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A MOOC in a DTU course: Global Environmental Management

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A new 10 ECTS MSc level course on Global Environmental Management was established at DTU and run for 37 students for the first time in the autumn semester 2015. The MSc students in DTU Environment are already quite an international group, though mostly from EU countries. In order to expose the students to an even more global group of peers, 5 week of teaching was set up on the Coursera MOOC platform (with the same heading), open to the whole world, starting 2 weeks into the DTU course. The MOOC course consisted of a total of 35 online lectures of 7-15 minutes with inbuilt quizzes, which were mostly video shots outside or in teachers' offices, mixed with illustrations. The learning was guided by five weekly quizzes testing the knowledge obtained and three peer assessed essays, where the students should demonstrate some more analytical skills. All essays were small 200-400 words cases descriptions, where students analysed environmental trends, management and technologies in a particular area (often their own), and then they should assess three fellow students' essays, randomly and anonymously, following a detailed rubric given by the teacher. Apart from the five weeks of MOOC-activities the DTU students also had lectures and a couple of group work reports to make up for the full 10 ECTS.

More than 3,000 people signed up for the MOOC part, but (as in other MOOCs) only 400 did at least one of the exercises and 137 passed the course by obtaining more than 60% of the max score of all eight deliveries. Hereof 75 were on "signature track" (got certificate, paid 25 USD), 37 were the DTU students, so 25 did the full program "just" for the learning experience. 25,000 times one of the lectures were seen, which is not that high in Coursera standards, and the reason is that the course was only flashed on the Coursera page about 3 weeks before the course. The students' evaluation of the online lectures on a 5-level Likert-type scale were between 3.6-4.5 out of 5. The course as a whole were evaluated by 88 students with an average of 4.4 out of 5.

Based on the first experience and the comments received, the rubric-based peer assessment functioned well as an examination tool, but a qualitative open statement from student to student was requested. There was also good satisfaction with the lectures and content and in future it will be offered as an on-demand course with similar content and assessment, which can be taken any time by students. It was also appreciated by the DTU students as part of the DTU course. This modality seems to have potential as a way integrate the use of MOOC study platforms (that is free for the students, but quite expensive to produce) as part of the regular studies at the university.