Issues in Transitioning to Remote Teaching of OR/MS/Analytics:
A Discussion

In the effort to help to flatten the curve, many INFORMS members are transitioning to remote instruction. On April 24th, the Committee on Teaching and Learning (CTL) hosted a webinar to support these efforts. The Webinar served as a panelist-led open problem-solving workspace for members to meet and discuss issues related to the transition to remote instruction. The webinar was hosted by Neil Desnoyers, Chair of CTL and Adjunct Professor in the Decision and System Sciences Department at Haub School of Business, Saint Joseph’s University. The four panelists were:

- Juan Jaramillo, Ph.D.
  Associate Professor
  Robert Willumstad School of Business
  Adelphi University

- Bob Nydick, Ph.D.
  Professor, Management & Operations
  Management Department
  Villanova University

- Virginia Miori, Ph.D.
  Full Professor and Chair
  Decision and System Sciences Department
  Haub School of Business at Saint Joseph’s University

- Jill H. Wilson, Ph.D.
  Professor of Instruction of Industrial Engineering & Management Sciences
  Charles Deering McCormick Distinguished Professor of Instruction
  Assistant Chair of Industrial Engineering & Management Sciences
  Northwestern University

The following section summarizes the panelists’ responses to the questions posed to them.
1. How have you approached the transition to online format in your face-to-face courses and what worked and what didn’t?

Some panelists are already teaching online courses, while others have had to move their courses from face-to-face to online. All are facing the challenge of finding solutions to work with students who are facing difficulties to adjust to disruptions caused by the pandemic. Being available, considerate, and understanding with students are key ingredients for making the transition work. On the other hand, allowing students the option to keep their cameras off creates obstacle to engaging with students.

2. What pandemic-related challenges have you experienced and how have they impacted your teaching and or academic life?

For some panelists, like many around the world, the pandemic has amplified the challenge of managing boundaries between work and home, especially for those with small children who require constant attention and supervision. Some panelists found the pandemic has amplified their motivation on maintaining contact with students.

3. When the lockdown is partly removed, do you think blended classrooms are a good strategy for the Fall semester?

In addition to blended classrooms, there are discussion of other options such as running classes with half the students attending one day a week and the other half attending the other day. There is a lot of uncertainty, and this decision is out of our hands as instructors. The key is being flexible and preparing for being able to quickly adapt to what would be needed.

4. Could exams be given an individual breakout room?

Exams could be given in an individual breakout room up to the room size limit set by the teleconferencing service provider.

5. What pandemic related challenges have your students encountered and how have these impacted your teaching?

One challenge is that some students have been relying on using computers available on campus when working on assignments up until the transition. These students suddenly found themselves unable to meet deadlines for assignments because they no
longer had access to this equipment. In addition, assisting many students at once to install software on personal laptops is not an easy task for the instructor as each student is unique to some extent.

Another challenge is that students from different time zones may now find themselves attending lectures and taking exams in the middle of the night. In turn, instructors feel uneasy about requiring their students to join the lectures at these unusual hours.

6. How are you approaching end-of-term assessments in the classes you transitioned? Is this different from how you approach end-of-term assessments for full-term online classes?

At a quarter school, guidance on final exams changed every 12 hours in the period we were creating exams, so that was very challenging. One school asked instructors to hold online final exams during the time that was scheduled prior to the transition to remote learning. This was to avoid students being inundated with take-home exams.

7. What is your experience with remote proctoring? Do you have any pointers for those planning to use it?

One panelist expressed the view that remote proctoring software/systems don’t stop the “professional cheater” and negatively affect the level of trust between the class and the instructor. So then it becomes a question of “how do I evaluate my class”. For graduate classes this instructor relies on project, not exams. A physics professor known to one of the panelists asks students to create a video explaining their answers. In general, focus on learning and not on assessment. Another instructor asked her students what they would think of a remote proctoring system that recorded a video of them taking the exam: The students’ response – “It would freak us out”. Another instructor who has experience with remote proctoring software views it as expensive and not necessarily effective. But you can create exams such that the presence of cheating is readily apparent. Students who want to cheat are constantly finding better ways to cheat. On the other hand, in the current situation where the ability to take classes on a Pass-No Pass basis is unrestricted, the overall level of effort put in by students is surprisingly significant.

8. In the current situation where students are ignoring emails because they are being deluged with them, is texting an option?

The basic belief expressed by panelists is that people will ignore messages in any medium of communication that is overused. So instructors need to be careful.
9. How is your university handling grades this spring? What impact, if any, has this had on how you are assigning grades in your courses?

One university implemented a credit/no-credit system. One school is allowing students to take all their courses pass/fail – but students get to see their letter grades before deciding. At a quarter school all classes are Pass/No Pass for spring term. With Pass/No Pass students should be aware of the impact that such a decision has on postgraduate plans. One recommendation is for students to focus on recommendation letters.

10. How much attention are you paying to accessibility?

One benefit of using web conferencing systems is that if you record a session the option exists to add captions. You do have to edit the captions, but it makes it easier. In general instructors had received very few questions about accessibility.

11. Given the likelihood of remote learning during the summer and the possibility of remote learning in the fall, how will your approach to a full-semester online course differ from a course you transitioned?

One instructor found that offering virtual help session during the weekend really helped and will continue this practice in his future classes. An educator known to one of the instructors commented “My students have so little control over anything in this situation. I want to give them as much control over their education as I can.” One instructor found her experience with flipped classrooms to be quite useful in transitioned courses.