

learning SPACES

what do we
KNOW
about them?



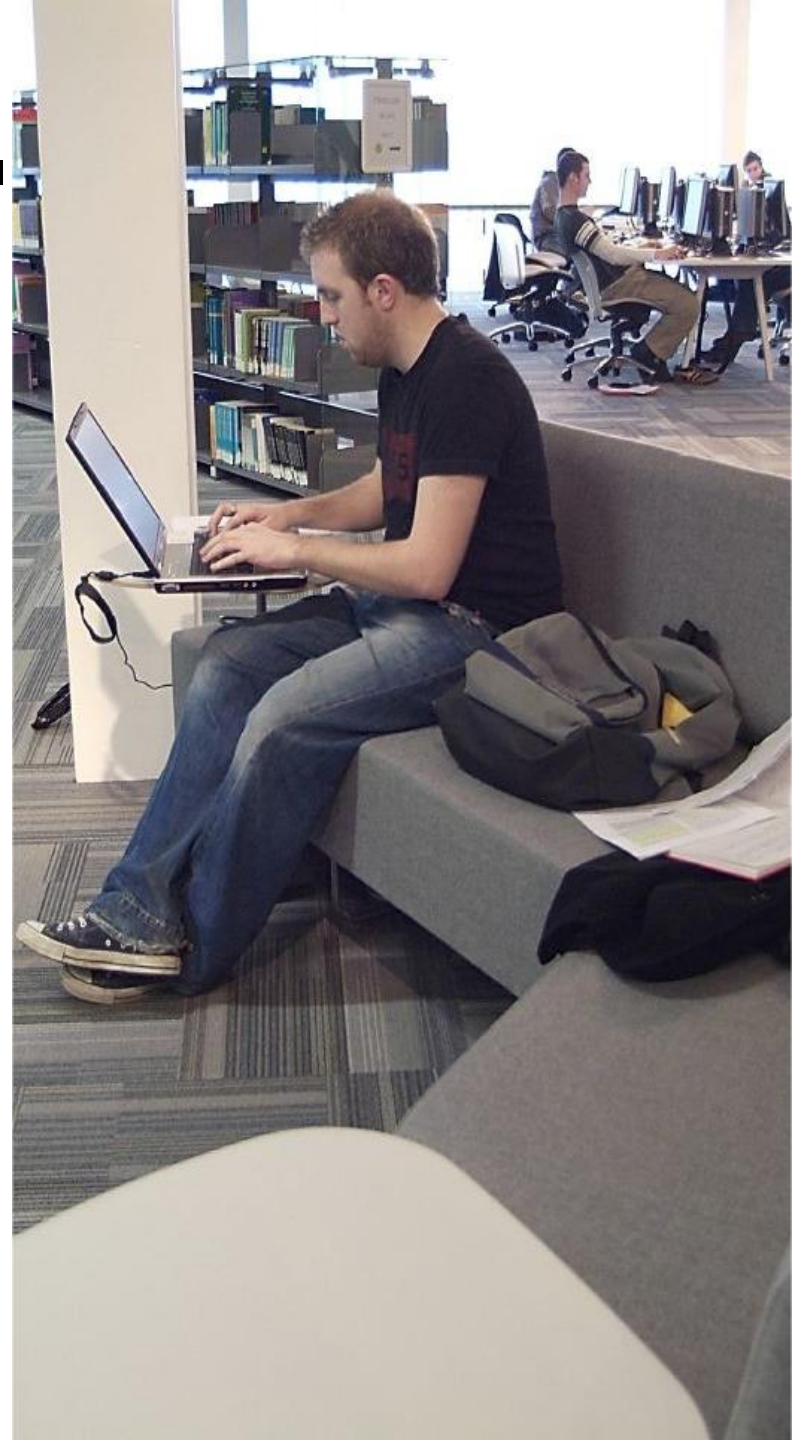
a working **definition** of learning spaces?

“... **learning space** should be able to **motivate** learners and promote learning as an **activity**, **support collaborative** as well as formal practice, provide a **personalised** and **inclusive** environment, and be **flexible** in the face of changing needs ...”

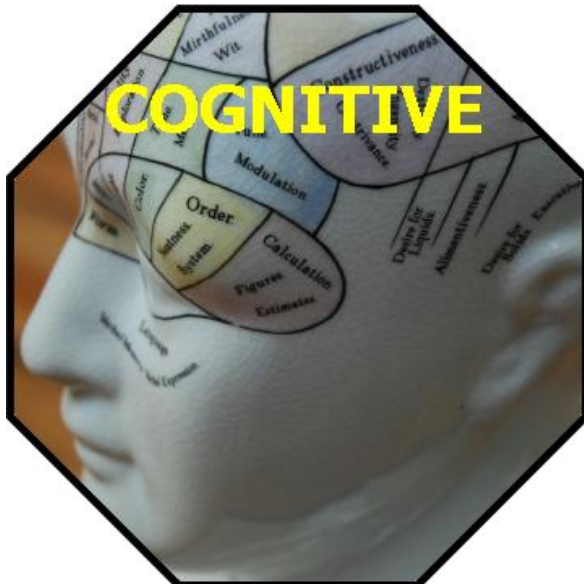


your **experience** ...

- 1) to what extent are your teaching and learning strategies determined by the “spaces” you have to work in?
- 2) does the “learning spaces” influence students engagement?
- 3) does learning technology enable students to work within **new** “spaces”?
- 4) do different “learning spaces” change the relationship between the tutor and the learners?



perspectives on **learning spaces** ...



physical learning spaces ...

“... being treated to somewhere **special** ...”

“... contributed to heightened anticipation and **increased expectations** from both learners and teachers ...”

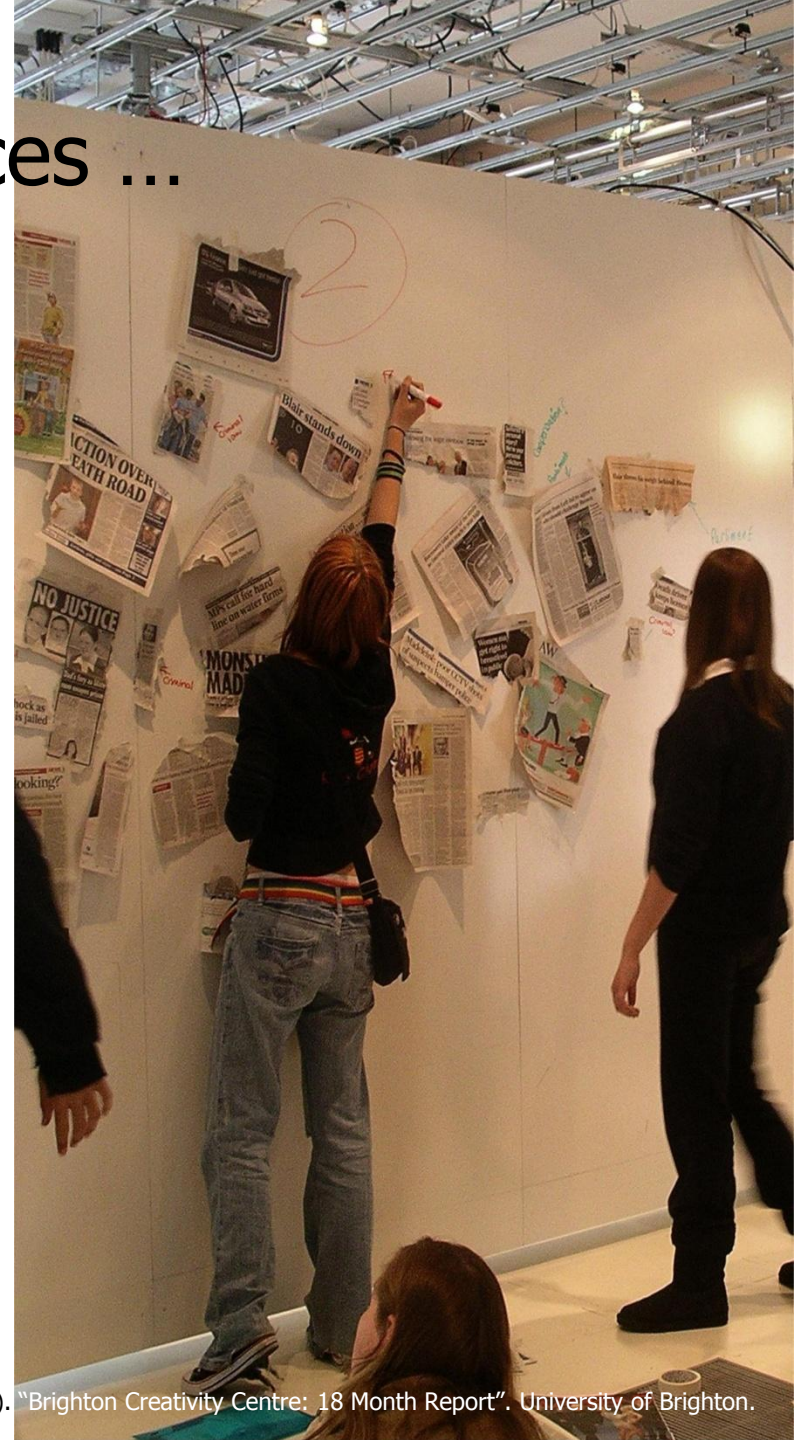
“... a better quality environment produces better **quality responses** ...”

“ ... **flexibility** and fluidity ... **reconfigurable** space

accommodate further kinds of learning ...”

“ ... **versatility** [of technology] enables a wide range of approaches to learning ...”

“... **atmosphere** is an ephemeral but important aspect of the learning environment ...”



virtual learning spaces ...

“ ... can **extend** from individuals and groups in the same or adjacent room, through the rest of the institution and it's locality to the **wider community** and the World Wide Web ...”

“... the embedded technology has **elaborated** rather than determined what happens making [it] an **empowering space** for students and teachers ...”

“... we should understand virtual space in its widest sense, referring not just to synchronous, **highly interactive** functions (such as chat, blogs, and wikis) but also to asynchronous functions such as **e-mail** and discussion threads ...”



cognitive learning spaces ...

"... [space] can support a combination of **risk** and **relaxation**, a safe yet **creative** environment ..."

" ... capacity to support the open minded **thinking** and **reflective** discussions ... for effective **group work** ..."

"... to support approaches that need specific ... **emotional atmospheres** ..."

"... encouraging creative and **divergent thinking** ..."

"... [with] increasing availability of **wireless networking** ... [paying] more attention to the **social** and **emotional** aspects of learning ..."



social learning spaces ..

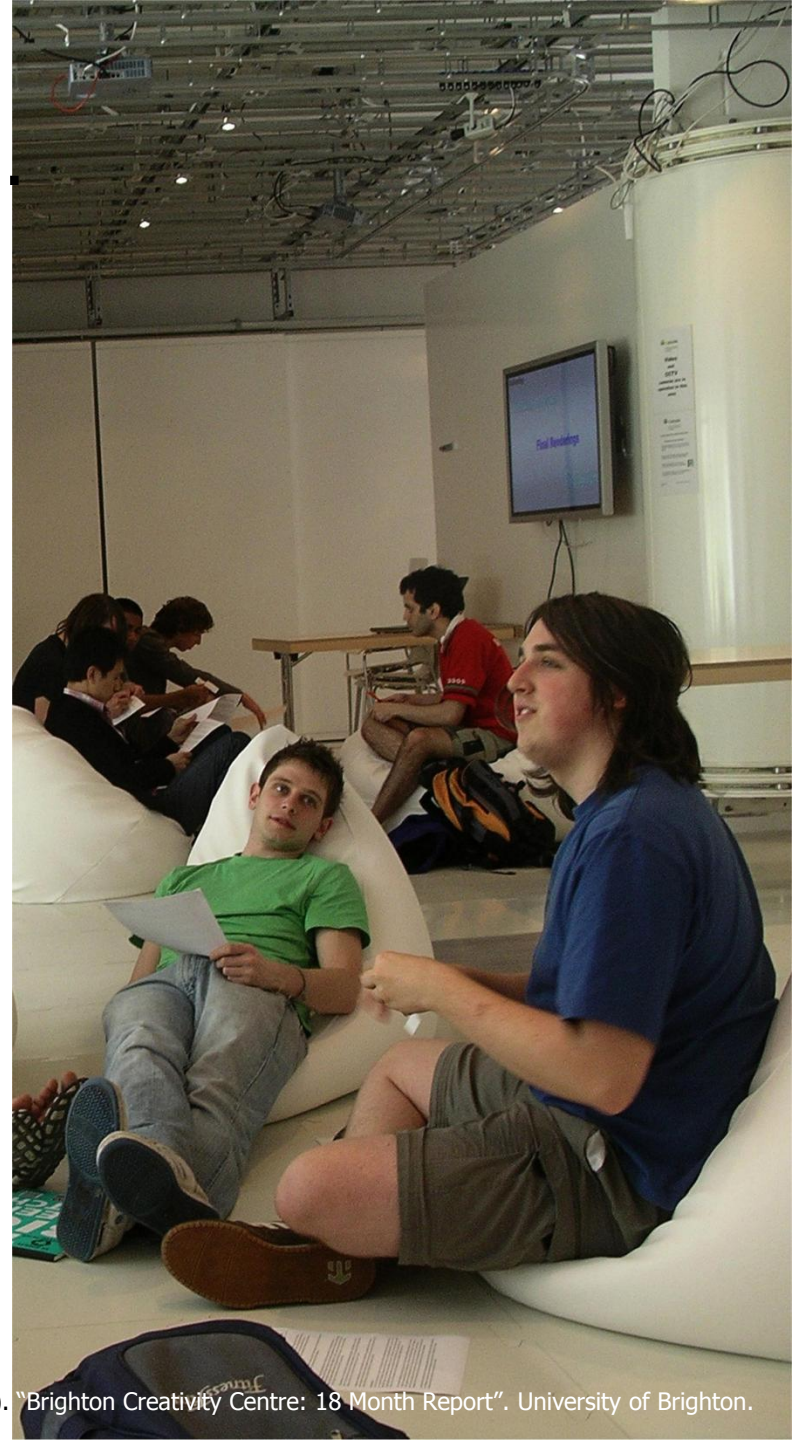
“... **effective** learning takes place as a result of **interactions** between students themselves ...”

“... create an **informal**, relaxed, even comforting [environment] ... easier to ask questions ... feeling less judged ... and **contribute more** ...”

“... willing to **share** experiences ... **new methods** and **exercises** ...”

“... [tutors] interested in establishing **positive relationships** with their students ...”

“... create knowledge and understanding through paths of **personal & group inquiry** ...”



what is **said** about learning spaces?

“the **‘iconic building’** seems to be a feature of every current campus master-planning project.”

“impressive new buildings are, on their own, **no guarantee** that improved learning will be achieved; although they may be useful in marketing terms, by helping to brand the institution.”

“where university staff members and students are actually asked about the impressive new building in which they are working, their responses tend to **fall short** of ringing endorsements.”



what is **known** about learning spaces?

“a high proportion of the literature makes **unsupported**, or **anecdotal**, claims about the benefits of new designs or new configurations of existing space.

where they are presented, **empirical findings** are usually **flawed**, as they either tend to report changed **student attitudes** (rather than **learning outcomes**), or where learning outcomes are reported, they **fail** to take account of observer effects of various kinds.”



moving **forward** with learning spaces ...

“discussions on student-centred approaches have **naturally centred** on issues of pedagogy ... rather than the physical environment.”

“teaching and learning should **drive design**, rather than vice-versa.”

“more recent thinking on **‘flexible learning’** spaces - spaces in which different groups may be undertaking different activities simultaneously and which lend themselves to a variety of uses - has suggested how campus and building design can be used to **facilitate** learning, particularly informal learning ... designs need to provide a variety of spaces in which they can **work** and **socialise** together.”



flexible learning spaces ...

group teaching area where flexible furniture arrangements can accommodate groups of varying sizes

peer-to-peer environments, where informal learning can take place, e.g. in cyber cafes

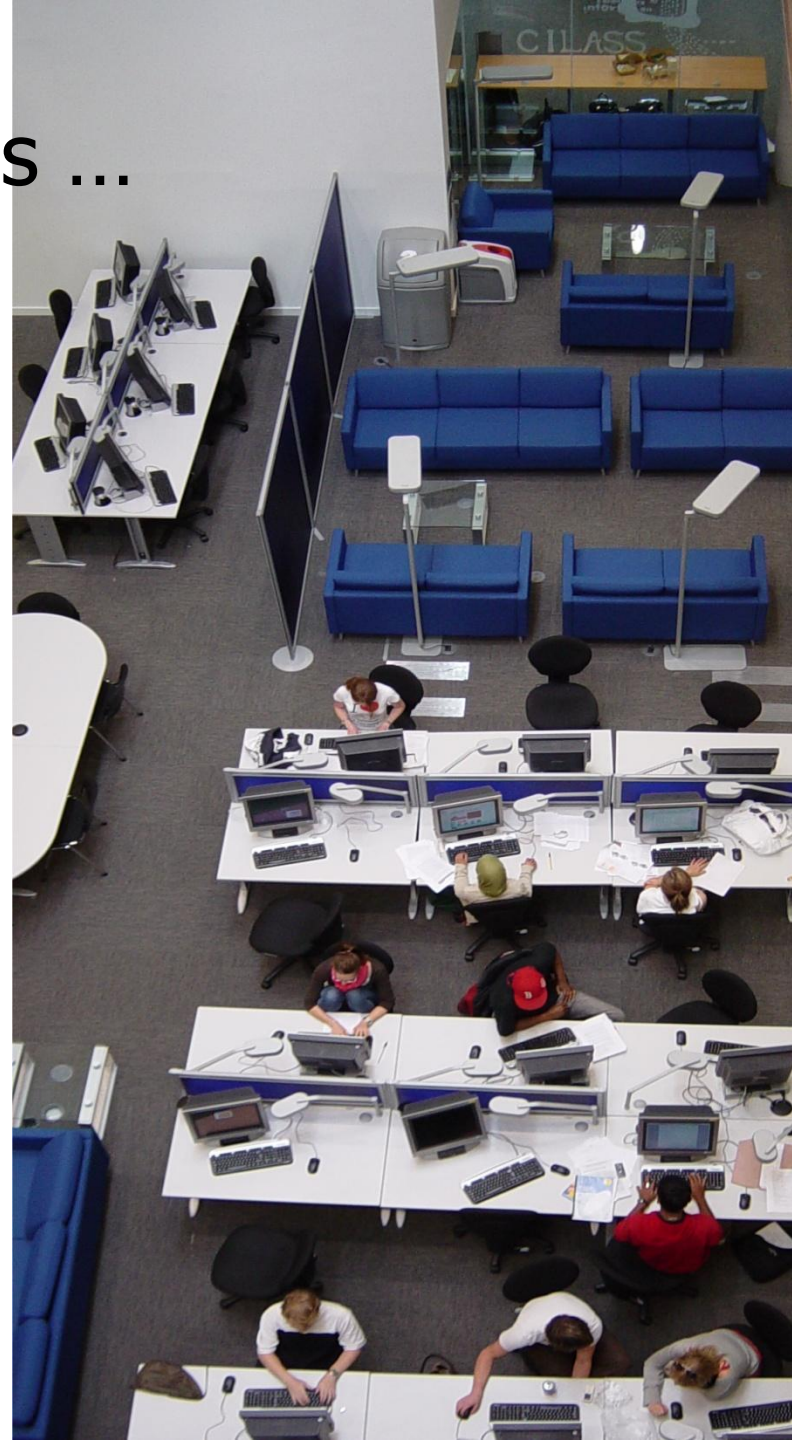
clusters where student group work can take place, e.g. project spaces

individual work – in quiet areas

wireless enabled laptops and wireless networks means that any enabled space, inside or out can now be used for technology enhanced learning

adjacencies – connection to other people

psychological – provide a sense of belonging, private space, natural light, temperature, furniture



some **pedagogic** research areas ...

how to **converge** different learning spaces?

how to **design** for the convergence of classroom, informal and virtual learning spaces?

how to **align** “Net Gen” characteristics, learning principles, learning spaces, and IT applications?

See also: Caldwell, L. (2009). [“21st Century Classroom Demonstrates Model Learning Environment”](#). Learning Technology Center, University of Texas at Austin.



some **pedagogic** research areas ...

... at Shneiderman *et al's* university, they found 4 emerging patterns of teaching / learning when using new technology equipped classrooms:

- 1) enhanced lecture sessions (such as, discussions based on students' using voting tools or looking up examples)
- 2) active individual learning and reporting (students find / create resources and share with the rest of the class)
- 3) small-group collaborative learning & reporting
- 4) entire-class brainstorming, using Web 2.0 tools

what new patterns of teaching / learning could / will emerge at CCCU as tutors make use of Augustine House?



some **pedagogic** research areas ...

what can we expect in terms of the **implementation** of new technologies in higher education?

“... information literacies, including searching, retrieving, critically evaluating information from a range of appropriate sources and also attributing it – **represent a significant and growing deficit area.**”

“... deployment is in no way systematic and the drive is principally bottom up, coming from the professional interest and enthusiasm of individual members of staff. ”

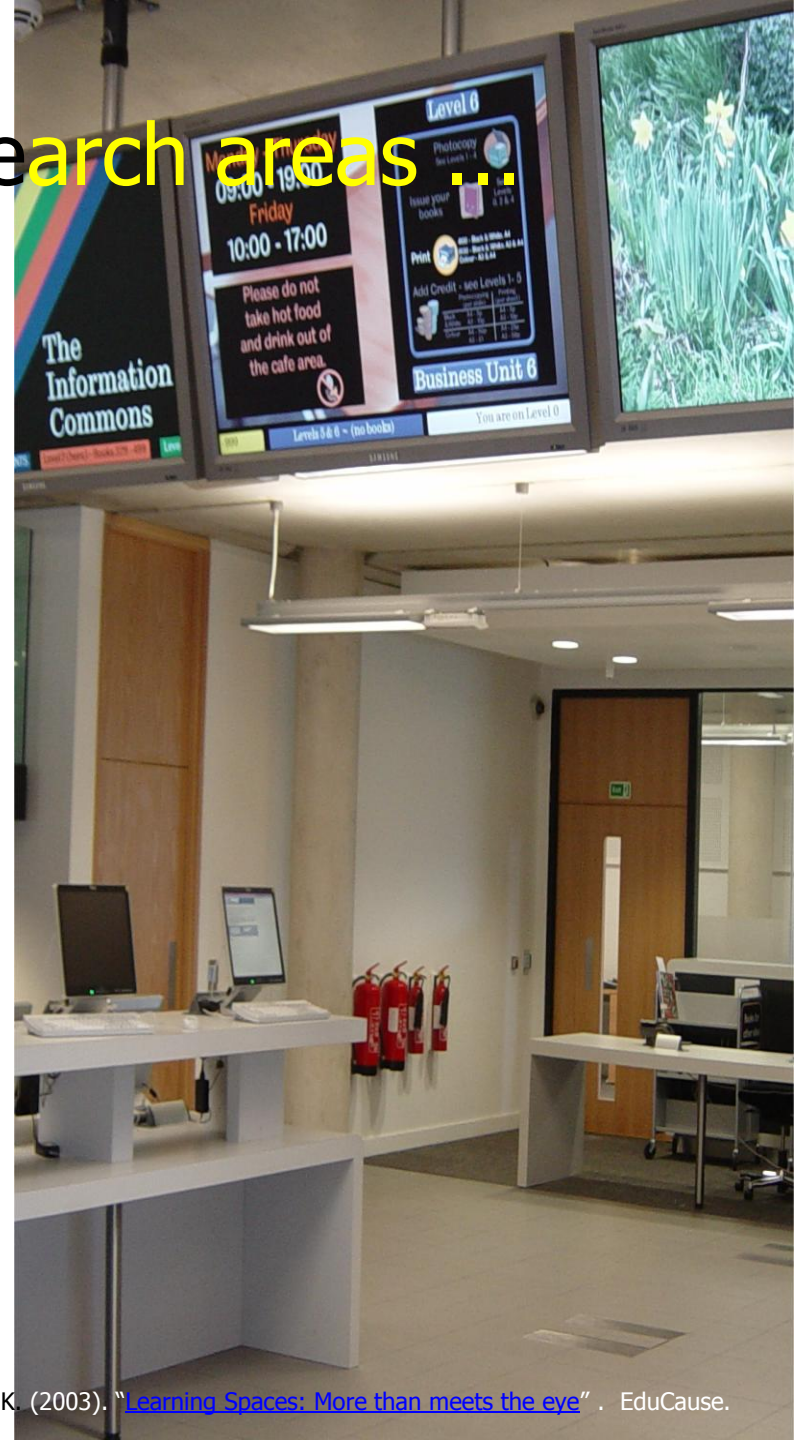
“... students are looking for traditional approaches, notably personal contact, in a modern setting, i.e. web-supported.”

what will our experience be with Augustine House?



some **pedagogic** research areas ...

what **sorts of support** are needed for students and instructors?



some **institutional** research areas ...

“Spatial Impact” – Take on board the views and experiences of various stakeholders (e.g. Academic staff, Librarians, i-zone, Student Study Support, etc.) on how space has impacted upon them.

“Small things make a big difference” – The apparent connection between day-to-day premise maintenance and learning may need to be drawn to the attention of Institutional Management.

“Good Vibrations?” – A better understanding of the role of space in the dynamics of creating more productive HE communities and its connections with learning and research.



some **institutional** research areas ...

“Recipes for success” – More consideration needs to be given to learning space design needs and the role that such spaces can play and the effective design ingredients for them require further study.

“Evaluating the Ideas Factory” – An “architecture of complexity” is said to encourage new ideas and creativity, but there is little evidence to support this claim. Efforts should be made to conduct evaluations of new learning spaces in order to provide guidance to the learning benefits, and the financial and other costs associated with them.

“Tried and Tested?” – A methodology needs to be created and tested to assess and evaluate the effects of space upon learning.



the **iBorrow** project ...

“... will allow users of a new Library and Learning Centre to borrow a notebook computer as easily as picking a book from a shelf. It will provide a large-scale demonstration of how thin-client notebooks with location-aware technology can enable the University to not only provide no-fuss access to a full range of software and learning resources but also effectively manage the configuration of the facilities within the large flexible learning spaces of its new learning centre. By overlaying location information with additional data it can also provide insights into the way students use electronic and virtual resources at an individual level or within a group context and thus answer the questions that arise when designing new learning spaces.”



some research **methodologies** ...

... researching the use of learning spaces through:

ethnographic approaches: descriptive observation; interviewing; field notes; photographic or video studies

phenomenographic: user generated accounts, e.g. blogs; electronic or video diaries

action research: theoretical concerns; curriculum development; enhancement

appreciative enquiry: focus groups; students as researchers - case studies - 'telling stories'

qualitative / quantitative: large / small scale surveys; questionnaires; in-house observation; tracking engagement; location / context aware



researching **learning** environments ...

however ...

“... if the **curriculum** in higher education is a **set of experiences**, that a student inhabits, experiences that that arise from a **student’s interaction** with his or her **‘learning environment’**, then any attempt to trace the influence of one particular thread of experience may well be doomed ...”



learning spaces **resources** ...

EDUCAUSE. (2005). "Learning Spaces".
<http://www.educause.edu/LearningSpaces>

Fisher, K. (2005). "Linking Pedagogy and Space".
http://www.eduweb.vic.gov.au/edulibrary/public/assetman/bf/Linking_Pedagogy_and_Space.pdf

JISC. (2006). "Planning & Designing Technology-Rich Learning Spaces".
<http://www.jiscinfonet.ac.uk/infokits/learning-space-design>

JISC. (2006). "Designing Spaces For Effective Learning - A Guide To 21st Century Learning Space Design".
<http://www.jiscinfonet.ac.uk/infokits/learning-space-design/design-high>

Scottish Funding Council. (2005). "Spaces for Learning".
http://www.sfc.ac.uk/collaboration/spacesforlearning/spaces_for_learning.aspx

Temple, P. (2007). "Learning Spaces for the 21st Century".
http://www.heacademy.ac.uk/projects/detail/lr_2007_temple





any **questions?**