

PROFESSOR: Many of you have heard of MOOCs. They're very famous, Massively Open Online Courses. MOOCs are very open and large classes, often with thousands or tens of thousands of participants. And MOOCs are essentially a big movement to really democratize education. SPOCs are a little different. So 16.842 was run as a SPOC, which stands for Small Private Online Course. So like a MOOC, a SPOC is also offered online. You can take it in person in a classroom at one of the hosting universities or you can take it entirely online. It's really up to you. It's small because we have a few dozen students instead of thousands, and it's private because in order to take the class it's by invitation.

In this particular instance, we had two universities that co-sponsored this class. One is MIT and the other one is called EPFL, Ecole Polytechnique Federale de Lausanne in Switzerland, which is also quite active in the world of online education. The way fundamentally that a SPOC works, is that you have the course management system at each of the hosting universities and institutions. And you essentially post the same materials, the lectures, the readings, the exercises, you post them in parallel at each of the hosting universities. The lecturers themselves, however, are run online using an open collaboration platform, like WebEx for example. You can do it with Google Hangouts. There's a lot of different platforms. And this is important because it is important to have live connections between the faculty and the students, but also the students amongst themselves can discuss.

The trickiest part of running a SPOC, of course, is the time zones and the time differences. In this case, the two universities were six time zones apart. And so it was offered in the morning here at MIT and then the afternoon in Europe. If you're running this as a global class, it will be more challenging to find a time slot that works for everybody.

The feedback from the students has been very positive, because you can think of a SPOC in this particular class as a blended form of education. Part of the class is live. The lectures are given live, and every lecture is recorded. So even if you miss a lecture as a student, you can watch it later. And so there's a record of it. The assignments are asynchronous, and there are some assignments that are individual. And there are team assignments as well. And so it's a blended form of education, which is an important trend in education where we take the best of the online experience, and we try to combine it with the best of the in-person experience.

Teaching a SPOC is fun and challenging at the same time. It's fun because you get to

converse and interact with students, not just in a physical classroom at one university but across multiple institutions. And that enhances the class, because students will speak up with experiences from different cultural backgrounds. But it's also challenging, because you have to keep track of what's happening at multiple places. And you have a mix of students from different backgrounds and different institutional constraints as well. And so it's both challenging and fun, but it's a very focused experience. And the feedback from the students has been great.