

MOOCs in blended/hybrid education

Ulrike Wild¹

¹ Programme director Open and Online Education, Wageningen University and Research,
Droevendaalsesteeg 4, 6708 PB Wageningen, The Netherlands
ulrike.wild@wur.nl

Abstract. The paper describes the way Wageningen University & Research blends MOOCs into on-campus education. Four strategies are explained:

1. MOOCs as part of a blended course
2. MOOCs as electives for campus students
3. A series of MOOCs as a Minor/part of study programme
4. MicroMasters: blending MOOCs in a programme as an alternative for compulsory courses

Keywords: MOOCs, campus education, blended course, blended programme, online education, MicroMasters

1 Wageningen University as an Education Ecosystem

Wageningen University is developing from a brick and mortar University into an education ecosystem. We invest in online education and in open&online education: besides an extensive portfolio of bachelor's and master's programmes on campus, we develop online master's programmes and open online courses, currently mostly MOOCs on edX.

To create a truly connected ecosystem, where the different worlds of on campus and online education meet, mix, and stimulate each other, two aspects are important for us:

- Students' flexibility: transitions between the various portfolios should be possible. For instance, after completing a series of MOOCs the student should be able to continue studying on campus, or campus students should be able to take online courses in order to arrange a more flexible programme. In this way, students "blend" MOOCs into an individual study programme.
- Efficiency and fructification: online learning materials should be used in different contexts, in different sizes. For instance course materials from MOOCs should be used also in courses on campus. In this way, we as an institution "blend" (parts of) MOOCs into our courses and degree programmes.

2 Strategies to incorporate MOOCs

Currently we use four ways to “blend” our MOOCs into our campus portfolio.

1. MOOCs as part of a blended course

This is naturally the most common use of online courses. There are two options:

- Using components of a MOOC: Examples: in the campus course Plant Production Systems the students are expected to study certain videos from a MOOC, in the campus course Animal Behaviour students prepare for the weekly lectures by studying certain modules from the MOOC Animal Behaviour.
- Using a whole MOOC. The students have to study the whole MOOC and in addition the teacher prepares extra lectures based on their questions and gives extra assignments for working groups. We call that “MOOC as a BOOK”.

2. MOOCs as electives for campus students

Online courses have a big advantage: they are in principle time and location independent and can run partly or completely independent from our academic schedule. The majority of our MOOCs is designed for a self-paced mode and open for long periods. As well the level of our MOOCs is generally academic, varying from introductory to advanced. We assumed that it could be a welcome option for our campus students to follow our MOOCs, not bound to an academic schedule. The only extra should be an exam, since the verified certificates are too easy to cheat.

First we organized a pilot with one course. We investigated if students subscribe to an online, non-scheduled course without structural interaction with the teacher, how many finished the course, how many took an exam and actually passed it. We are curious if students seized the opportunity and whether they were able to organize themselves in such a way that they actually finished the course and took and passed the exam. We also asked them to what extent they liked or disliked this self-paced study, and whether extra support would be necessary.

Outcomes of the pilot:

Sixty-six students originally decided to enrol in this MOOC, twenty-nine of these students registered for the examination, though only eighteen students actually showed up. However, of these eighteen students, fifteen passed (83%). Afterwards, we used a survey (n=28) and held interviews (n=3) to find out how students experienced taking this course and how they feel about online courses in general.

The reasons why students chose to enroll in this SPOC varied from being highly interested in the topic (which is not explored in this way on-campus) to just needing a few credits to round off their study programme. Many students (86%) indicated they would be interested in taking another online course for credits – amongst them also students who didn't finish this course.

Students said that they particularly liked the flexibility of the course, but at the same time they also reported it as the most difficult thing about being an online student. Some students could not handle the flexibility and dropped out of the course – mentioning that having campus meetings would probably have helped them to finish. Others found the flexibility to be a relief - for them it was the only reason they could even take this course, for instance because they lived too far away to be able to get to campus whilst also juggling a job or because they only had two weeks available in which to study. Some students developed strategies to keep themselves on track while following the SPOC, like going to the library at set times to study. For others, the fact that they really needed the credit was enough to keep them motivated.

This academic year (2016/17) we already offer 6 Wageningen MOOCs as electives. One MOOC is actually a SPOC: extra difficult assignments for our campus students have been added. Two times a year we organize an exam for every MOOC. Students follow a MOOC autonomously and without guidance; if they feel they are ready they can register and enrol in the exam.

We do not have numbers yet how many students do take our MOOCs. Our first impression is that more students take the SPOC than the MOOC - maybe simply because the enrolment process is more clear to them: they do not have to enroll on edX, but send an email to the course coordinator!

3. A series of MOOCs as a Minor/part of study programme

Our MOOCs as electives count for 1-3 credits. Some of the MOOCs we offer on edX form a series of courses around a certain topic. Currently we run a series on Nutrition and Health, and one on Sustainable Food Security. This is a very interesting package for students as well. We plan to offer both series in 2018/19 added by an extra project and /or exam for our campus students as one (larger) course. That way we add more depth and can award more credits, probably even accept the series as a minor.

4. MicroMasters: blending MOOCs in a programme as an alternative for compulsory courses

We offer a MicroMaster on edX: a series of 5 MOOCs on Biobased Sciences and a capstone project. Learners who earn the MicroMasters certificate can apply to continue on-campus (they still have to meet the necessary admission requirements). If they are admitted, they get the credits awarded and graded as a part of the master's programme.

Note that the MOOCs correspond with compulsory campus courses – the learning outcomes are the same. Naturally the question arises, if and how the MOOCs and the corresponding campus courses differ from each other. At the moment we are in the middle of producing both the MOOCs and the campus courses. We will blend MOOCs into our campus courses in the way described under 1a. and 1b. We expect however, that there will be slight differences between the MOOCs and the campus

courses, especially in assessing the higher learning outcomes. That is the most important reason we added a capstone project to the MicroMasters: to make sure that also the higher learning outcomes can be assessed.

In the end, we will probably put the whole MicroMasters as one course in our study guide, worth 24 credits. That way we can make sure that the credits can be awarded and the grade will appear on the diploma.