Author’s Name: Dr. Joss Boys

Institution: Centre for Excellence in Teaching and Learning through Design (CETLD)  
University of Brighton

Title of article: Beyond the Beanbag? Towards new ways of thinking about learning spaces

Keywords: Learning spaces, spatial design, informal learning, physical space, virtual space, conceptual space

Abstract: This article looks critically at some of the assumptions in our current ideas about learning spaces, especially the arguments in favour of a shift from formal to informal learning spaces. It suggests that the formal/informal divide hides more than it reveals about the complex relationships between learning and the spaces in which it takes place; and that learning spaces in post-compulsory education remains an under-theorised and under-researched area. Instead we need to develop better conceptual frameworks and richer research methodologies so as to enable a more informed, constructive and creative debate. The article ends by exploring the implications of unpicking the ‘granularity’ of different scales and types of learning space, so as to outline some alternative concepts for analysing what already happens and for enabling creative improvements to the socio-spatial encounters, relationships and processes of teaching and learning in post-compulsory education.

Main Text:

Introduction
There has been increasing interest recently in learning spaces. Experts across the fields of architecture, education and estates management are producing a considerable number of publications and case studies (JISC, 2006, TEFMA, 2006, Scottish Funding Council, 2006, Jamieson, 2008, SMG, 2008). Yet, in relation to post-compulsory education, key basic questions remain unanswered. What do we mean by ‘space’ and what matters about it for learning at university or college level? What kinds of space are we talking about – conceptual, physical, virtual, social and/or personal? What are the relationships between the shape of these various spaces and how they actually impact on learning activities? What are the different spaces in which learning takes place (both in and beyond the campus) and how can we interrogate the effectiveness of different kinds of learning spaces?

Learning Spaces has been a key theme for the Centre for Excellence in Teaching and Learning through Design (CETLD) since its inception over 4 years ago. Because CETLD brings together partners from both within and beyond HE – University of Brighton, Royal College of Art (RCA), Victoria and Albert Museum (V&A) and Royal Institute of British Architects (RIBA) - it already has an interest in examining the relationship between student learning and the growing range of spaces and places within and across which this learning happens. Many of its projects have been exploring underlying similarities and differences in assumptions about what ‘learning’ involves across disciplines and locations, for example between HE and museum educators (Cook et al, forthcoming).

The current CETLD research in learning spaces, led by Jos Boys, grew out of concerns that much contemporary debate about architecture and post-compulsory education assumes the need for a shift from formal to informal learning spaces. This argument is often offered up as obvious and unproblematic with the concept of informal linked in a relatively simplistic way to associated ideas such as personalised learning and social networking. Yet, while many of the resulting new informal spaces are very interesting, there is little underlying analysis of what is (or should be) actually changing in learning and teaching practices, or how we can assess student and tutor experiences, or impacts on learning itself. Much recent development has focussed on generating flexible, informal learning spaces, for example, through learning cafes, corridor ‘nooks’ and library learning zones; and on using bright colours, natural lighting, playful graphics and soft furnishings. Whilst many of these examples are interesting, they highlight three major problems. First, these kinds of environments are based on simplified - and often idealistic or metaphorical – notions of learning space. Whilst they can offer
exciting additions to existing spaces, they do not enable a more strategic critique to be developed. Second, they fail to engage with the wide panoply of learning spaces from academic workplaces to research settings, and ignore the continuing need for better-designed formal (and other hybrid) learning spaces. Third, they fail to enable us to engage with key issues and contemporary shifts in educational ideas and perspectives. As well as the formal/informal learning debate, these include, for example, concerns with widening participation, communities of practice, inclusive pedagogies, community engagement, entrepreneurship, new technologies, wellbeing and sustainability. We therefore wanted to look ‘beyond the beanbag’ approach to learning space design. Our aim is to develop more appropriate conceptual frameworks, analytical methods and relevant parameters for relating the design of space to post-compulsory education’s distinctive characteristics (particularly in design subjects). We want to open up to view the un-thought through assumptions in learning spaces within the university, and also explore some learning spaces beyond it, in libraries, museums, homes and workplaces. And we want to face up to tensions between the recent emphasis on personalised, informal learning and the realities of large cohorts; to the impact on some students of paying fees; and to the real difficulties of combining innovation with cost-effectiveness and sustainability agendas.

Reviewing our frames

Initially, then, this involves thinking about how ideas around learning spaces have been framed within contemporary debates and from the viewpoints of different subject disciplines. So, for architects, space is the setting in which learning takes place. For educational theorists it is the physical, virtual and technological affordances (a term taken from human-computer interaction) that support learning. To an estates manager learning spaces are a limited and costly resource that must be effectively distributed. For teachers and students learning spaces are a set of given physical, virtual, organisational and durational frameworks into which a variety of activities must be fitted. Rather than assuming a common language we need to explore, explicitly debate – and even enjoy – the problematic intersections between these different perspectives.

In Higher and Further Education there has been considerable recent interest in shifting from formal to informal models of learning. Harrison and Cairns (2008) put it succinctly:

> Approaches to learning in educational settings are changing. Traditional teacher-centred models, where good teaching is conceptualised as the passing on of sound academic, practical or vocational knowledge, are being replaced with student-centred approaches which emphasise the construction of knowledge through shared situations (...).

For many educationalists, this requires a move away from formal lecture halls and classrooms towards technology-rich and social informal learning spaces, – a strong driver in many recent building designs and adaptations. But while these debates are influenced by many disparate sources – from theory (for example, the ‘communities of practice’ literature (Lave and Wenger, 1991, Wenger, 1998)), and policy (government initiatives on the creative economy; and on lifelong and workplace learning) to new technologies (the success of Web 2.0 applications such as MySpace and YouTube) and pragmatics (space utilisation and costs) – the underlying assumptions and terminology remain seriously under-researched. For example, usage of the terms ‘formal’ and ‘informal’ learning often ‘jump’ from describing differences between educational sectors inside and beyond the university to types of spaces within a university, to, by implication, better and worse kinds of education. In fact, there are several intersecting myths embedded in much current work that urgently need careful unravelling. These can be summarised as follows:

- Formal and informal learning are binary opposites
- Informal learning is good because it is social, personalised, and integrates physical and virtual environments
- Formal learning is bad because it is a one-way transmission of factual knowledge from teacher to learner
- Teaching and learning in post-compulsory education needs improving
- It can be improved through the development of both physical and virtual innovative and flexible learning spaces
- The new generation of students will be ‘digital natives’ who will demand a different kind of education
• ‘Good’ education enables the ability to think critically and solve complex problems, preparing learners for the ‘knowledge economy’.

I call these myths, not because they are ‘wrong’ but because they have become a commonsense we think with rather than about, and thus can all to easily substitute for critical analysis. This is exacerbated when ‘formal’ and ‘informal’ are simplistically translated into spatial/representational design metaphors, rather than related through specific, situated learning and teaching practices. In the current context it is urgent that the underlying difficulties with such assumptions are rigorously unpacked, so as to prevent simplistic oppositions or associations being made between different types of learning and spaces.

‘Talking back’ from an art, design and media perspective
CETLD is part of the Faculty of Arts and Architecture at the University of Brighton, and whilst its learning spaces research aims to reach to a wider audience than just the architecture, art, design and media subjects, it starts from the belief that these disciplines can usefully ‘talk back’ to more mainstream educational and professional theories about learning and space, potentially opening up underlying assumptions to view. This is most immediately because art design and media education and practice has to deal with the complexities of a very wide range of spaces from ‘conventional’ lecture theatres and seminar rooms to studios, workshops and labs. In fact, art, design and media education is already often offered up as a paradigm for new types of learning, because of its emphasis on open-ended multi-disciplinary and problem-based learning; and on open plan and studio-based learning, built around collaborative critique and self-reflective iteration. These approaches offer an inherent critique of any simplistic formal / informal learning divide.

The creative subjects also offer a ‘take’ on learning that is slightly different to, and can throw light on, other disciplines, including pedagogic theory. Art, design and media education of course emphasises creativity, which is increasingly considered of value more widely. It focuses on learning by doing - through making and interpretation which necessarily combines verbal and non-verbal communication - offering the potential for richer forms of describing and analysing learning spaces. Finally, it has many existing intersections across vocational, academic, community-oriented, practice-based and professional spaces, which make it easier to ‘think’ relationships to, and engagements with, learning spaces beyond campus boundaries.

Shifting the boundaries
Developing more explicit conceptual frameworks for thinking about learning spaces will also help us develop richer and more appropriate methodologies for examining how different participants interpret and interact with conceptual, physical and virtual spaces; and for linking educational visions and practices with the design of actual spaces. Too many architectural case studies tend to explain the intention of the space, and show how the design is planned to have these effects, but actually involve little proper research evaluation of spaces in use. And whilst there are now a number of studies beginning to investigate the student experiences of learning spaces (http://www.jisc.org.uk/whatwe.do/topics/learnerexperience.aspx), recent reviews (LSRI, forthcoming, Melhuish, 2009) suggest that we are still a long way from having effective ways of understanding how different participants experience the various spaces in which learning takes place, on and beyond the campus. This is both about complex, layered and informative ways of finding out what already happens and about recognising not just the explicit relationships of learning (course content, curriculum, physical and virtual space, etc..) but also its unspoken interactions (Austerlitz, 2008).

By rethinking how we conceptualise learning spaces and developing more rigorous but also more creative research methods we can begin to challenge the current tendency to think with rather than think about such broad-brush and generic concepts as flexibility, technology, colour and informality. Whilst this is very much research in progress (supported by a pilot study of the student experience by Clare Melhuish, and the recent addition to CETLD of Hilary Smith as a Learning Spaces Research Fellow), it is already possible to outline some ideas, based on unravelling some of the distinctive characteristics of learning spaces in post-compulsory education.
For us, this means shifting from viewing (physical or virtual) space as a container or setting for learning activities where the hope is that ‘changing the scenery’ will affect behaviour. Instead, in line with much contemporary architectural thinking, space and its occupation are interrogated through their dynamic intersection as social and spatial practices. Space is not a thing but a process. This opens up issues around the spatial and social implications of learning in post-compulsory education - about what is assumed to go ‘together’ or to be ‘kept apart’ when we teach and learn - at a variety of levels, and across different contexts and situations. Most importantly, this involves initially thinking about scale, or more accurately as Anne Boddington, Dean of the Faculty of Arts at University of Brighton, noted recently – ‘granularity’. Scale allows us to think about the relative location, size and ‘shape’ of different teaching and learning activities. Granularity is about the extent to which a larger entity is subdivided into smaller parts and can enable a much finer understanding of different segments of activities, their content, boundaries, relationships and comparative patterns. Such an approach has the potential to both clarify specificity and difference (across subjects, activities, levels, locations) and to develop informed generalisations – what scale, location and pattern works ‘best’ in various situations. Here I want to suggest that most immediately we need to separate out the different scales at which learning spaces operate. These are outlined as learning encounters, learning relationships and learning processes.

**Scale 1: teaching and learning encounters**

Some of the CETLD projects have been examining a range of learning and teaching activities such as demonstrating, experimentation and project-based processes, often trying to capture the non-verbal and embodied aspects of these kinds of learning experiences (http://cetld.brighton.ac.uk/projects). We need to understand more about how and when space ‘matters’ for learning at the level of these intimate and local encounters between students and their tutors. This also means exploring the immediate and everyday interactions students and tutors have with different kinds of teaching and learning spaces, from studios through specialist workshops/labs to seminar and lecture rooms; and between students and other places they use for learning such as libraries and galleries. Our understandings of the space of the learning encounter can be usefully informed by recent research into how learning takes place at this level, for example in relation to work already mentioned such as the communities of practice literature and the unspoken interactions of learning; and to research around concepts of ‘sticking places’ (Meyer and Land, 2006). These all conceptualise learning as a transitional and troublesome process or journey, which must feel both safe and enable risk-taking. What if any, are the social and spatial implications of such an approach?

**Scale 2: teaching and learning relationships**

This second level centres on the institutional scale, on what activities a specific university, college or other educational service houses within its boundaries and how these are related, conceptually, physically and virtually. I call this the space of the teaching and learning relationship, because it is about the set of connections (as well as the ‘gaps’) that any participant has with all the activities of that institution. For a student this will range across, for example, peers, student services, canteen staff, cleaners, academics, administrators and researchers. Only by understanding these relationships can we get a clearer picture of what constitutes the complete learning experience. But these relationships are also mapped – inaccurately and inadequately – into the space of the institution. Both physical and virtual spaces are attempts to delineate particular categories, boundaries, relationships and exclusions (with varying degrees of consciousness and success). Roland Barrett reflects on this ‘shaping’ of the university when he considers how research is being ‘located’ in relation to teaching and learning across different subjects and institutions (Barrett, 2005). Similarly, Lorcan Dempsey explores how to re-think the location, scale and content of library services in response to the impact of new technologies (Dempsey, 2009). This is also the level at which architects and estates managers often work. Their job is centrally to respond to a problematic situation and to predict more appropriate categories of activities, to give these activities form and content, to orchestrate relationships of togetherness and separation (Edwards, 2000).

**Scale 3: teaching and learning processes**

The third scale concerns how we articulate learning as a process between and beyond the campus, that is, the ‘patterning’ of education across our lives and the landscape of spaces where learning can occur, across employment, professional organisations, museums, galleries, cafes, homes, etc. I call this the space of teaching
and learning processes because it engages very directly with our broadest conceptual assumptions about - and contestations over - what learning is, and therefore how and where it ‘should’ take place. It is the level of debates about lifelong learning and widening participation, university mission statements and their ‘locations’ within the wider context; and of different pedagogic models and their spatial implications.

Conclusion
The CETLD Learning Spaces research is not just about finding better ways to map what we already do. Only by unpacking the multiple, layered and dynamic components and relationships through which learning and space intersect, can we develop the appropriate tools and tactics for improving learning spaces. In terms of the learning encounter, changes might just involve small-scale alternations of teaching and learning approaches, curriculum or spatial arrangements; or could be part of a wider institutional engagement with the quality and type of learning encounters they offer. Engaging at the scale of the teaching and learning relationship is about strategic institutional change because it involves re-designing the range of encounters across the whole university, even if the resulting impacts are felt most at the small-scale and/or local level. Finally, there is considerable potential to re-think learning spaces at the scale of the pedagogic model, by exploring not only how museum, workplace and other spaces could be linked to campus-based education, but also how educational involvement in community and work-related activities can constructively blur some of the conventional boundaries about what learning in higher education is and where it happens. This, then, is the beginning of attempts at richer debate and more informed practice that can move beyond the simple binary divide of formal to informal learning space.

Biography
Dr. Jos Boys is currently Senior Research Fellow in Learning Spaces, CETLD, University of Brighton. She authors a blog at http://www.spacesforlearning.blogspot.com and is researching a book, Towards Creative Learning Spaces: re-thinking the architecture of post-compulsory education to be published by Routledge at the end of 2010. Jos trained originally as an architect but has also worked in architectural and interiors education across a range of institutions including the Architectural Association, London Metropolitan University and Birkbeck College, University of London; and as an educational technologist and developer at De Montfort University and the University of Brighton.

References
Barnett, R. (Ed) 2005 Re-Shaping the University: new relationships between research, scholarship and teaching OUP
http://www.oclc.org/research/staff/dempsey/presentations.htm (accessed 07/07/09)
Edwards, B 2000 University architecture Spon
http://exploreacademicworkplace.co.uk (accessed 02/07/09)
JISC 2006 Designing Spaces for Effective Learning
http://www.jisc.ac.uk/eli_learningspaces.html accessed 07/02/09
Learning Sciences Research Institute (LSRI) (forthcoming) A study of effective evaluation models and practices for technology supported physical learning spaces
http://www.jisc.ac.uk/whatwedo/projects/learningspaces08.aspx (accessed 09/07/09)
Melhuish, C., 2009 Pilot Study: Qualitative Evaluation of Students’ Experience of New Learning Spaces at InQbate-CETL D, Universities of Sussex
and Brighton http://www.spacesforlearning.blogspot.com (accessed 08/07/09)
Space Management Group 2008 Affordable Estate Model http://www.smg.ac.uk/the_model.html (accessed 07/07/09)
Scottish Funding Council 2006 Spaces for Learning: a review of learning spaces in higher and further education http://aleximarmot.com/research/ (accessed 07/07/09)
Wenger, E., 1998 Communities of Practice: Learning, Meaning and Identity Cambridge University Press