Designing spaces for learning and student engagement – Summary

## December 2018

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**Books and reports**

 *Reframing space for learning: Empowering Excellence and Innovation in University Teaching and Learning,*

To be published by UCL/IoE Press.  <https://www.ucl-ioe-press.com/books/higher-education-and-lifelong-learning/reframing-space-for-learning/>

*Reframing space for learning*is a book about learning and teaching practice which explores the importance and impact of learning spaces and places in university teaching. There is a chapter about NTFs working with architects and estates staff in co-designing and refurbishing learning spaces – to be published in early 2019

Anne Boddington  and Joe Boys (2011), *Re-shaping learning: The future of learning spaces in post-compulsory education.*

*Reimagining Spaces for Learning in Higher Education* (2018) Andrew Middleton, Palgrave Macmillan

*Learning Landscapes in Higher Education* (2010):

<http://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwiHw4Ls4LzeAhUQxxoKHcloB_AQFjAAegQIABAC&url=http%3A%2F%2Fhedqf.org%2FOpenFile.ashx%3Fpath%3D%255CHEDQF%2BPublications%255C2010_HEFCE_Learning_Landscapes_in_Higher_Education.pdf&usg=AOvVaw2j_gpPjlxgsnjTqZCfmVkc>

*Leadership and Learning Landscapes: the struggle for the idea of the University* (2011):

<https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-2273.2011.00494.x>

*On the Nature of Academic Space* with Helen Beetham in John Lea’s *Enhancing Learning and Teaching in Higher Education* (2015):

<https://www.mheducation.co.uk/9780335264162-emea-enhancing-learning-and-teaching-in-higher-education-engaging-with-the-dimensions-of-practice>

Also, see Cath Lambert’s article on the Reinvention Centre classroom we designed at Warwick:

*Psycho-classrooms: teaching as a work of art* (2011):

<http://wrap.warwick.ac.uk/41421/>

**A major literature review**

<http://learnline.cdu.edu.au/commonunits/documents/Retrofitting%20University%20Learning%20Spaces.pdf>

FLEXspace (<http://flexspace.org/>) is an initiative jointly sponsored by the California State University and State University of New York systems in the US that **provides a global forum and open repository for sharing examples of innovative learning spaces and their impact on teaching and learnin**g.

**UCISA UK HE Learning Spaces Toolkit:** [**https://www.ucisa.ac.uk/learningspace**](https://www.ucisa.ac.uk/learningspace)

**Leaflet from JISC**

 <https://www.jisc.ac.uk/guides/designing-learning-and-assessment-in-a-digital-age/learning-spaces>

**Presentation from Ros O’Leary and David Webster**

<https://www.dropbox.com/s/hu4i3sd0xyjgb5d/creative%20teaching%20spaces.pptx?dl=0>

## Sources of good ideas/examples

**Disruptive Media Lab at Coventry:** [**http://dmll.org.uk/about/**](http://dmll.org.uk/about/)

The Lab is home to a unique physical space based on the top floor of the Lanchester Library. Designed as a collaborative working space, here students can come together to study as a group in a flexible environment that can be adapted to suit their individual study needs, whether that be working on one of the 50 wide-screen Macs available, working as a group at one of the pods utilising the 9ft whiteboards or moving the open cafe desks to fit for a lively group discussion or team presentation. The Lab is a lively and vibrant space that allows the constant flow of creativity and open discussions. There are bookable spaces that can be used for shaking up the traditional lecture space, holding meetings, or delivering workshops in an informal environment to work on new ideas and projects.

**The Hive at Birmingham City Prof. Maxine Lintern (****Maxine.Lintern@bcu.ac.uk****)**

The Hive is oval shaped, with banked sides containing L-shaped seats around tables. Each table contains some embedded screens and audience response systems. The teaching therefore takes place ‘in the round’ so to speak, with the lecturer/facilitator in the centre. The space is designed to encourage collaborative discussions in small groups of 5-6 students, and can seat about 80-100 students overall.

**Monash University** [**https://www.monash.edu/lt-building**](https://www.monash.edu/lt-building) **(mutiple mentions!)**

My university has just finished an amazing Learning and Teaching Building which the students love - it has workshop/tutorial spaces for 30/60/150/220 student groups and plenty of breakout spaces.  We have found that students make extensive use of the building when there are no scheduled classes. And as an academic I love teaching in there (whiteboards on tables/walls; wireless projection in all rooms).

**'digital museum' in Paris**

I think learning spaces will be more immersive with students & staff inside the world of the discipline and exploring it together. Here's a 'digital museum' in Paris doing that. I can imagine the 'digital university' may come to mean something similar soon.

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

**LearnHigher room at Bradford (from Peter Hartley)**

Capacity about 30 to 40 depending on what you do with the tables etc. Used for classes on PGCert and many other courses including humanities and social sciences.

This the best room I have ever taught in and was involved in the design and implementation (funded by the LearnHigher CETL) around 2008. See a couple of photos attached. It had a number of features which were state-of-art at the time and which you could achieve these days much easier and cheaper as follows:

- double pc system plus visualiser with audio and video playback for the presenter. Each pc can be worked independently and the images sent to any or all of the screens in the room. Great for comparing images!

- multiple screens round the room: we used whiteboards - not sure that this would be a justified expense nowadays, given what you can do with laptops, tablets, smartphones etc.

- circular tables which can be disassembled in seconds and pushed to the side. We had a real problem finding ones that were the right size and I think the ones we used were a bit too big for the group size we tended to use (5/6).

- chairs on wheels

- plenty of power points

- groups working at the tables could send their laptop images to all the main screens (they did it by plugging into whiteboards - now you can use software mirroring as Westminster does - see below.

If I was starting this again I’d:

- stick with the double pc and multiple screens flexibility (but not whiteboards)

- find a cheaper and more flexible control centre

- find better circular tables (and also consider other shapes like ‘plectrum’)

- insist on top-quality wifi

- use mirroring and other techniques to enhance engagement.

- have a writing wall so that you are not too swamped by the technology

Based on that and some other examples. I’ve been doing some work with Gunter Saunders at Westminster. The details of this are most easily accessed in the following presentation, which includes a number of images of room variations. This is also a case study in a forthcoming AdvanceHE publication and we did produce an article for SEDA Educational Developments - <https://www.seda.ac.uk/past-issues/19.1>

Please contact Gunter or myself if you want to discuss anything about these examples, or the model we used to organise our thoughts.

<https://www.slideshare.net/profpeter/re-design-of-teaching-rooms-to-enable-teaching-excellence?qid=5ec395cc-c240-4cde-92db-36e1046abb1f&v=&b=&from_search=3>

Little things (and not necessarily expensive ones) can also make significant difference - e.g. at Westminster the use of hand-held presenters changed many lecturers’ interactions.

Walking into teaching rooms and learning spaces in different universities across the UK as I do, I often feel frustrated that the design

seems to be done by people who do not have to use the space with groups, so the furniture is often inflexible and the wrong shape/size and the room design typically reinforces the ’sage on the stage’ model.

## Relevant projects

**SCALE-UP at Nottingham Trent University** – running for over 5 years now. This involves various elements of different active learning approaches, combined in a particular way, and situated in a bespoke learning space with equipment to facilitate collaboration. You can find information here: <https://www4.ntu.ac.uk/adq/teaching/scale_up/index.html>

**James Cook University** undertook a project to provide the opportunity for academic staff to staff share insights into their teaching approaches and how they are using different rooms and technology to engage students in a variety of active and collaborative learning experiences.

<https://sites.google.com/site/jculearningspaces/home/the-project>

Open-space Learning in Real World Contexts was a project funded by the Higher Education Academy's National Teaching Fellowship Scheme 2009-11. The OSL project, as it has come to be known, brought together three NTFs from Education, Creative Writing and E-Learning at the [CAPITAL Centre](http://www2.warwick.ac.uk/fac/cross_fac/capital), a CETL exploring creativity and performance in teaching and learning, to develop and embed new forms of creative pedagogy associated with workshop practice and collaborative learning in flexible teaching spaces. Since summer 2010 it has been hosted by Warwick's Institute for Advanced Teaching and Learning ([IATL](/fac/cross_fac/iatl/)). The project was led by Professor Jonothan Neelands, Institute of Education and Warwick Business School.

**The Learning Space Project at Middlesex – ongoing (PDF attached)**

**Sheffield Hallam project by students last year** (PDF attached)

**Two digital classrooms at the University of Kent.**

<https://www.kent.ac.uk/elearning/themes/digitalclassroom.html>

If you are interested, I am also happy to share with you the slides of the presentation we gave at the 2018 APT conference at the University of Greenwich. We run a pilot study to investigate how the rooms were used. The slides provide further background and information about it.

(Dr Silvia Colaiacomo : S.Colaiacomo@kent.ac.uk)

## Those with expertise or currently researching on this

**Gordon Heggie:** **Gordon.heggie@uws.ac.uk**

I'm the academic lead for the UWS Lanarkshire Campus project - what we see as possibly the most radical step forward in the UK in creating a learning environment for the future.

The  vision was to challenge traditional models of delivery and dependencies on enclosed spaces.

**Brent Carnell:** **b.carnell@ucl.ac.uk**

Doing project at UCL focused on the intersection of research-based education and the holistic university physical environment

**James Rutherford** (now working at City University) did some great work on flexible learning spaces when we were both at Birmingham Uni, his website curates some examples: <https://learningenvironmentdesign.net/>

He also has a good network in this field so may be able to advise on other good examples for you to browse.

**Brian Whalley, University of Sheffield offered this:**

I think you can take advantage of technology now with good wifi for when it is needed. Although people still use laptops if they need a ‘computer’ I think everything can be done entirely adequately on a tablet of some kind or another.  In fact for pretty much all purposes nowadays a tablet can do the job much better than a laptop. (See the stuff we have been doing with BYOD and France et al ‘Enhancing FieldworkLearning using mobile technologies, Springer 2015).  In fact, what is needed most by tutors is ‘imagination’. A flexible space is just ‘fieldwork’ conditions.

Don’t let the techie ICT people rule the roost!  All it really needs is good wifi - but use that to enhance learning (if Wifi is not being used for teaching and learning, and I don’t mean just swapping mails or browsing) then why are institutions fitting out places with WiFi.

I think that the key word is space and the next is flexible. You want the space for all sorts of reasons (and scientists and engineers too, in fact i think they may need it more than anyone!).  I was talking to a colleague in the English Department when I was at QUB and asked him about ideas for getting students my geomorphologists in this case) to gain confidence in giving talks. What we did was to get the students to do the exercises he (David Grant) would do (he was artistic director of the the Lyric theatre) with drama students.This wasn’t subject matter but I think it did give students confidence (as I was there making a fool of myself as well).  Leaving that aside, the open area was the only place we could do such things in a non-public, place.

I think nowadays you can use simple video projectors if you need them, project onto walls where necessary.  i.e. none of these expensive and not very environmentally friendly plasma displays.  Tablets and appropriate technology will work fine!

I think that you need seats (chairs, bean chairs etc) for all but early stackable and moveable, along with tables on wheels that can be brought in for any set of general/group configurations. These can be foldable and stored around the edges as needed. But they must be available and deployed rapidly for whatever idea springs to mind.  i think the other useful need would be ‘room dividers’ not find ones that come in from the fixed sides but screens on wheels that can be brought in to divide working groups as necessary, or not. Again, flexible and adaptable.

 The other thing that I am very keen on, but rarely seems to be fitted are T loops. associated with that is having sound absorbent walls or wall hangers that absorb sound.  Groups discussing things with highly sound reflective walls creates all sorts of havoc of people rating their voices against a generally increasing background of noise.  Some students do not react to this at all well. There is not nearly enough research done into this kind of thing. But discrete loudspeakers would be a benefit for some configurations.

Oh yes flexible lighting as well as people might need to simulate a wide variety of lighting conditions.  Especially important for humanities.  In fact, perhaps thinking of this as a rehearsal room might not be a bad idea.

**Sarah-Jane Crowson shared this:**

I work in a small, specialist creative arts college in rural Herefordshire with a longstanding crafts tradition (rather than Fine Art). Although this seems a long way from humanities departments in Newcastle University, I wonder if the kinds of learning spaces we use might be of interest.

These are studio spaces; where students blend theory/practice by experimenting and discussing ideas. They're very non-hierarchical, with none of the trappings of traditional pedagogy (there is no lectern, no 'special' place for the lecturer - the lecturer/practitioner and student work together)

In Hereford, as in most arts colleges and departments, these types of learning space run alongside workshops ( the places of physical knowledge-production and practical experimentation) and more traditional lectures and seminars (that often also take part in the studios).

As we are not space-starved in Hereford, in some disciplines each student has an area which they populate with their work (for larger courses, for Fine Art and for Foundation this is often rotational and project-based in groups).

If you are interested in seeing photos I can send you some. I can't work out how to attach them through jismail, though. Images of the spaces speak more clearly than words. I'm looking at this as part of my PhD so I have quite a few!

**NB**

* Students on the autistic spectrum may want a certain amount of space around the them.  Not overly fussy environment – e.g. not brightly coloured, stripy walls (which we have in one of our open learning spaces because the designers thought it would be fun and funky)
* Students with some mental health conditions may want to be able to ‘fade into the background’ and/or be able to arrive and leave quietly through a back door.
* Always good to have some confidential space where possible