

## **First 100% online course and exam completed**

The course in object-oriented programming consisted of 30 students from all over Denmark. Andrea Corradini himself lives in Sønderborg in Jutland.

Of the 30 students who enrolled, 5 dropped (out and 2 were dismissed), which is fewer than normal, and the grade point average was the same as it has been in this course for the last 6 semesters.

### **ReadIT:**

Andrea, why convert a course into a 100% online one?

### **Andrea Corradini (AC):**

I believe that nothing can replace the face-to-face lecture that standard Universities have been offering ever since they began teaching. Human-human interactions, with all the combined modalities such as speech, voice, tone, facial expressions, body language, etc. remains in my opinion the best interaction you can have in class. At the same time, I have seen "online universities" mushrooming and also being relatively successful, at least in terms of student enrollment. As a "standard" university, the ITU should also extend its offer to cater for a wider audience.

Online courses are not a panacea against the increasing student drop rates. Online courses cannot say to be "better" than standard lectures. Nonetheless, in my experience online courses can be more effective with certain student groups and notably for those students who have rigid time constraints or those who want to study at their own pace and/or do not like too much class interactions. Adding to this that online courses do not require student presence, students who are located remotely can be enrolled and be part of a class. Personally, I much like the fact that remote participation allows students and teachers to save time in transportation and ultimately also the energy consumption that derives from it (I once simulated a calculation with a student from north Copenhagen about both time as well as decreased CO2 emissions he would save for attending an online class at ITU instead of traveling the 20-km drive from/to his place to/from ITU to attend a standard class).

### **ReadIT:**

In your experience, what would you say are the pros and cons of going online?

### **AC:**

Biggest cons: as a teacher you miss the interaction with each student, you do not have their faces in front of you hence you have much less feedback, you cannot see if what you say is not understood and needs more clarification. As a student it's basically the same things, just from the other perspective: you do not have a teacher you can ask on the fly.

The pros are described in the first question.

### **ReadIT:**

This being the first time, has it been a time saver or consumer for you?

**AC:**

No doubt it has been a huge time consumer for me. The first time you turn a regular class into an online one, it is going to take three to four times longer than to prepare a regular class. Now, that I am going to offer the online class for the second time, I still expect to have to invest a more time; that is as opposed to if the class were a regular one, but certainly less time than last term. This is due to the fact that a few things should be adjusted based on the outcome and experience of last term.

It remains that on the long term, I expect my online class to take as much time as if it were a regular class.

**ReadIT:**

Would you recommend this to others?

**AC:**

It definitely depends on the content of the course and its audience. Simply turning each course into an online one for the sake of it does not make much sense to me.

Also, an online class can be run differently from case to case: you can have synchronous classes, asynchronous classes, a mix thereof, and so on. What online approach is best again depends on the course and its audience.

If I were in the ITU's control room, I would certainly be thinking about increasing the offer of online courses. Specifically, I would analyze in details which courses could be offered both as online courses and as regular courses. I believe that this could potentially increase ITU attractiveness among (potential) students.

**ReadIT:**

If you were to do this again, what would you change the second time around?

**AC:**

I AM going to do this again. And I AM changing some stuff.

We learned a great deal from the first online course, but we still are in the process of learning how to properly run an online course. With the approach we chose (asynchronous learning), we learned a lot about the way students watch video lectures and what students' expectations are with such material. The major problem with the course seems to have been the lack of or the low sense of community among the students enrolled in the course. Usually this leads to a higher drop-out rate, but this did not happen in our case. While this is the positive part of this problem, we still need to figure out a way for students to "build an online community". Related to that, group work did not work as expected and we need to figure out a way to smooth this problem or change the perspective of how we look at student interaction in the online world.