

# Teaching in front of a camera

**Wageningen University is keen on developing forms of education that reach people all around the world and from all social strata. 'There are a lot of misunderstandings about online education but people are gradually starting to trust it.'**

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**I**t is very odd, teaching without students. You have to look at the camera but you don't get any response. That took some getting used to at first,' explains Gerrie van de Ven, assistant professor in the Plant Production Systems chair group. She helped develop the online course Future food production: Crops, one of two Massive Open Online Courses (MOOCs) launched this year by Wageningen University. The basics of the course topics are covered in short films and three- to seven-minute presentations using techniques such as animation and voiceover. 'It forces you to take a thorough and really precise look at the material. During a lecture, when you see students frown you can clarify a point: now it has to be clear from the start,' says Van de Ven.

No one on her team had any experience of creating online teaching materials. 'But there was good collaboration with technicians and education specialists. We are now using these films on the Bachelor's programme too, and we've given students here access to the simulation model for crop production.' The material for the other Wageningen MOOC, Nutrition and Health Part 1:

Macronutrients and Overnutrition, is used on the conventional courses too. 'It is such good material, we really have made a great leap in quality,' explains Sander Kersten, professor of Nutrition, Metabolism and Genomics. The diversity of the participants on the MOOC has been a great inspiration to him. Kersten: 'On the forum 600 people from all over the world and all echelons of society introduced themselves. It is fantastic that you can reach all these different groups.'

## FREE

The two MOOCs – free of charge except for 50 euros for the certificate – attracted 55,000 people from 196 countries. Most came from the US, Canada, India, EU countries, Brazil and China, says Ulrike Wild, director of Online Learning. About 15 percent of the participants made it to the course, watching the films and obtaining their certificates after getting good test results. These MOOCs are already running again and eight new ones will be launched in 2016. And a Chinese licence has now been obtained to translate them and offer them to Chinese speakers.



September will see the start of the first Wageningen online Master's programmes: *Plant Breeding and Nutritional Epidemiology and Public Health*. The students come once or twice to Wageningen for a short period of practicals and to meet their teachers and each other. The part-time online Master's programme can be completed in four years, but the actual duration depends on how much time the student can make for it. Students from within the EU pay the statutory tuition fees of almost 2000 euros, the same as for a regular Master's course. Students from outside the EU pay 7900 euros,

**'The education will still be typically Wageningen: small-scale and interactive'**



Video clips for MOOCs, online Master's and other courses are recorded in a film studio in Wageningen.

half of what they would pay if they came to Wageningen for a Master's. Online students get exactly the same qualification as those who take their degree on campus in Wageningen.

Registration has not closed yet, but there are now about 45 students enrolled for the online Master's, reckons director of Online Learning Ulrike Wild. Most of them come from EU countries such as Greece and the Netherlands. 'They are mainly people who combine work and studying. The average age is 31,' says Wild. In their letters of application, some students referred to the Wageningen MOOCs they had followed. Wild: 'The MOOCs are a great advert.'

For the production of all the online lesson material, the university has invested in a film studio at the Dreijen campus in

Wageningen, and in support from multi-media specialists. Teachers go on courses and get guidance from specialists and colleagues such as Cora Busstra of the Nutrition and Disease chair group. In her PhD work, Busstra specialized in developing e-learning modules, and now she helps other teachers make the switch.

### NEW WAYS OF WORKING

The online Master's programmes are quite different to the large-scale MOOCs, explains Busstra. In the Master's courses, the short 'knowledge clips' dealing with the essential topics are directly linked to an assignment to help the students actively assimilate the knowledge themselves. Teachers can also use them to test whether the material has come across well. Busstra: 'The teachers had to think up new ways of working. Getting students to make a film clip, for instance, in which they present a research setup they have thought up themselves, or to respond to someone else's idea, or to work on a document in groups.' The students also got the chance to post a question while they are watching an online film – the equivalent of putting your hand up during a lecture. Fellow students and teachers can then answer the question online. 'There are a lot of misunderstandings about online education,' says Busstra, 'one of them being that there is only one-way communication. But people are gradually gaining confidence in it. It will stay typically Wageningen: small-scale and based on interaction and group work.'

The investment in online learning is paying off in the regular education programme too, according to Busstra. Students in Wageningen can pick up the basics at home through the knowledge clips. During lectures, teachers can then provide more in-depth analysis, talk about their own work and supervise students more personally. 'Increasingly, on-campus and online education will no longer be two separate worlds,' expects Busstra. ■

[www.wageningenur.nl/online-education](http://www.wageningenur.nl/online-education)



### ONLINE EDUCATION

'We want to work towards a cohesive education system, both for students on the campus and for people working elsewhere around the world,' explains Michèle Gimbrère, educational policy advisor at Wageningen University. Four guidelines have been established to safeguard the small scale and quality of the education, even if online student numbers should soar. 'First of all, we approach the student as an active participant and not as a passive observer. Secondly, it is essential that teachers give good feedback. Online learning analytics can support that,' says Gimbrère. 'When 20,000 students take part in a MOOC, it is not difficult to show a student that he or she is in the top 500, in terms of results, or is bringing up the rear.' Another principle is 'learning in communities': creating added value through intensive collaboration with teachers, fellow students and professionals in the field. Finally, says Gimbrère, it is important to aim at diversity because students come from all sorts of different backgrounds and have different priorities. 'You can meet that by enabling people to plan out their own paths through the course.'