch?time_continue=42&v=fH8xRy_MPO0

Evaluation at Loughborough University

“It’s my favourite room in the campus...as a design student I found the whole building very inspiring. Actually, that’s why I came here, that’s why I chose Loughborough because of this space.”

Design Student at focus group

Capacity 148 in 185m²

Sofas seat groups of 4-6



“The creation of this type of space has positively challenged the way we teach.” Collaborative lecture theatre opened in Sept 2011

Outputs

Website

- <https://www.jisc.ac.uk/guides/learning-space-toolkit-case-studies>
- Case studies exemplifying Learning Space toolkit
- With video links of spaces
- Tools for use; games, surveys

POE template

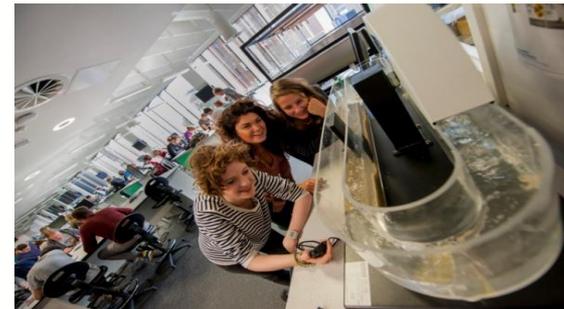
- Created for the case studies transferable

Presentation of toolkit / case studies

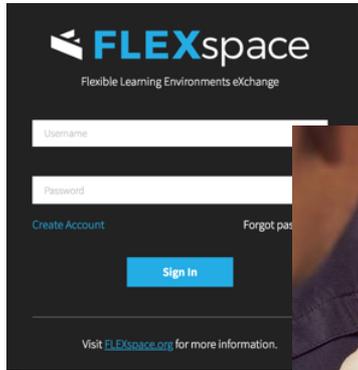
- To disseminate to conferences

Follow on-link to <https://flexspace.org/>

- Further HEDQF Research www.hedqf.org



How Can You Use FLEXspace?



The Flexible Learning Environments eXchange is a one-stop shop for leading practices, detailed examples, and a community dedicated to improving learning spaces around the world.

- FREE to the academic community
 - Content contributed by campuses themselves
 - Learning space designs and examples
 - Tools, guidance, and research
 - Collaboration tools
 - Community network
 - 3700 members
 - 1200+ institutions
 - 62 countries
- Visit FLEXspace.org
 - Get an account
 - Login to the portal
 - Add your spaces!



Partnerships and Collaboration between Academia and Industry



shaw contract®



mediasite®

WOLFVISION®

Featured in Educause Review and Learning by Design Magazine Summer 2019



UBTech



**Browse.
Contribute.
Collaborate.**

- Add Spaces and Toolkit Resources
- Mobile friendly
- Case study layout
- Details and specs
- Design rationale and post-occupancy impact

Tags for all the details

LEARNING RESEARCH STUDIO
San Diego State University

Education and Business Administration, EBA 410

Sharon Clark
Assistant Director, Facilities
Eureka State

The LRS spaces are designed to foster effective teaching and to support initiatives on campus that encourage active learning, pedagogical innovation, and the use of technology to improve student learning outcomes. The objectives of the LRS include experimenting with technologies that support alternative modes of organizing, teaching, and managing learning experiences to benefit both the teacher and the student.

CAPACITY 35
AREA SQ FT 375
ACTIVE LEARNING CLASSROOM

SPACE DETAILS

Institution Type: Public College/Univ
Improvement Date: 05 / 10 / 2016
Scopes: New Construction
LRS#2 Scoring: 52 / Part A: 32 Part B
Design/Architecture Firm: Architectu
AV Firm: Unified AV
Primary Discipline: Self Learning Lab

PHOTOS



WHAT'S INSIDE

Layout & Furnishing	Environment	Technologies	Learning	Br
LAYOUT	FURNITURE	SEATING	FURNISHING	
Furniture with varied heights	Furniture with built-in technology	flat floor		
Fixed desks	tenoned floor	movable partitions		
flexible configuration	group stations or pods	tiered floor		

Add resources such as:

- Faculty training & support
- Planning and design docs
- Research findings, protocols
- Presentations, videos

RESOURCES

- My-presentation-deck.pdf
- My-document-deck.doc
- My-spreadsheet-deck.xlsx
- My-slide-deck.ppt
- My-Video-deck.mov



Take a Virtual Fieldtrip Around the World!

- **Seek inspiration** and proof of concept
- **Benchmark** with peer institutions
- **Connect** with others

Browse Curated Galleries

The screenshot shows the FLEXspace.org website interface. At the top, there are navigation tabs for "All Spaces", "My Spaces", and "Liked Spaces", along with a "CREATE NEW SPACE" button. Below the navigation is a search bar and several filter dropdowns: "All Types", "All Capacities", "All Project Scopes", "All Institution Types", and "Newest Built", with a "CLEAR ALL" button. The main content area displays a grid of learning space photos. Each photo is accompanied by a title, a location, and a heart icon with a number indicating likes. The visible items include: "LT 161" at San Diego State University (1 like), "PALM BEACH ACTIVE LEARNING CLUSTERS" at Palm Beach State College (0 likes), "GENERAL PURPOSE FLEX CLASSROOM" at Temple University (0 likes), "HT 140" at San Diego State University (3 likes), "ACTIVE LEARNING CENTER" at University of Florida (0 likes), "CSE-E119 ACTIVE LEARNING CLASSROOM" at University of Florida (0 likes), "COLLABOR CLASSROOM" at Temple University (1 like), "BGC 134" at Wheaton College (0 likes), "BH170 LEARNING-READY CLASSROOM" at San Francisco State University (1 like), and "CREATIVE STUDIO" at California State Northridge (0 likes).

Curated Galleries
Launched at ELI
2019!



MAKERSPACES AT
CAL STATE

Makerspaces are taking hold
across several CSU campuses.

VIEW GALLERY



BUILD IT MAKERSPACE
@SAN DIEGO STATE
UNIVERSITY LIBRARY
San Diego State University



INNOVATION /
MAKERSPACE CENTER
California State University
Fullerton



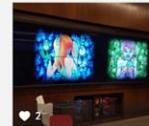
CHICO STATE
MAKERSPACE
California State University
Chico



SPACES IN THE
SPOTLIGHT

Detailed examples of innovative
spaces!

VIEW GALLERY



IDEA GARDEN
Indiana University/Purdue
University at Indianapolis



SOL MESSINGER ACTIVE
LEARNING CLASSROOM
State University of New York at
Buffalo



ACTIVE LEARNING HALL
University of North Carolina at
Chapel Hill



FEATURED
PARTNERS

See how our partners are
inspiring spaces around the
world.

VIEW GALLERY



HISTORIC RENOVATION
AT FLORIDA STATE
Herman Miller



LEARNING STUDIO
Computer Comforts



UNIVERSITY OF DUNDEE,
SCOTLAND: ACTIVE
LEARNING CLASSROOM
Wolfson



Tell Your Story

Use FLEXspace to create:

- **Classroom inventory**
- **Gallery of showcase spaces**

Show to:

- Administration
- Faculty teaching in these spaces
- Donors
- Staff
- The world!

The screenshot displays the FLEXspace interface. At the top, there is a profile for Buffalo State, The State University of New York. The profile includes a header image of the university building, the name "BUFFALO STATE The State University of New York", and a "PRIVATE COLLEGE/ UNIVERSITY" badge. Below the header, it says "BUFFALO STATE, SUNY Buffalo, NY, USA" and "Joined: May, 2013". To the right of the profile is a "MEMBERS (13)" list with six members: John Ingram (Assistant Director, Facilities), Renee Johnson (Assistant Director, Facilities), Alex Steadholm (Director, Facilities), Jenifer Millican (Director, Facilities), Dan Resman (Director, Facilities), and Leslie Stanson (Director, Facilities). Below the profile and member list are tabs for "Spaces" and "Tools". A search bar and filters for "All Types" and "Sort By" are visible. The main content area shows a grid of eight showcase space cards, each with a photo, a title, and a description. The cards are: MAKERS LAB (Cal Poly University, SLO), PHOTO LAB (Chapman University), LAB 1200 (USC, Ronski School of Design), CRESTRON (Modern Classrooms), CRESTRON (Modern Classrooms), HERMAN MILLER (The New Flexible Classroom), FLEXIBLE OUTCOMES (SDSU), and HERMAN MILLER (The New Flexible Classroom). Each card has a heart icon and a share icon.

Coming June 2019

Use Idea Boards for Stakeholder Input

Create a shared 'pin board':

- Facilities
- AV/EdTech
- Faculty
- Students
- Alumni

Gather input about potential designs and favorites

Share prototypes, scoresheets, and planning docs

GENERAL IDEAS
My catch-all Idea Board

VIEW ENTIRE BOARD

REGAN RM 140
Classroom - Fixed Tables

RESEARCH FINDINGS LEARN...
Jill Iwasi
UCSD

AHT112
Flexible Learning Space

ANGE Lackaw

COOL TABLES
Table ideas for the new space in DSM 312

VIEW ENTIRE BOARD

MAKERS LAB
Makers Space

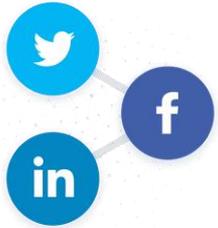
LC COMMONS
Flexible Learning Space

SST 210
Lecture Hall

Coming June 2019

Use Idea Boards as a Collaboration Tool
Keep PRIVATE or SHARE your team

FLEXspace Next Steps



@FLEXspaceorg



Dr. Rebecca Frazee

rfrazee@sdsu.edu

Faculty, San Diego State University
Learning Design &
Technology Program

FLEXspace Manager



Upload spaces to FLEXspace

- Add exemplars and 'directory' type spaces



Update existing records you've already added

- Provide lots of photos and details
- Add collaborators to get their input about how the spaces are being used today, and plans for refresh



Use FLEXspace for planning or during projects

- Document before, during and after photos



Spread the word on your own campus to various stakeholder groups

- Facilities, Faculty, Libraries



Nudge vendors and consultants to support us

Visit [FLEXspace.org](https://flexspace.org)

Email us directly info@flexspace.org





Higher Education Design Quality Forum (HEDQF) Research group

AIMS & OBJECTIVES

- Promoting positive outcomes of design for building users
- Exploring the success of completed built environment projects.
- Supporting early career researchers
- Involvement is open to all HEDQF members.

Current co-chairs: Dr Caroline Paradise, Associate Director, Atkins SNC-Lavalin and Rupert Cook, Director, ArchitecturePLB.



HEDQF

**SOCIAL
LEARNING
ENVIRONMENTS**

Student views
of their university



84%

of students would study in the library



80%

of students would study in their study bedroom



Q. WHERE DO YOU STUDY OUTSIDE TEACHING HOURS?



15%

Breakout spaces



84%

Library



80%

Study bedroom



30%

Cafe / refectory on campus



6%

Other



17%

Atrium or public space



21%

Cafe Off campus



21%

General teaching/ seminar room



8%

Unused lecture theatre



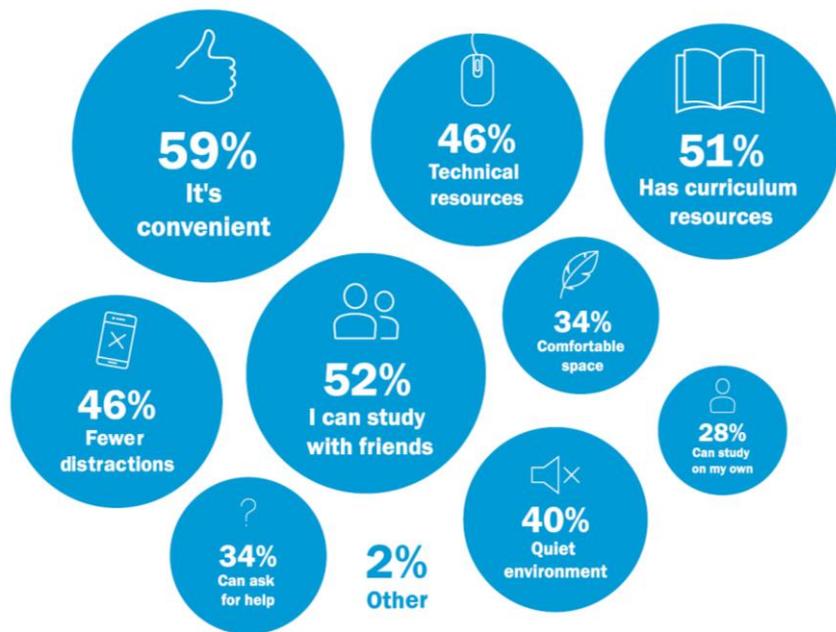
19%

Student union

(Multi-response questions)

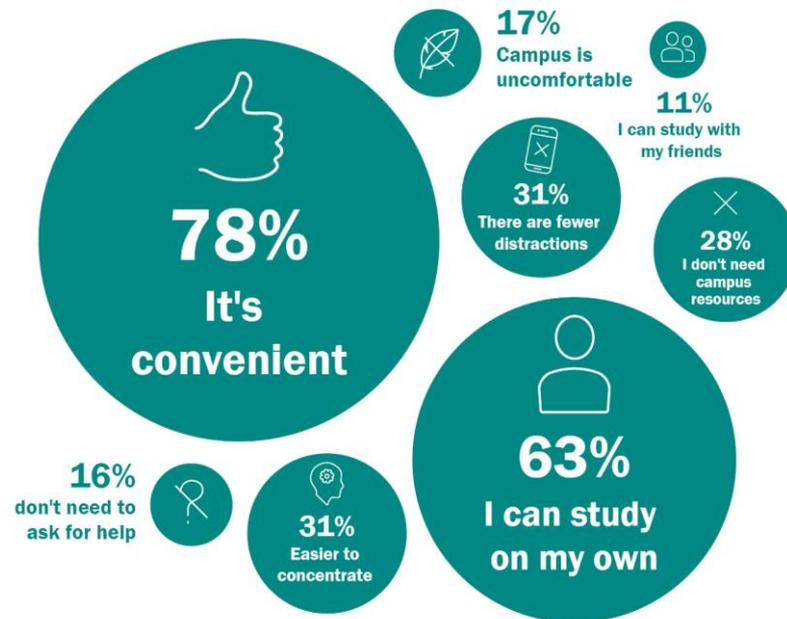
Q. WHY DO YOU CHOOSE TO STUDY ON OR OFF CAMPUS?

ON CAMPUS



(Multi-response questions)

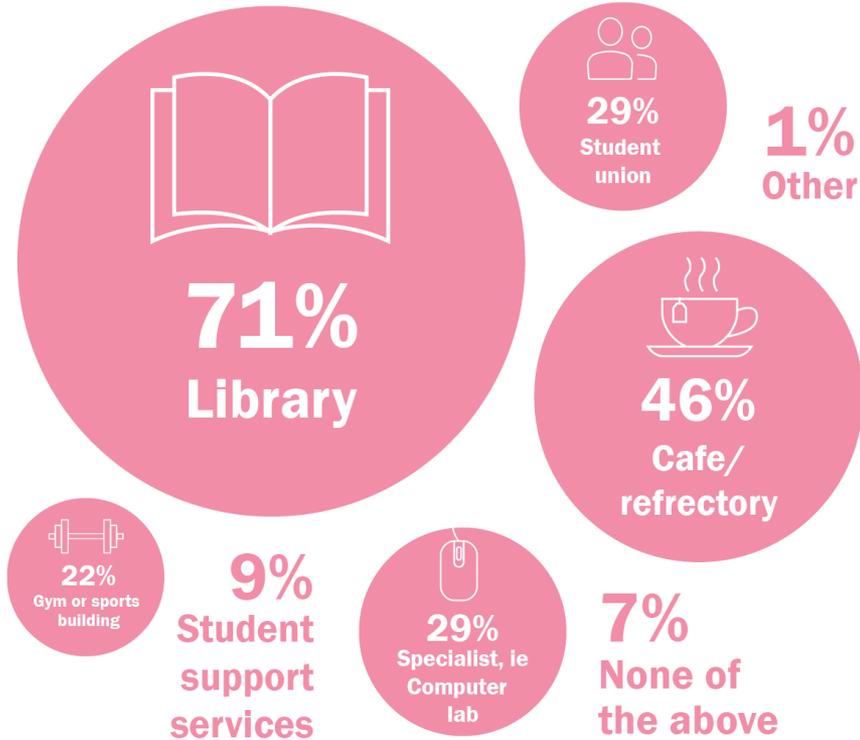
OFF CAMPUS



(Multi-response questions)



Q. WHICH FACILITIES DO YOU USE MORE THAN ONCE A WEEK?



(Multi-response questions)

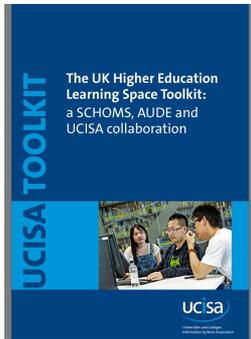
Where should our future research focus be?

- Design & evaluation to address the building 'performance gap'?
- Adaptability and re-use?
- Designing for a smart campus?
- Designing for mental and physical wellbeing?
- Implication on space design of lifelong learning strategies?
- Influence of advanced technology i.e. robotics and AI?
- **OR something completely different?**



What we have learned

- Envision the future by keeping an eye on signals
- Engage student, staff and future employer voice
- Empower spaces by supporting pedagogy & outcomes
- E-learning harnessed (Skype, mobile technology, AR/VR)
- Efficient spaces through technology, location & timetabling
- Embracing diversity to support equality
- Ensuring environment comfortable with power, wifi, café nearby
- Energise spaces with good design (biophilic) and furniture
- Experiment with pilots and do not be afraid to fail or have fun



Acknowledgements

Toolkit steering Group

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Caroline Paradise Atkins (HEDQF)

Caroline Pepper Loughborough (SCHOMS)

Tessa Rogowski Essex (SCHOMS)

Pete Ryan Canterbury (SCONUL)

Jane White (AUDE)

Researchers

Elina Koristashevskaya Glasgow

Yuanyuan Qu Glasgow

Gill Ferrell Aspire Education (EUNIS)

Case Study key Contacts

(not already mentioned)

Brian Henderson Aberdeen

Sean Woulfe Kingston

James Pearson-Jenkins/Jon Rhodes

Wolverhampton

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