

# RESULTS FROM TEACHING STRATEGY COURSES IN A VIRTUAL WORLD

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## ABSTRACT

*Due to COVID-19, more university instruction has gone online (either synchronous, asynchronous, or a combination of both). Online instruction has existed for many years but was mainly asynchronous with some web conferences for interaction with students. With new tools such as Zoom or Microsoft Teams, synchronous classes have supplemented (or replaced) the previous asynchronous online classes. Either of these methods is especially difficult for a strategy course since many professors use simulations in their course. Professors must make sure each student understands the simulation as well as how the simulation relates to the strategy process covered in strategy textbooks. In a classroom or lab setting, the professor could walk around the class to see what the students are doing and to answer questions in real-time. Online presents more challenges, but faculty have learned how to do this. This paper will present results from teaching in a virtual world from Fall 2020 through Fall 2021.*

## INTRODUCTION

Universities across the world have been offering online courses for the past 20 years. With the ever-increasing competition for attracting and retaining students, online education became a high priority for most institutions. According to the National Center for Education Statistics, enrollment in distance education courses has almost doubled from 2000 to 2010. More than half of the educational institutions are offering some distance education courses (Chasteen, 2014).

COVID-19 has accelerated the move to online education. In 2020, more university classes went online (either synchronous, asynchronous, or a combination of both). With new tools such as Zoom or Microsoft Teams, synchronous classes have supplemented (or replaced) the previous asynchronous online classes. Both of these online methods are difficult for a strategy course since many professors use simulations in their courses. In a classroom, the professor could walk around the room to see what the students were doing and to answer questions about the simulation in real-time.

But how can a professor do this online? Online synchronous classes allow this real-time feedback to some extent, especially if breakout rooms are used. This paper will present results from teaching in a virtual world from Fall 2020 through Fall 2021.

## SIMULATIONS FOR STRATEGY COURSES

Simulations span the knowing-doing gap. In previous courses, students have gained much business knowledge in accounting, marketing, operations, and finance courses. In a strategy course, students must combine this knowledge to understand the management of firms (Teach and Szot, 2018). The simulation should illustrate the key strategy question – “Why do some firms outperform others?”. In the simulation, whether as teams or as individuals, students manage firms. Teams usually work better since managing a firm is a complex problem (Chasteen, 2016). Some teams will outperform others. Students must then determine what they are doing right or wrong and make changes to improve the performance of their firm. The synchronous format allows the professor to answer questions in real time similar to a classroom.

The simulation involves many of the key attributes of strategic management. The simulation involves multiple functional areas of the firm (R&D, marketing, production, and finance), both short term and long term decisions, and different operational decisions to correspond to different firm strategies. There can even be different strategies for the different products within the same firm (Wolfe, 1978).

In summary, the simulation puts each part of the strategic management process into an ongoing exercise where student teams must analyze the current situation of a firm, develop a strategy based on this situation, put this plan into action, and then make corrections as necessary to improve performance (Anderson and Coffey, 2004). The following sections show results from teaching in a virtual world from Fall 2020 through Fall 2021.

## RESULTS DURING COVID-19 CHANGES

COVID-19 forced most university classes to go online starting in March 2020. Luckily, this coincided with Spring Break at many universities that gave universities some time to plan. Some universities were much better prepared for this change if they had already been using online classes. For universities that had not used online classes, the learning was much more difficult. Below is a discussion of what my university did over the past year.

My university was already familiar with online classes – about 20 % of existing courses were online. We had an extensive

eLearning support group that had helped faculty develop their asynchronous classes in previous semesters. Therefore, for the remainder of the spring semester, asynchronous online classes mostly continued as before. However, face-to-face classes switched to an online format – either synchronous or asynchronous depending on what tools the faculty had available. Most were a combination of the two modes. The summer term continued much like the spring, but the faculty used more synchronous classes using Blackboard Collaborate. However, Blackboard Collaborate was not that easy to use by faculty or students.

### **Fall 2020 – Spring 2021**

For the Fall 2020 term, there was more time to plan. The University decided to use a combination of small on-campus classes, our previous asynchronous online classes, and a new synchronous online format ([utdallas.edu/covid](http://utdallas.edu/covid), 2020). The university decided to change to Microsoft Teams for its synchronous classes. Faculty could teach these classes just like their previous campus classes but would do it from their office or from their home. All the synchronous classes were automatically recorded via Teams so that students who missed the scheduled class could watch later, much like our previous asynchronous classes. However, since these classes were automatically recorded during the synchronous class, there was not any extra work required by the faculty.

The breakdown of the Fall 2020 classes was about 20% for small on-campus classes, 20 % for our previous asynchronous classes, and 60% for the new synchronous format. Most everyone (administration, faculty, and students) was satisfied with the results of the fall classes. Therefore, our Spring 2021 classes followed the same format (Chasteen, 2021).

### **Changes for Fall 2021**

For Fall 2021, my university wanted to go back to more face-to-face classes. The plan was 60% campus, 20% online, and 20% a new hybrid. Although the total synchronous online classes were very popular and successful, the university felt that students missed too much interaction with other students with a total synchronous online format.

However, the new hybrid mode was added. This mode would have about 50% face-to-face classes and 50% online classes. This compromise met the need for less possible COVID-19 exposure due to fewer face-to-face classes and use of the new synchronous technology that had been developed during the previous year.

My four Fall 2021 classes provide a small sample of two of these modes. I taught three undergraduate strategy courses (two were the new hybrid method and one was the previous online asynchronous method). I also taught one graduate strategy course (online asynchronous method). The online asynchronous method was the same as pre-COVID – asynchronous with prerecorded lectures.

The hybrid was new and various options were possible. This course is normally about ½ lectures over textbook material and ½ simulation. The question was should the textbook lectures or the simulation be the online portion? At first, I planned to use prerecorded textbook lectures as the online portion and save the face-to-face for the simulation since students have had issues understanding the simulation in previous online courses (Chasteen, 2014). However, since synchronous classes using TEAMS had worked so well in Fall 2020 and Spring 2021, I decided to do the simulation as the online portion.

The approach using the online for the simulation worked very well during Fall 2021. However, a few ideas as discussed below allowed more student interaction during the online class. First, Capsim was the simulation that was used ([capsim.com](http://capsim.com), 2021). Capsim has a large library of videos that explain the simulation. Although these have always been used for previous simulation face-to-face classes, they were even more valuable for an online simulation class.

Next, teams are always used for my simulations since this mirrors the real world better. Also, most problems are too complex to be solved by just one person (Hall, 2015). However, to avoid “free-loading” in teams, I try to make sure that each student learns how to do the simulation on their own. First, each student must complete some introductory rounds by themselves playing against 3 computers. Then I do team practice rounds where teams can learn how to work as a team. Then there are team decision rounds that count for grades. And finally, each student must play decision rounds by themselves against 5 computer teams to see if each student really understood the simulation. This approach not only encourages teamwork but also forces each student to learn in the online environment since they will have to later complete the simulation on their own.

Another good idea is to meet face-to-face, if possible, for the first 1 or 2 simulation sessions. This allows the faculty to see whether all students understand the basics of the simulation and if all students are taking an active part in the team decisions. I have even done this in previous semesters for my total online asynchronous courses since most guidelines for total online courses allow up to 15% of the classes to be face-to-face. This approach works very well for undergraduate courses since most undergraduate students live in the local area. For graduate courses, it could be a problem since many students may live in other cities. Therefore, it has been optional for graduate courses.

Another good idea is the “rotating” CEO. Even though everyone on the team is supposed to take an active part in the simulation decision making, there is usually one person who really likes the simulation and tries to do everything. This may be a “winning” approach for the team rounds but turns out to be a problem for the later individual rounds since some students may not even know how to enter decisions. Therefore, the “rotating” CEO requires each team member to enter at least 2 sets of decisions during the team rounds if they want credit for the team score.

And finally, the synchronous method allows the faculty to give immediate feedback to teams as soon as the round is processed – just like in the classroom. This feedback can be to the total class or just to the team. I think giving feedback to the total class is the best approach during the practice rounds since the practice rounds are just to learn and not for grades. Each team can benefit from problems that other teams are having. Also, if a large class and more than one industry, issues could arise in one industry and not in another. Hearing about problems in other groups is also a good learning experience during the practice rounds.

The grades were similar for both modes for the 3 undergraduate classes. Although the student evaluations are not available yet, students seemed to like the new synchronous portion better since there was more interaction with the professor, there was timely feedback on the simulation results, and team presentations were more like the face-to-face classes.

As discussed above, the synchronous method worked very well during my Fall 2021 courses. I did learn a few new items from my students in the virtual environment. I assumed that most students needed to use a laptop for the simulation. I have even taken my classes to a simulation lab for the decision rounds since I thought that students needed to see all the reports on a big screen in preparing for the next round. However, I found out that some of today's students can work on iPads or even smart phones just as efficiently so they can be almost anywhere during the virtual classes when the simulation decisions are being made.

## CONCLUSION

Due to COVID-19, more university classes have gone online (either synchronous, non-synchronous, or a combination of both). Since many strategy professors use a simulation in their course, online instruction has always been especially difficult for a strategy course. COVID-19 only increased this difficulty since many classes moved online. However, new tools such as Teams and Zoom have made synchronous online classes much like face-to-face campus classes. This paper has shown how a simulation class can be successfully taught as a hybrid class with 50% face-to-face and 50% synchronous online. Such a course keeps the student's interest and also provides a good capstone experience to a student's undergraduate or graduate studies.

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