The Proof Is In The Pudding!

What user-research is telling us about value-for-money school buildings.

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I'm a teacher, but for quite a while now, also a researcher into what makes innovative learning environments innovative. I'm concerned with how we build schools that actually improve students' schooling experiences. In collaboration with my architecture colleagues I have occupied that slippery ground where the ephemeral nature of pedagogy meets the pragmatic nature of 'quality design'. While part of this work explores the characteristics that make good school designs, increasingly it is looking at what is left well after the builders and designers and procurement teams have moved out. Our work as researchers has evolved into two interrelated foci – how do we assess the impact of school design on student learning experiences?, and how do we use this information to assist teachers use the myriad of affordances a good design holds, to improve their pedagogy? I'll deal with these separately.

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Traditionally the evaluation of a school design has been the prerogative of procurement teams and architects who employ a post-occupancy evaluation (POE) model to buildings they have commissioned and created. It is a worthwhile practice; it acquits spending and informs improvements in later builds. POEs have focused mainly on what we call 'building performance' variables such as traffic flow, acoustics, air quality, material performance and the like. APOE is driven by the question, is the building providing what we paid for? However in recent years, groups like our LEaRN team at the University of Melbourne have been developing increasingly sophisticated ways to evaluate the building in terms of something more; the actual practices within those spaces. We are focusing on the alignment of design and pedagogy, and the key question we often address is "how does this learning environment meet the education vision and priorities of its users?" The POE approach focuses on how the building meets the design parameters and building standards set by the client's procurement teams. The second approach focuses on the long-term impact of the space on student learning. A POE gives fast feedback on measurable items, whereas the second approach takes time, and deals with issues that are hard to quantify. Thus, such evaluations are rarely commissioned. Yet logically, the latter is the only evaluation that actually matters; the only reason for the existence of a school building is to facilitate good student learning. While POEs are a sensible component of the commissioning process, the actual measure that matters, the assessment that validates our spending is how the

POEs have their place in the commissioning process but the measure that matters is how a building performs educationally.

buildings perform educationally. Actual value-for-money lies in the degree to which a building facilitates (or detracts from) improved student learning.

This leads me to my second point. POEs can be misused; the educational impact of a building is not measurable immediately, it occurs through many years of operation. While the conceptualisation, design and build of a new school can be difficult, it is quite speedy compared to how long it takes users to learn how to make the most of what the building offers educationally. This is typical of education; it takes months, even years for most initiatives to be represented in tangible, measurable results, yet we often conflate or treat as synonymous the terms 'occupation' and 'inhabitation'. To look at one is not to look at the other. Our team's research sees the former as the immediate action of moving into a new space; a period of excitement with glossy new spaces and other improvements to our daily living, but these are quickly made normal and fade into reality. The latter, inhabitation, is the long-term state of us having adapted our own living to suit this different physical environment; and the reverse – the site being modified, changed, adapted to our only needs. POEs give evidence of immediate building performance but little that informs our true mandate – to improve through good design, students' educational experiences. Evaluations that focus on inhabitation are concerned with sustainable improvement beyond the halo effect of a new space. While POEs provide evidence of value for money at the 'occupancy' stage, it takes an inhabitation perspective to determine whether the building is, in reality, a good investment.

How do we ensure our designs improve educational outcomes? Research by teams like ours are finding a correlation between 'good use' of spaces and early user participation in the design process. Approximately one quarter of learning spaces in Australia and New Zealand are now innovative learning environments . Of those, cluster analysis identifies those that are deemed 'successful' pedagogically, with active participation of the teacher and leadership team in the design process being one common characteristic. Others include prototyping spaces using the proposed designs, and professional learning based on proposed designs. In other words, the 'hand over and hope' practice, where procurement teams develop schools with little active involvement of eventual users, are those investments that are less effective in the long term.

Research that evaluates how buildings perform educationally is starting to provide useful roadmaps for education policy, procurement, design, and school leadership teams. Guiding principles are first, the true measure regarding 'good investment' in a learning environment is its performance over time. Second, there is a huge difference between 'occupation' and 'inhabitation'; success in the former is easily achieved, the latter has to be earned. Third, research is beginning to show that a common characteristic of 'successful investment' is users' active participation in new schools' conceptualization and design.

Wesley Imms will be speaking at Education Estates

Teachers and leadership team involvement in the design process is crucial to a building's success educationally in its inhabitation by users.