

Speaker

Right, so what I'll do is just to give you a quick overview of the OLT project we've been working on Business simulations because we've got a lot more time after morning tea to unpack all of this, and some of you might be ready for a cup of coffee. So we'll just whip through this fairly quickly.

I just want to acknowledge that this particular project, like Liz and Janice's project involves a whole suite of different people from a range of institutions, some of whom are here today hovering around the back of the room. But it's been really exciting working with this project team from La Trobe University, Paul who was at Victoria University previously but now at William Angliss bringing a new perspective from the non-public university system, we've got some team members from the University of South Australia, and some team members from Griffith as well, so it's been really enjoyable to do this project on simulations, to look at how they work in these different university settings.

We started this project with the notion that there were a number of challenges in Business education, and more now after the conversation we had this morning. But these are some of the things that concerned us about Business education; one of them was that Business schools are often the largest, or one of the largest schools in most universities, and programmes particularly in Business and Commerce have large numbers of students, and these large cohorts create some challenges for us in terms of how we turn some of the theory into practice, or allow students to practice and reflect on their own capabilities.

Another issue, another challenge for us I think in Business is that we tend to use a lot of different types of assessments that are not always particularly effective at developing these business capabilities or managerial skills, and I can count on several hands the number of colleagues who set students reports or essays to write, which are good for developing particular sets of skills but they are also quite limited in developing other types of business capabilities or skills, and they're not very dynamic. It's not uncommon for a student to go through a Business degree at some point to be asked to do a strategic plan or a business plan or a marketing plan, and that's also a useful learning exercise. The limitation with that is that the student doesn't get to implement that plan to then see how a business would perform in response to that plan. We've heard some comments about case studies from the front here which was very helpful as well. Case studies have a couple of problems; one is that some of them date very quickly, some are not very detailed, and even the good ones, students respond to the case study perhaps with a plan or a set of recommendations and like the planning type documents you then don't get any kind of feedback apart from the feedback that you might get from you lecturer about how the business then goes on to perform as a result of those recommendations.

Work integrated learning is becoming more common in Business, certainly more so in some universities than others. In some places it is now a core expectation, and certainly that is good for conditioning students to the workplace and helping them understand the work and preparing them for that transition to work, and I'm a big fan of work integrated learning. But I think there are also some limitations and we've heard some of those this morning around the quality of some of the experiences that our students have; there's a lot of variability. Some of our students have fantastic experiences and others have very ordinary experiences that don't really allow them to apply what they've learnt at that advanced undergraduate or even Masters level.

We also have a lot of exams in Business; they seem to be particularly common in Economics and Accounting. They are effective at testing knowledge in a lot of cases, but not at developing skills. And MOOCs, new kid on the block I guess, I was at the ascilite conference in New Zealand last week where there was still quite a lot of conversation about MOOCs, but the conversation now has turned from one of optimism to a more critical perspective on what MOOCs can actually do for us, and some very interesting statistics about who actually does MOOCs and the features of people who complete them. And having done a couple myself as a student through Open Universities Australia, because I was curious about what they could do, my assessment is that they are good at developing knowledge but like exams, not particularly good at developing skills. So there are a number of limitations around some of the types of assessments and pedagogies that we might use.

So our question is about how we can provide large cohorts of students with an experience where they can sharpen their managerial skills through regular feedback.

Just a little bit of theory to set the context here; I'm a big fan of Jan Herrington's work. Jan Herrington's at Murdoch University. I would say that she's the world leader in authentic learning in digital environments. She specialises in these technology digital environments and how they can provide authentic learning experiences. And she's developed this really nice model; if you type in "Herrington, authentic learning" and you'll come across her website; she's got a lovely website where she unpacks a lot of her ideas around authentic learning. She also has lots of books, but the website's pretty good. She argues that the authenticity experiences we can give students can be mapped on a matrix. So in this matrix we have an academic setting and a real setting, a decontextualized setting, and an authentic setting. So she argues that we can have academic tasks in academic settings, and I guess those are the traditional types of assessments that we would run with students like exams, essays, I would put MOOCs in that category. She then talks about academic tasks in real settings, so we might send students out to do an observational study or we might take them on a field visit, we might get them to complete worksheets outside of the university setting. But they are still academic tasks. Then we have at the bottom there authentic settings, real tasks in academic settings, and this is where I feel simulations, things like problem-based learning and case studies and scenarios fit in, and then real tasks and real settings, all the work integrated learning and placement stuff, and service learning and so on. So that's useful just for positioning the work that we're doing in simulations where we think they fit in.

Our view is that simulations are not the bees knees and be-all and end-all of Business education; they are part of a tapestry of different assessment, authentic assessment experiences that we should be providing to students.

This is the learning pyramid; this is a bit of pop ed theory. I've seen very little evidence for this, but it's a useful framework just for making the point that the passive experiences with your students like lectures, watching videos, doing demonstrations, result in less learning, and the more active experiences where we ask students to discuss things, where we ask them to practice by doing something or where we get them to teach others how to do something are much more likely to result in information retention. Simulations, I think, fit into this kind of 75% band; get them to practice by doing something. So the work that we're doing fits into this broader field of simulations and to help visualise it I've put together a bit of a hierarchy. Business simulations broadly can be broken down into physical simulations and virtual simulations. Some Business schools run really effective real simulations in the classrooms through role plays, acting, and scenarios that are given to students. We're not particularly interested in those for this project; we had to set the scope at some level. We're interested in the virtual simulations, but when you unpack that there are also quite a few different types of virtual simulations. Some of them are software-based, then you have to mess around with the IT guys at your university to get them installed in a lab, you have to then be able to get students into the lab in a way that fits into the timetable; too hard as far as I'm concerned, too difficult, which is why we focused on online simulations. Most of these online simulations are browser-based, so you're able to access them on a tablet, a Mac, a PC. You can access them anywhere you have an internet connection. So the constraints that you have around labs and software installations are much reduced. I'm not saying there are no technical problems, because there sometimes are technical problems, but that's much reduced. And then within that grouping some of the simulations are 3D virtual learning environments similar to the kind of second life experience, and others are more data centred. So students interact with the simulation through a series of menus, buttons, and their decisions are put in through a menu system, and the outcomes are presented as data such as balance sheets, profit and loss statements, employee satisfaction scores and so on. So we are interested mostly in these data centred simulations. There are many of them on the market; our project was not about creating a new simulation, it was about how we could use the many that are available in the marketplace to help students learn, and we're interested in the pedagogy in the assessment that people then use around those simulations. And for those of you that like definitions, typically these simulations are complex simulations designed to teach things like strategy, competitor analysis, finance, marketing, human resources, the cross-functional alignment between a lot of those areas, and the selection of tactics and strategies to build a successful business. So most of them require students to build a virtual business, whether it's a bike shop as Mike's Bikes does, a café, an airline, a hotel, a manufacturing business which is what Capsim does; they all require students to run a business, sometimes competitively with other students in the class.

So these are the sorts of simulations that we've been studying. A couple of examples, that's a screenshot from Capsim Captstone, Markstrat which is obviously focused on

marketing, this is one from [Hots 0:12:09.8] which is a hotel simulation, this is one that [0:12:12.7] will demonstrate later this afternoon which is an airline management simulation just to give you a bit of a flavour for some of the different products in the marketplace. I should say that as part of our project we're developing a listing of all of these simulations; it's one of the resources we would like to provide to people who are thinking of introducing simulations into their programmes, and that listing is on our website.

So the aims of the project are pretty straight forward; we wanted to map what was out there. The biggest challenge, when you set out, you make the decision, "Yes, I'm going to have a simulation in my course," is you start searching the web and there are very few resources to support you in your decision-making, and that's one of the main reasons for this particular project is to develop that resource base through our website to make it easier for people to select and implement a simulation. So to do that we wanted to do an audit and we are aware of about 30 simulations, commercial packages in the marketplace. Some universities like Wollongong have created their own because the commercial packages don't meet all of their needs. So there are many out there, and still the project's been running for a year, still every other week I get an email from something saying, "Hey, have you heard about this simulation?" So there's another one to add to the list. So we're in the process of doing a more detailed mapping of the more popular simulations at the moment to help people with their decision-making.

We also want to evaluate the contribution of simulation pedagogies to student learning outcomes, and I'll talk about how we do that after morning tea. But we want to understand what it is that students learn from simulations, to identify and promote the more innovative pedagogies and resources that people use, and we are doing that by developing case studies, quite detailed case studies that you can have a look at on our website, and to understand some of the challenges of using these online simulations in a higher education environment.

So we've developed a range of resources and I'll drill down into some of these in a bit more detail after morning tea, but the simulations audit is really the A to Z listing of the simulations that we are aware of. To try and understand what students are learning from simulations we have developed an instrument called the Simulations Learning Barometer, and there is quite a heavy theoretical construct sitting behind that barometer, but it's essentially an instrument that students fill out at the start of the semester and at the end of the semester to try and measure their perceptions of whether they've further developed skills in particular areas, knowledge in some of the major areas of Business, there are questions around teamwork and collaboration, self-efficacy, student motivation, engagement; there's a whole package of different questions and I'll talk more about that after morning tea.

Towards the end of the project, which will be about the middle of next year, we will finish up the Good Practice Guide. The Good Practice Guide draws together many of the things I'm going to talk today with you about, and also pulls together a number of the threads across the different case studies that we've been developing, so it's a resource

that people can pick up and say, “Well, if you’re implementing a simulation here are some of the things you might want to think about, and here is where you go for resources, and here are some ideas for assessment, here are some ideas of what you need to do for students in the classroom to support them through that whole process.” So that’s the purpose of the Good Practice Guide. All of it is on the website, as it is with Liz’s project, the Capstone website, and it’s a resource that will be there long after the life of the project and the workshops, what we’re doing now. So the website is quite detailed, the case studies as you can see sometimes include resources like marking rubrics which we’re happy for people to download and adapt and modify for their own use. There will be a video with each case study so you can hear from the educator about how they’re using their simulation as they’re also in some cases assessment guidelines which would be the guidelines you would give to students, the instructions you give to students.