Dan Grossman: Creating a MOOC is like writing a textbook

Dr. Grossman, an associate professor in Computer Science & Engineering at UW Seattle, chose to make his first online class a MOOC. "Programming Languages" is a Coursera adaptation of a course he has taught several times already at UW. Dr. Grossman is also helping coordinate the adaptation of four other courses from UW Computer Science & Engineering to MOOCs, working with instructors and TAs to learn best practices for teaching MOOCs, and for the Coursera platform.

Why a MOOC? "For me, it is largely about being passionate about the course material and how to present it. Given this passion, why would I not want the largest rooftop I can find from which to shout?" More than 65,000 students signed up for "Programming Languages" on Coursera, and 3,500 completed the first two assignments. "I try to compare the impact to what I might have from writing a textbook; the ability to reach learners via videos, assignments, and an online community is exciting. It is an opportunity for UW and for me personally to exhibit educational leadership."

Educational value of MOOCs: "With so many students, some will have a transformative educational experience, others will learn very little, and most who express some interest will not end up participating. To compare it to a conventional course where students get personal attention, have significant financial investments, and have shared background as part of a coherent curriculum, is difficult. I instead prefer to compare it to writing a textbook. Just as many people touching a book do not read it and those who read it have a wide range of understanding as a result, the learning in MOOCs defies description."

Student reactions: "Because of the large size of the classes and the physical separation of the students, the sheer amount of (attempted) learning and self-motivation is stunning. In the first day of my course, more people watched my course-introduction video than have ever taken one of my conventional courses."

How he sees his role: "Like a book author, I am primarily making content available and providing learning opportunities. I do interact on the discussion forum as time allows, but it is often more as a firefighter than as a pedagogue."

Student learning: "The amount of student learning is difficult to judge, but even if we grant, as others would vigorously contend, that it significantly trails conventional courses, is that the right comparison? What if many of the students spending their evenings participating in my Coursera course are doing so instead of watching reality television or going shopping?"

Advice: "It can be deeply rewarding, but have no illusions. No matter what you do, many students will complain and many more will not finish."

"It is an enormous amount of work. To continue my favorite analogy, it is perhaps as much work as writing a textbook. Make sure you have a great course and a solid set of materials that will translate reasonably well to an online setting. Start early — months early."

"Work with TAs who share your passion for the material and for the excitement and novelty of MOOCs. I may be the talking head in the videos getting all the credit, but I have a small but unbelievably fantastic team keeping things afloat."

Links: Dr. Grossman's faculty web site

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