Using an online simulation tool for remote teaching of strategy and strategic decision

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Abstract

This case study explores the use of an online simulation tool used to teach strategy and strategic decision making to Executive MBA students in the School of Business and Economics (SBE). The tool was used during the timetabled remote teaching element of the level 7 module to provide a practical orientated experience for students.

1. Background

Simulation and game-based methods have been used to teach business concepts in SBE mainly at an undergraduate level. Previously in SBE, business strategy simulations have been run in the classroom with students guided face to face through online tasks by an academic member of staff and an external facilitator who leads the session. This paper describes the use of a strategy simulation tool for a part time Executive MBA online module and shares experiences of the module leader and the facilitator in using this method for remote teaching and learning.

Leading the organisation: Strategy, Governance and Markets is a level 7 module taught to Executive MBA students. For the 2019 version of the module, it was decided to incorporate SimVenture Evolution, a web-based business strategy simulation, in the classroom element of the module to give students experience of practice based strategic decision making and its consequences. Due to the Covid-19 pandemic, the face to face element of the module was transferred online (see Fig 1, Day 1-3) and delivered as a mixture of pre-recorded lectures, live mini lectures and online discussion using the Adobe Connect platform. As previously planned, we included the simulation workshop on Day 2 of the timetabled remote teaching sessions with the external facilitator running the workshop remotely with assistance from the module leader.

Fig 1. Online version of module – cohort size 10 students

Online content	Day 1	Day 2	Day 3
Completed in student's own time prior to the timetabled sessions	Timetabled remote teaching Pre-recorded lectures; discussion sessions	Timetabled remote teaching Simulation workshop with scheduled discussion points throughout the day	Timetabled remote teaching Pre-recorded lectures; discussion sessions; live mini teaching sessions

SimVenture Evolution demonstrates the implications of business strategy and decision making and allows students to work in teams in a challenging and competitive environment. The simulation allows users to manage and attempt to grow a business and deal with key decisions an organisation would face. Evolution is web-based and the facilitator and academic have access to a control tower to monitor the activity of participants.

The module leader (Dr Julie Holland) had three planning meetings with SimVenture's facilitator (Paul Brough Jones) to discuss the overall module content. A bespoke scenario was written for the module to address specific Intended Learning Outcomes (see Section 3). While this pre-course preparation was more costly than just procuring a SimVenture workshop, the scenario written for the activity will be used for similar strategy modules that will run in the future on this and other Loughborough programmes. The ethos of plan once, deliver many times was at the forefront of our minds when planning this online module.

2. Methodology

Although Adobe Connect was used as the primary platform for remote teaching on Days 1 and 3, Microsoft Teams was used to run the simulation workshop. A trial run had indicated that being able to see the students was needed to encourage more verbal discussion between participants.

Microsoft Teams was also the preferred platform for the simulation facilitator who is external to the University.

Students were asked to consider the theoretical aspects of strategy and risk taking while taking part in the simulation and sessions were planned during the day to gather feedback and discuss how practice relates to theory.

The external facilitator took students through the simulation allowing them to familiarise themselves with the tool at their own pace (activity 1). Students then completed a practice simulation in teams (activity 2) in which the game could be reset, and decisions remade. Finally, teams completed a competitive activity (activity 3) that did not allow them to reverse their strategic decisions.

Students were brought back to the Microsoft Teams platform at scheduled times to discuss their experiences and to ask questions. The Microsoft Teams meeting was left open for the whole day so that the facilitator and module leader could talk to one another and students could drop in throughout the day to seek advice.

3. Issues

Evidence that intended specific ILOs are met

When using a new teaching method for the first time, it is often difficult to anticipate whether specific Intended Learning Outcomes (ILOs) will be met. Planning meetings with the simulation provider resulted in an appropriate business scenario which aligned with the module content and addressed the following ILOs:

1. Select and use appropriate investigative and research skills, analysing data to make effective decisions (relating to strategy and risk taking)
2. Analyse the multiplicity of factors and inter-relationships that make up a complex scenario

From student feedback, we were confident that these specific ILOs were met. We were able to observe from the simulation control tower, students using investigative and research skills to analyse complex data sets and making strategic decisions. By running the simulation a number of times over the day, there was also anecdotal evidence that students were learning how to make better decisions based on the data given to them.

The complexity of the simulation addressed ILO (2), with students reporting that the simulation made them aware of the complexity of an organisation and the multiplicity of factors and inter-relationships between different parts of the organisation. This was quick and simple. The case study itself was pre-existing. In the MSTeams meeting initially we just chatted through our plan and decided on an approach, then pressed “record” and completed this in one go. The key to doing this was to embrace a natural and probably flawed video as preferable to one that was polished and slick. The result was an informative and easy to listen to conversation which identified all the key points that we wanted to capture.

Running the simulation remotely – student engagement concerns

In a live classroom session, the facilitator can demonstrate the simulation face to face and interact with participants to support them from the start of the workshop, ensuring no one is left behind. Similarly, students can support each other in teams. This was not possible in an online workshop and it was felt that the risk of ‘losing’ students during the day was potentially higher than normal. We were concerned as to how the group would interact and whether they were making group or individual decisions. From the facilitator’s and academic’s perspective, this was a challenging and intensive day, but the ability to observe student activity from the control tower reassured us that all participants were engaged. We scheduled adequate times throughout the day for students to come back as a group and discuss their progress. There was a reassuring enthusiasm from the cohort.

The simulation’s reset facility deployed for activity 1 and 2, meant that students could practice strategic decision making and observe different outcomes based on different choices made. This

clearly gave students the confidence needed to compete against each other in the third and final activity where the reset facility was disabled.

4. Benefits

The simulation tool was a useful way to offer students a more practical orientated experience and as reported by Clarke (2009), it allowed us to develop a student's 'conceptual understanding in cross functional decision making and analytical thinking abilities through "learning by doing" of real business problems'. Inclusion of the tool also allowed us to break up three days of intensive remote teaching. Varied activities and the introduction of a competitive element ensured that the day was engaging and fun for all concerned.

The simulation tool offered students a more real-time, practical oriented experience than a paper-based case study used previously on this module.

Where there any unintended outcomes?

The module leader took part in the individual part of the simulation. The academic reported feeling slightly overwhelmed by the amount of reading needed to run the simulation effectively. The academic also reported that she felt anxious when she could see other students making better progress. This feedback provided important information for the simulation's developer who is going to build in more functionality to assist students with different learning styles (e.g. to help those who read at a slower pace).

5. Evidence of Success (if available)

Student perspective

We were satisfied that there was excellent engagement and collaboration between participants. This was evident from the feedback received at various points throughout the day and in the final verbal feedback session at the end of the workshop.

It was evident that students had enhanced their learning of key strategy concepts by taking part in the activities. One student commented that the game had made them aware of their 'blind spots' when running an organisation. All students reported that the simulation had demonstrated how a change made to one part of the organisation could significantly impact on activity elsewhere. Specific quotes demonstrated that theoretical content had been applied to the simulation.

"The simulation gave us a chance to practice strategy decision making in a low risk environment."

"It was good to see how a decision made internally influenced performance externally - and vice versa."

"Innovating can be very hard as a strategy and timing is critical."

Academic and facilitator's perspective

To receive positive feedback and evidence of meeting the ILOs was a success. Students were enthusiastic; no one dropped out of any activity and adding a team competition kept interest high in the later stages of the day. Discussion sessions were lively with everyone taking part. During Day 3 of the module, we saw evidence of students relating topics (outsourcing and innovation as strategic choices) back to events that had occurred during the simulation.

6. How Can Other Academics Reproduce This?

There are many business simulation tools available but it is important to choose wisely and establish a good relationship with the external provider. We have developed a relationship with Venture Simulations Ltd. and we were prepared to share module content with the company to achieve the ILOs.

This simulation tool is also appropriate for any academic wishing to embed enterprise education into a module. Students do not need a business background to benefit from the activities that this simulation provides.

Limiting factors include cost of upfront preparation if a bespoke business scenario is required. In our case, it was important to design a business scenario that can be used across different modules.

7. Reflections

The tool added a different dimension to the module providing a practical experience for students. Traditionally, this has been very difficult to achieve when teaching strategy in a block format.

The facilitator's presence was essential. We would never attempt to run a sophisticated simulation tool without an expert on hand. We will adopt the same approach if we need to deliver the module online again.

8. References

Clarke, E (2009), Learning outcomes from business simulation exercises: Challenges for the implementation of learning technologies. Education and Training 51(5/6):448-459

Information about SimVenture Evolution can be found at www.simventure.co.uk