

When learning spaces become learning homes: applications and implications

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If we have learned anything from the extensive discussions and research related to places of learning, it is that not all learning spaces are created equal (Fisher, 2005; Johnson & Lomas, 2005). This field of research suggests that well-designed spaces result in increases in student usage and a corresponding increase in student and teacher satisfaction. Some of these learning spaces are ingeniously designed and are, therefore, adopted by students and teachers with minimal modification. Others are designed with an emphasis on flexibility – the contemporary social demands for personalisation affecting learning space design.

The University of British Columbia recently opened the Irving K. Barber Learning Centre, a multi-purpose building providing both ‘use as is’ and flexible design spaces. We quickly learned that all spaces are, to varying degrees, ‘flexible’. Students and teachers began to modify spaces from the moment they started using them. This modification process can be considered upsetting or encouraging, depending upon one’s perspective. On the one hand, the rooms were designed with a particular pedagogical intention and altering them dismisses this intention. Alternatively, modification can be considered in keeping with the strong sense of identification that students and teachers alike have developed towards the building, or as an expression of personalisation and identity.

It was these observations of the ways users were adapting learning spaces that led us to think about the difference between a learning space and a learning home. In recent discussions of ‘learning homes’ (Poole, 2008; Poole & Dawson, submitted), we have presented the concept of ‘home’ as a place with the capacity to affect identity — where others know who we are and where we go to confirm who we are. In this context, well-designed learning spaces become learning homes when we know who our students are as learners. In terms of ‘flexibility’, a learning home provides opportunities for users to shape learning spaces so that they may find identity within those spaces — in the same way that they change and shape their own residences or personal online environments.

A recent issue of *Educause Quarterly* (EQ) (2009, Volume 32, Number 1) is dedicated to the topic of learning spaces. It affords a timely opportunity for us to explore further applications and implications of the ‘learning home’ concept. Drawing on the topics raised in the EQ issue, we aim to move the concept of learning spaces towards the identity-confirming qualities associated with learning homes.

The value of observational data in learning space research

The assessment of the overall effectiveness of a learning space is difficult. By what indicators do we measure design impact? While methods such as user satisfaction surveys and student exam performance have been adopted, the use of observation as an evaluative approach has received considerable endorsement in the EQ issue. Given that an important characteristic of a learning home is how people ‘live’ in the space — from modification to adaptation — observational research is a valid and effective approach. Grummon (2009) provides a useful list of methods that can add insight into (a) contemporary student learning requirements and (b) the capacity for current available learning spaces to fulfill these requirements. Grummon’s methods include:

- asking students to send digital images of their favourite spots to study alone or with peers; having them include a description of what made the spot conducive to learning
- visiting places on campus identified through these photos at different times of day and counting the number of people using them for learning
- spending an hour in a coffee shop, dining hall, or other campus eating spot and observing how students and faculty use them for learning spaces
- establishing a Twitter feed to gather information from randomly selected students as they use the formal learning spaces on campus
- posting a survey on your campus’s Facebook site
- engaging social science courses in devising methods for gathering this information (Grummon, 2009).

The blurring of distinctions between the purposes of learning spaces

One of the observations made in the EQ issue is that students will occupy some formal learning spaces (what we might also call classrooms) for informal study if they are flexibly designed to accommodate small-group or individual study as well as class meetings (Whiteside et al, 2009). We have also observed this frequently in the Irving K. Barber Learning Centre. In fact, it is common for a teacher to have to ask a group of students to vacate a room so that a class may come in. This blurring of the distinction between the formal and the informal is very much in keeping with the concept of a learning home. Such flexibility results from viewing a building as a 'learning landscape' rather than a disjointed collection of narrowly defined spaces (Dugdale et al, 2009). Similarly, van der Blink (2009) observes a blurring of the distinction between computer lab and classroom in some of the spaces at Cornell. In our domestic homes, dining room tables become places where homework is completed and tables need to be cleared so that dinner can be served.

Flexibility for whom?

The articles in the EQ issue refer repeatedly to flexibility as a key element of effective design. The question is: flexibility for whom? The EQ issue presents flexibility in terms of the capacity for teacher modifications. Spaces are considered flexible when a teacher can break classes into small groups, put them in circles, present information on multiple projection surfaces, and so on. While this is undoubtedly an important aspect of learning space design, our observations suggest that only when students perceive this space as being flexible is its potential as an area for supporting student learning fully realised. Furniture is moved, work is displayed, portable whiteboards are coveted. Students make the spaces their homes, and evidence of learning is ubiquitous.

This is especially evident in what has been called 'transition space' — the name given to areas outside large classrooms where students gather to wait for entry (MacPhee, 2009). We have seen considerable amounts of furniture moved into these spaces by students. It is not surprising, therefore, that when Fox and Stuart (2009) created a Student Advisory Council to help with a renovation project, the students asked for mobile furniture and an easily adaptable space that — as the students describe — "morphs to my needs". Indeed, the list of essential attributes

identified by these students reads very much like those of a learning home:

- attention to aesthetics, comfort, good food and drink
- comfortable, mobile chairs and tables
- space that facilitates diligent work and breaks
- outstanding group productivity tools
- celebration of creativity through exposure to student art and projects
- occasional interruptions for fun and games
- a sense of connectedness to the space and to those in the space
- "assistance at hand when I require it" (Fox & Stuart, 2009).

The importance of ongoing research within a given space

We agree with Fox and Stuart's (2009) point that every learning space is a work in progress. This implies an iterative process — from design to use to research to redesign and so on. As we stated earlier, we believe that the design (and redesign) of learning homes requires ongoing observational research. The ethics of this work must be considered carefully, especially for methods such as video cameras. To augment our observational process, we are considering informal interview strategies in which we approach groups of students in our Centre and simply ask if they would mind telling us what they are doing. A less intrusive method uses Twitter, as Aspden and Thorpe have done at Sheffield Hallam (2009). They have asked students to 'tweet' brief messages three times per day, quickly noting where they are and what they are working on.

At Carleton College, Nixon's (2009) description of this iterative process is reminiscent of determining where walkways should go by waiting until users have worn paths into a lawn. At Georgia Tech, Fox and Stuart (2009) call this "incremental innovation".

Some concluding thoughts and a lesson for practice

We argue that learning homes attract people in the same way domestic homes do. They are designed in ways that acknowledge the needs of the learner and, at the same time, can be modified by learners to affirm their identities. We have discussed elsewhere the importance of 'icons of identity' that good learning homes feature (Poole, 2008). These are design elements that say 'you are home now' in the same way as famous landmarks or indigenous flora and fauna do.

Like domestic homes, a learning home might, through necessity, get a bit messy. You can't do good observational research on things like furniture usage if someone is constantly returning the furniture to its designated place. This messiness isn't just a test of our tolerance of disorder; it also can be problematic when certain pieces of furniture critical for a designated teaching purpose 'go walkabout' (e.g. tables in classrooms). Ultimately, observational data from the University of British Columbia indicate that the most useful implication of the learning home concept is that, when students make the conversion from 'learning space' to 'learning home', they'll show up more – both physically and cognitively. We believe this also applies to virtual homes when students are given the opportunity to modify online space. It becomes our job as educators to help students make use of this time to engage deeply with their learning and identify positively with the place they call their learning home.

The main lesson for practice that emerges for us from our experience and reading of this literature is that all learning spaces must allow their occupants the opportunity to personalise them to some degree. Teachers, as well as designers of spaces, learn a great deal by observing these attempts at personalisation.

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