Designing collaborative learning spaces that support digital at Massey University

There is no doubt learning is changing. New technologies – such as interactive whiteboards, mobile and high quality digital learning resources – are transforming the experiences and ambitions of learners.

In response to the evolving digital environment, the last decade has seen institutions across the New Zealand higher education sector creating and designing innovative spaces that support flexible teaching and learning, in a bid to improve learning outcomes, enhance digital literacy and optimize the student experience.

With the Ministry of Education recently reporting that approximately 90 per cent of New Zealand’s educational institutions are currently exploring the direct correlation between space and technology, it appears many universities are already realizing the benefits new learning styles, supported by good space design, can provide.

For Massey University, the concept of ‘new generation learning’ is not new. The University has for over fifty years been New Zealand’s leading distance provider of higher education and has kept pace with innovation, shifting from traditional learning modes through to a sophisticated digital platform. Since 2008, the University has been actively future-proofing its buildings to better engage students, staff and visitors through the use of innovative space design, along with technologically enabled pedagogies.

And while the journey so far has not been without challenges, the transition to new innovative learning spaces has been very popular among students from all academic disciplines, with an impressive 90 per cent satisfaction rate.

Ahead of New Generation Learning 2016, we caught up with Professor Giselle Byrnes, Assistant Vice-Chancellor Research, Academic and Enterprise at Massey University, to find out how the University is creating learning environments that inspire and engage students, the tools they are using to align space with digital technology and the results that have been realized in terms of learning outcomes and student engagement.

Taking a multi-disciplinary approach to revamping learning environments

“Over the past eight years, Massey has rolled-out a number of flexible learning environments, transitioning from large fixed seating to large flat floor collaborative spaces. We have transformed
spaces that incorporate traditional learning environments to incorporate new elements of design, like tiered seating, where appropriate, and movable furniture. These kinds of spaces allow for more collaborative learning and more facilitated engagement to occur.”

“We have taken a multi-disciplinary approach to revamping our environment, particularly in the business school and veterinary science teaching spaces. Our focus here has been on the delivery type rather than what a specific discipline needs. We’re trying to be flexible in our approach to cater for different learning types. For example, in the business discipline there is more emphasis on dialogue, analysis and group work than there is typically in veterinary science and other laboratory-based subjects. It’s important to factor these requirements in during the design phase, both in terms of learning space and curriculum planning.

All of our large entry level programs also adopt a collaborative form of teaching, through the use of problem based learning, which as a format lends itself to the need to have co-working, collaborative spaces. We’re trying to accommodate on-campus dialogue amongst groups of students in the teaching space design, as well as providing digital spaces for collaboration to occur among our large cohort of online students.

Because we are a large online provider, we consider it vital to facilitate online collaboration through our learning management system so that every Massey University student – whether studying on campus, online or in a blended mode - has an equivalent learning experience.”

**Aligning space with digital technology**

“Every one of our refurbishments or new builds in terms incorporates digital learning in the space design.

For example, we have collaborative software tools that have been included in the design, so that any device can log onto the software app that is available in the space and project onto the screens in the room. These screens can be on all walls, not just one wall, which allows for students to bring their own devices and use the resources for self-directed learning.

As a multi-campus institution, we also have a need for our classes to work in conjunction with each other. For example, a cohort of students from one location will need to connect with a cohort of students from another. So we need the software solutions to allow that to happen and Adobe Connect is the main tool we are using to achieve this collaboration.
We also have a video link teaching project we are investing in, at both our Manawatu (Palmerston North) and Auckland (Albany) campuses. The rooms in these two campuses are identical – the students are in a virtual classroom and communicate completely as if they are in the same room. This is innovative and there has been strong support for this kind of teaching, both from the students and the teachers.

Our rich media project is another area where we are continuing to invest. Over the last two years we have invested considerably in installing lecture capture software and hardware across all of our campuses. This has given us the ability to allow students to engage either in real-time out of the classroom or participate in personalised viewing options through Stream (our online learning system or LMS). This has allowed students to connect with the lecture in real-time or post-lecture and has very positive impacts for both distance learners and our on-campus students.”

**Transforming the roles between students and staff: moving away from institutional to constructional learning**

“The most graphic example of constructional learning is the conversion of old fashioned spaces – such as immovable tables and chairs in a tiered lecture theatre – to flat floor spaces. These new spaces provide much more flexibility as they allow greater emphasis on dialogue around collaborative and cooperative learning. This also means there is less emphasis on the lecturer as the disseminator of information and more emphasis on the teacher being the facilitator and curator of learning.

Many of our lecturers are also engaging with flipped classroom principles. For example, the lecture or the tutorial (or the ‘lectorial’ as these modes of teaching and engagement blend into one another) is a space where the teacher and students come together to interrogate ideas, primarily on the basis that the students have been, with guidance from their teacher, accessing the content outside of the formal lecture class. Content is still delivered during class, but there is greater emphasis on the analysis, interpretation and critique of the work during the contact class time.

There has also been a shift where the lecturer is no longer the didactic teacher, or ‘sage on the stage’ and has become more of a facilitator and coordinator of learning – more of a ‘guide on the side’. In fact, the best teachers we have at Massey University describe their role as being ‘partners with the students on their learning journey.’

The spaces at Massey University reflect this pedagogical shift and we are also using technology to facilitate this shift. Technology has enabled a much more disruptive structure of a lecture – for example,
if you have screens on every wall you can pull up online clips easily and you might have the ability to connect with students in another location. It’s much more interactive and engaging than the traditional 50 minute lecture.”

**Ensuring staff are on board with new teaching and learning styles**

“It is important to provide staff with sufficient support and development when rolling out new learning technology and designing spaces to support engaged learning. We have done this by having a strong academic development program to ensure staff feel supported. This program is also presented as part of their professional development and engagement.

We very much value teaching at Massey University, given that (along with research) it is one of the core types of work undertaken by our research-active academics. We reflect these values in our promotions policy and the ways in which staff are recognized and rewarded for their teaching quality and innovation, as well as providing supportive academic development.

For example, we run courses from the centre of the university around teaching development and design and are always looking for good ways to push our new ideas around best practice and peer-to-peer. It is important to ensure staff feel that innovative and new ways of teaching are supported by the University.

The new approach to learning can also be potentially a little threatening to the traditional role of the lecturer and the professional identity of the university academic, but the academic still has a very important role in the process: to guide, advise and co-construct the learning experience. In essence, there will always be a role for the teacher, but new learning spaces and technology makes learning more of a mutual discovery process.”

*Interested in learning more?*

Join Giselle at [New Generation Learning New Zealand 2016](#), where she will further explore Massey’s success and the following:

- How can we create learning environments that serve to inspire and engage our students and staff?
- The move from “instructional” teaching to “constructional” teaching, and how has this changed teacher and student roles
- Why do we need to align space design with digital technology?

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• The innovative design and refresh of programs within an LMS and virtual learning environment
• Tailoring spaces and technology to suit teachers and their preferred pedagogies
• Providing adequate professional development and realigning pedagogical practice to optimize learning and teaching

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