The purpose of the workshop was to initiate a first step towards achieving strategic alignment between future teaching / learning and learning spaces within the School.

**Workshop format**
- Workshops conducted virtually on 28 April 2021
- Student workshop - 1.5 hours
- Staff workshop - 1.5 hours

**Tools used**
- Miro, Zoom, Google Forms

**Ground rules**
- All ideas are welcome, no idea is a bad idea
- Teaching and learning as the point of departure for discussions not the learning spaces.

**Workshop outcomes**

**Better student experience: Concepts to inform future strategy programmes**

1. Thinking about learning experience as a triad between people (academic staff, teaching assistants, student support staff, peers and external stakeholders), learning environments (physical and virtual spaces) and learning activities (assessments, exercises, lessons).
2. Focusing on efficiency (density and flexibility) as well as experience (a great place to learn).
3. Creating hybrid and inclusive learning environments jointly considering physical and virtual spaces with varied level of permeability (public, semi-public/access-only and private).
4. Moving beyond a building and thinking about the urban campus as an ecosystem of learning spaces.
5. Thinking about a building as a living lab - continuous evaluation of building’s use to inform ongoing interventions.

**Themes to incorporate in future strategy programmes**

- Visioning an enhanced competency-based framework for curriculum design (including assessments), which in turn is reflected in the learning spaces.
- Inclusivity for differently-abled students
- Engagement of students with live clients to simulate workplace experience
- Enabling community facing activities such as Technocamps and science shops.
- Mixed reality learning environments and data visualisation
- Flexibility of learning spaces to support different pedagogical approaches
- Including play, fun and risk-taking in learning activities and assessment
- Continuing to develop digital resources and enhancing virtual forums for socialising even when on-campus delivery is restored.

**Actions to consider in future strategy programmes**

- Appoint a ‘Curator’ for the Abacws Building who can facilitate alignment between the building and the School's teaching and learning activities. The curator could enrich the use of the building through supporting staff and students to familiarise with the building, gather ongoing feedback to inform future interventions, stimulate changes in working practices, build a community through organising events and engage with external stakeholders.

Creating spaces that encourage shared learning activities between Computer Science and other schools in the university including physical sciences, medicine and humanities (for example data labs). Such spaces could be located in shared amenities such as libraries as well as in those locations which have public access.

**Questions to explore in future strategy programmes**

**Curriculum development**

- “How will teaching hours be spent? Time spent delivering content, time spent reading student work and providing feedback, time spent in interactive activities, time spent in Q&A?”
- “How can you link in with other departments/schools to get access to other also flexible spaces e.g. joint timetables, booking systems and student experience?”

**Design and use of learning spaces**

- “How to create maximum flexibility so a wide range of learning activities can happen in the same space?”
- “How will you determine the amount of space required now and in the next 5 years while considering timetables, booking systems and student experience?”
- “Would more flexible and accessible teaching spaces get access to other, also flexible spaces e.g. joint projects and working?”

**Student experience in hybrid model**

- “How do you interact with the students and is this space dependent?”
- “What are the interactions that offer the best improvement in student outcomes when done face-to-face over online?”
- “Should we try to minimise the number of in-person lecture sessions?”
- “How many hours/week will students expect be getting in-person teaching to justify moving away from home and spending £9K?”
- “How are you specifying requirements to make learning environments inclusive, welcoming and effective for under represented groups?”
- “How to bring together students who are physically present and those that are virtually present?”
- “Would better integration of the teaching spaces and the IT equipment and software we have be possible, so that classes could mix physical and online attendance?”
- “Will staff deliver online content/lectures from office? What will that mean for office design? Also what difference will that make for staff when compared to standing in front of students in lecture theatres?”

Appoint a ‘Curator’ for the Abacws Building who can facilitate alignment between the building and the School’s teaching and learning activities. The curator could enrich the use of the building through supporting staff and students to familiarise with the building, gather ongoing feedback to inform future interventions, stimulate changes in working practices, build a community through organising events and engage with external stakeholders.

**Embed discussion around physical spaces in the annual module reviews. This will facilitate reflection on existing learning spaces and identify potential for their improvement. The process will encourage academics to think about space as an active tool in their session design.**
The workshop provided an experimental space for the participants to gain hands-on experience to apply "Learning-Space Compass" framework.

About Learning-Space Compass
The learning-Space Compass framework aims to enable alignment between curriculum and space. The framework creates a forum for reflecting on existing curriculum design and envisioning future learning strategies while engaging with physical spaces actively. The framework can be used for briefing new learning spaces as well as evaluating the fit of existing spaces for evolving curriculum.

Four views of curriculum
The framework captures four views of curriculum: as prescribed in course handbooks, as enacted by the academic staff, as experienced by students, as experienced by prospective students.

The framework is applied through workshops with academic staff, staff from various university services and students.

Lessons learnt for improving the workshop methodology
- Increase duration of the workshop to 2 hours.
- Add prospective student experience within the learning-space compass framework. This has been incorporated in the summary above referring to four views of curriculum.
- Have incentives in place for encouraging students to participate. Promote the workshop to students with support from lecturers and tutors.
- Have support in place to facilitate break-out sessions. Organise prompts in break-out sessions for tasks such as learning outcomes, stages and channels to ensure progress in discussions.
- If possible, conduct pre-workshop focus groups with participating staff and students prior to the workshop to gather key themes for discussion.
- For student workshops, module level learning journey mapping could be combined with a more generic discussion about the programme, the students' past experiences and motivation to do the course. The learning journey template could be adapted accordingly. Where possible, include participants representing different years of study so that issues around digital resources and physical spaces can be mapped at different levels of progression within a programme.

School of Computer Science and Informatics, Cardiff University

Learning-Space Compass Workshop

APPLYING THE FRAMEWORK
Service design concepts of journey mapping, personas and channels are mobilised to apply the framework.

The framework could be applied at the levels of either a module or a programme.

The framework could be applied at annual module/programme reviews as well as in curriculum design exercises.

Learning outcomes and learning activities drive the discussions.

The framework looks at learning space holistically and captures both physical and virtual spaces.

The framework enables different voices from academic staff and student bodies to be heard.

“That we got to speak to people who can act on our advice. The opinions we have expressed are widely known within the school but “die” on their way up to people who can work on them.”
Workshop participant

“Looking beyond current limitations of space will be key.”
Workshop participant

Feedback from workshop participants

Lessons learnt from feedback:
- Increase duration of the workshop to 2 hours.
- Add prospective student experience within the learning-space compass framework. This has been incorporated in the summary above referring to four views of curriculum.
- Have incentives in place for encouraging students to participate. Promote the workshop to students with support from lecturers and tutors.
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For more information, contact Dr Hiral Patel, Email: patelh18@cardiff.ac.uk

For further information on Learning-Space Compass Framework, visit HEDQF’s website.

These workshops were conducted as part of Cardiff University ESRC Impact Accelerator Grant Project 'University spaces for learning through life in the Fourth Industrial Revolution'. More information about the project can be found at futurelearningenvironments.org (website to be launched in July 2021).

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