Making best use of innovative learning environments

Innovative Learning Environments (ILEs) are defined by the Ministry of Education as a ‘physical, social and pedagogical context’ that is capable of evolving and adapting as educational practices evolve and change.

What’s really important about this definition is that the physical environment is only one component of it. The wider socio-cultural and pedagogical environment is just as important as the physical elements. Like most things in education, our decision-making should be guided by our vision and values, not what is convenient, what is on ‘sale’ or what others are doing.

To answer the question of where ILEs have come from, it’s helpful to see their evolution running in parallel with a growing awareness of the importance of learner agency and life-long learning. Many of the newer schools and classroom blocks built from the late 1990s onwards show the emergence of ILE-style elements: different sized spaces to support different ways of teaching and learning; increased flexibility made possible by features such as sliding doors; and more glazing between spaces to create open and light spaces that can be indirectly supervised.

For many schools a move toward ILEs comes as a response to a growing desire to use as many different tools as possible to meet individual learning needs, and also a growing questioning of the idea that learning is always best when it is organised around a single teacher, a single space and a single group of 25 or 30 learners.

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In the New Zealand curriculum, a lot of our current classroom spaces prevent teachers from collaborating with each other: there’s often a timber wall between them. So the environment is ‘teaching’ children that grown-ups don’t collaborate much. Nothing could be farther from the truth, but many of our current teaching spaces were built in another era, when collaboration wasn’t so important.

How are ILEs being used?

For many schools the potential of ILEs lies in two key areas:

- Co-teaching, where two or more teachers can plan, teach and evaluate together.

Co-teaching research suggests that when two or more teachers work together, with the right culture and processes in place, the quality of their teaching goes up. This makes sense when we think about the sustained, ongoing access to professional practice that we have when we teach alongside someone else. The shared- and collaborative-problem that is possible when more than one educator is in the room is also a real advantage of co-teaching and ILEs.

What’s been interesting to observe during the past few years is the number of schools that are embarking on co-teaching even when the spaces are not ILEs.

In many schools, teachers in separate side-by-side classrooms are planning and teaching together using traditional classrooms as different zones: one teacher-led and one student-led for instance.

- Varied and purposeful spaces to meet learner needs

A learning environment that consists entirely of desks and chairs facing the front would work perfectly if everyone learned equally well using this mode of instruction.
However, the emerging evidence from neuroscience is showing that variability in learning is the rule, not the exception. For some learners, reading and thinking works best in some situations; for others it might be analysing a diagram of playing with a model. What often transpires is that learners may need several different modes of learning at different stages, depending on what they are trying to achieve. ILEs try to offer the kind of variety of spaces this kind of personalised approach to learning requires.

Do they work for everyone?

While we know that existing classroom arrangements don’t work for all learners (we’ve got lots of research showing this), when designing an innovative learning environment, it’s very important to ensure we don’t just end up with the same outcomes as we currently have: schools working well for some learners and not for others.

One approach advocated by CORE Education, that many schools are using to avoid this outcome is Universal Design for Learning (UDL). UDL begins with the learner and seeks in them all their strengths, interests and talents, then asks, “What barriers might exist to prevent them putting these strengths to work in their learning?” For some it will be that they have a razor-sharp brain but might not be able to see the whiteboard because of impaired vision (barrier); for others it might be that they express themselves best orally, but they are often assessed in class using only written evidence (barrier); others might find activity and conversation disruptive to their processing (barrier) and prefer spaces with lower levels of activity.

Identifying these barriers is the first step towards developing universal solutions, which may include the environment: a learner who struggles with ASD and anxiety, particularly when surrounded by larger numbers of other people, should have the ability to work near a support figure such as their teacher or to move into a smaller breakout area in order to decrease that anxiety. A learner who is still developing their self-monitoring skills should be able to develop ability to work autonomously while still being passively supervised by one or more teachers through a glass sliding door or partition. A learner who prefers to stand up while listening to a teacher or other students should be able to work at a standing table as well as sit down when they need to. When it comes to acoustics, many researchers like Kenn Fisher advocate having three acoustic zones (quiet, conversational, and active) in a learning environment to ensure any learner who needs quiet can find it, and any learner who needs to talk or be a bit noisier in their learning can find somewhere to do so too. In an existing classroom, these two groups of learners would be trying to achieve quite different outcomes in the same acoustic zone. Researchers have also found that the quality of the acoustics in a learning environment can have an impact on learning. They have found that it is the quality of the acoustics rather than the total amount of noise that has the greatest impact on learning, given that in a space with poor acoustics, even a small amount of noise can disrupt learning and cause people to become stressed.

A second approach advocated by CORE Education and used by a number of school is culturally-responsive practice. Tatako - cultural competences for teachers of Māori learners holds a number of very important concepts that are equally useful for designing learning environments as teaching and learning experiences:

Ako

Where can learners come together to learn from and with each other? Does furniture support it? Are there enough writable surfaces for all learners to be teachers and vice-versa?

Whanaungatanga

How does the environment foster the deepening of relationships and a sense of belonging and connection? Can converencing and group work take place equally successfully?

Tangata Whenuatanga

Does the indoor and outdoor environment reflect who we are as a community, the story of this land and the people who have been here for hundreds of years? Does the environment also welcome others (tangata whenua) to be part of the learning taking place in this kura or school?

How does the environment invite partnership and ‘the village’ to be part of the raising of the children? What expertise exists in your community and how can you use it in learning?

Manakatanga

Does the learning environment allow all learners to use their strengths, and to be rewarded and recognised for these strengths? If a learner is best by discussing and debating, are they able to do this without impacting on those who learn best by building and making, or those who learn best by thinking and writing? Does the environment show off these skills and talents equally?

Wananga

In what ways does the space support larger groups of people to come together to engage in problem-solving, celebration and innovation? Gathering and meeting places are important for community, but also important for togetherness. Can a group of more than 25 get together easily and often in order to be something “greater than the sum of the parts”?

Conclusion

These two approaches inclusive education (through universal design for learning) and culturally responsive practice offer a couple of approaches to ensure that the design of innovative learning environments are in line with our vision and values, and put the needs of our learners at the centre of everything we do.

The key question is not ‘can this child adapt to my learning environment?’ It’s ‘can my learning environment adapt to this child?’

By Mark Osborne, Senior Advisor, CORE Education

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