

Building for the future



This image is taken from the government book *Exemplar Designs*, which includes architects' ideas about the sorts of buildings which can be built on different types of sites. It shows an atrium with alternative learning environments.

EVERYONE LIKES a bright new building; at least in preference to one that is dirty, half broken with tired inadequate facilities.

To this extent the argument for a new school is a no-brainer, and the challenge for the design team in providing something that better meets modern requirements is not particularly testing.

But add to this the fact that the chance to create a new campus is a once in a lifetime opportunity, that the beneficial effect of change in itself is quick to fade, and that ideas about learning and teaching are being constantly updated, and the task of thinking about one's building and where one's scarce resources might be deployed becomes much more tricky.

One might even say that the task was daunting. However, design should and can be fun – especially the challenge of creating a new vision for learning.

But are we getting the best out of this process just now? Many exciting new schools, colleges and university buildings are currently being built, but are they as good as they ought to be, and is sufficient thought being given to the challenge being offered us?

The process of school provision is largely pre-determined by the way in which public funding is made available. In the past this has been via horrendously simplistic formulae of what was considered "usable" or "unusable" space.

Until all too recently the formulae for providing funding was based on this simple definition: Classroom space is usable and non-classroom space is unusable.

More recently, funding through the process of PFI (private finance initiatives) has given this a slightly different commercial twist, but has reinforced, if anything, notions of efficiency and cost effectiveness.

And breaking out of PFI and starting to develop more enlightened ideas of what might constitute "usable" spaces, the process is still complex and bureaucratically remote. It is easy therefore to be cynical even before the process has started.

Let us step back, however, and imagine a situation where adequate resources did actually exist, and where the objective of wanting to stimulate young minds was not forgotten. A situation where the process of creative design – objectives leading to options to new ideas to refinement and testing – was actually allowed to occur.

Such a situation starts with the creation of a vision, and now is a particularly exciting time to be designing new schools, colleges and universities. There are radical ideas abroad, born out of advances in technology which are causing us to re-think the whole process of learning and thereby the very shape of our learning campuses.

The vision sees a time and an environment where learning can be fun, where the focus does not have to be on the process-oriented notion of "teaching" – of imparting knowledge on a volume basis.



Are we getting the best out of our new educational buildings? Is the endless call for the 'wow' factor a little over simplistic, and do we have to dig a little deeper to get something that is both practical and innovative? Architect **Hugh Anderson** discusses

A world where the emphasis does not have to be on discipline and order (as it was in those 19th century board schools, not uncoincidentally modelled on penitentiaries), but on "learning", where students can access information in their own time and in their own way, and where designers can talk about stimulating environments being the context for stimulating thought.

It is a heady time, and one where the objectives of pedagogues appear to coincide fortuitously – but also dangerously – with funders, and the key issues are as follows:

- Computers and the spawning devices that go with them now mean that information is everywhere and accessible by everyone in their own time and in their own manner.
- The classroom with the one-size-fits-all monologue from the person at the front is no longer. Enter "self-directed learning", where students can work at their own pace (often with wonderfully crafted learning materials), where "group" or "seminar" working allows for an exchange of views and the notion of "conversational" learning.
- Instead of classrooms with their inefficiency (standing locked and idle when not actually in use) and inflexibility, we can now make use of large open-plan, flexible spaces and more of those previously "unusable" circulation spaces.
- We can actually reduce on the total amount of space required and improve percentages of utilisation and efficiency.
- Supposedly we can create greater flexibility and (bonus of all bonuses) we can do so in large, naturally ventilated, sustainable spaces.

Under the old formulae of "classroom space is usable and non-classroom space is unusable", refectory spaces, libraries, and so on were fundable but between them there were only corridors, reduced in size and arrangement to comply minimally with logistics and building regulations.

While students did outside the classroom was not exactly irrelevant, but at least in terms of accessing and absorbing knowledge, massively secondary. Now this equation is being turned on its head.

In further education colleges and universities, "self-directed learning space" and "social learning space" is where the buzz of the educational experience is now focused and where funding is able to follow.

Guidance and teacher support is still required but on an individualised, increasingly informal basis – at least as much as resources allow.

The situation sounds almost too good to be true, and thanks to the interpretations of our procurement processes, this is unfortunately what is often the case. We are able to create a great vision, we can develop notions of space use and a new learning process which all have considerable validity, but we run the danger of short-circuiting what is needed to refine this new design and pedagogic approach.

The new learning environment becomes summarised in that all too frequent call to provide the "wow" factor. This is indeed a wonderful challenge, and one normally leapt on by architects and designers. It is perhaps unusual therefore for the architectural profession to be raising the warning signs with respect to this existing new climate of campus change.

"Wow" factor is not wrong. The term is possibly overused, but spaces that can inspire and provide a psychological boost to both teachers and students disillusioned by a crumbling estate must be a good thing. What is dangerous is the over simplicity of this magic wand in dealing with what is still a complex process, limited in its management resources.

The new learning pedagogy recognises that we all learn differently, through a variety of means. Ironically the new learning environment can replace the old "one-size-fits-all" with something equally limiting.

The limitations can come in the form of the new open plan "wow" spaces coupled with their current need to be naturally ventilated and lit. These spaces, for all their professions towards flexibility, can in fact be singularly inflexible, at least if not carefully thought through by architect and user.

If different students learn differently there is a need to provide a variety of different types of learning environment – spaces for reflection, for interaction or practical application – big spaces, small spaces, lively

spaces, cosy spaces. This is a complex task calling for a careful overall space strategy, and thereafter a process of testing and gradual evolution that takes time and needs to be done in conjunction with the actual space users.

It is a process which calls for an understanding of how fit-out and furniture elements need to combine with the larger spaces and their advantages of openness, interaction and free air movement. It also requires an understanding of what exactly constitutes manageability, privacy or lack of disturbance.

Elements of a successful solution can be drawn from the design and management of offices. Here, technology has already had a radical effect on how people work, and both designers and users have gone far in the last 20 years (much further than educational institutions) in developing ways of using large spaces in complex ways to meet the compound manner in which we increasingly need to work.

If the analogy is right, it tells of the many and subtle ways in which potentially conflicting activities can be allowed to take place in a single space; it also tells of the inextricable link between designer and user, between the arrangement of space and the management of this space.

This is a link which is at its infancy in the design of educational buildings, for many intractable reasons of size, procurement route and funding, but to the detriment of school and college design all the same.

Interesting solutions are undoubtedly starting to emerge in educational design, but much of the time they are still conventional, albeit dressed up in bright new colours and fresh materials.

In other instances one fears that the departure from the institutional formulae has been insufficiently thought through, and that a reactionary response might sadly set back the process of evolution.

Just now, the way in which young people have taken to new technology, are accessing information from anywhere in the world and absorbing it, and in the process developing a confidence that was unknown just 10 years ago, is extraordinary.

This change in attitude must be allowed to have its impact on the schools of the future. Not to take notice of this in the re-thinking of our learning environments, or just to translate it into bright colours and open spaces would be little short of criminal.

For progress to occur time and opportunity must be made available for serious interaction between users and the design team.

Unless teachers stand up for this the limitations of the procurement process will take over and win once again.

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