

MASSIVE OPEN ONLINE COURSES

Acquiring Wageningen

Hundreds of thousands of people have already signed up for Wageningen's free online courses, the MOOCs. Participants come from all over the world. They want to explore the options or increase their knowledge. 'A MOOC costs nothing, doesn't commit you to anything and I can do it in my own time.'

TEXT ALEXANDRA BRANDERHORST ILLUSTRATION YVONNE KROESE

I have always been interested in international development and sustainability. I think it's important for us to know where our money is going and how our purchases impact the rest of the world, socially and environmentally. I didn't spend much time studying these topics at my university, so I was excited to be able to take this class online,' says Zoë Fowler-Kimsey from the US in her email.

She is 25, has a Bachelor's degree in Modern Languages and Literature and is currently working as a travel guide. In January she started the *Food Security and Sustainability: Food Access* course. This is one of the Massive Open Online Courses (MOOCs) offered by Wageningen University & Research. In the future, Fowler-Kimsey would perhaps like to do a Master's and look for a job in the field of sustainability and food. Because she works as a tour guide, Fowler-Kimsey finds it handy to be able to do the course at her own pace and from any location. More and more universities are offering free online courses that can accommodate vast numbers of students. These MOOCs are making the knowledge available at universities more accessible for large groups of people. The Wageningen MOOCs, which take eight



knowledge worldwide



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weeks on average, provide basic knowledge on specific subjects using short films and presentations lasting three to seven minutes, for example with animations and a voice-over. Course participants are also given assignments and can swap expertise and experience in forums. ‘We have assignments where we take pictures of things like our dinner or nearby marketplaces and share them with the rest of the class,’ writes Fowler-Kimsey. ‘It’s been so interesting to see these responses in the forum from all over the globe! I don’t think that I would see this many different perspectives if I were physically studying at a university.’

EXPENSIVE TO CREATE

Cary Clark, originally from the US and now living in Italy, took the same MOOC. Aged over 50, she has designed and facilitated training programmes and online courses, for example for the World Bank and the UN. She currently works with farming organizations and teachers in East Africa, Pakistan and the Gulf States, teaching them how to take advantage of online learning. Like Fowler-Kimsey, Clark wanted to find out more about food access because of an interest in the subject. ➤

'I am very concerned about global environment degradation caused by intensive tillage and the use of agrochemicals. I wanted to see what stance is taken by Wageningen.' Clark, who has done a lot of MOOCs, thinks that the Wageningen MOOC is well designed from a technical perspective. 'The structure and delivery is straightforward.' In terms of the content, she has different views on the subject to the teachers. Even so, she is grateful for the Wageningen MOOCs. Clark: 'I know that the courses are time-consuming and expensive to create. This is a great service for global education.'

University students also take MOOCs, such as Thalison Bruno Campos Correa who is doing a degree in Forestry at the Universidade Federal Rural da Amazônia in Brazil. Correa did the Sustainable Soil Management MOOC to improve his skills in soil management. 'As a student of Forestry, I am aware that the soil is a fundamental agent to the maintenance of life. Without it there are no trees, no animals, no food, no ecosystem; without soil there is no life.'

He didn't find the course difficult and all the topics were relevant for him. 'By the end of the course we understood the importance of soil, and how to manage it in a sustainable way.' Correa definitely wants to do more MOOCs, although he does not yet know which university he will choose. He sees MOOCs as a good way of enriching his study and broadening his knowledge about his future field of work.

TWO HUNDRED COUNTRIES

The participants in the Wageningen MOOC come from around 200 different countries. The majority of participants are in English-speaking countries. The US heads the list, with India second, followed by the Netherlands, Canada, Germany, the UK and Brazil. Ages range from 15 to 81, with an average age of 30. About one third of the participants have no university education, one third are educated to Bachelor's degree level and one third to

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Master's degree level or higher.

More than 260,000 people have enrolled to date since the first MOOCs were introduced in 2015. That does not necessarily mean they took a MOOC. 'Some never start, others give up half way through or just browse through the course. There are so many different reasons for enrolling,' explains Ulrike Wild, director of Online Learning at Wageningen University & Research. Only 1.5 percent of the course participants complete the course and purchase the final certificate for 50 dollars.

Wageningen students can also take some of the MOOCs as an optional module. If they then take a MOOC exam on campus, they will be awarded credits for the course. At present, universities are working on the recognition of one another's MOOCs. 'We are exploring collaboration with Delft University of Technology and Leiden University, as well as in the wider European context. If students can do MOOCs elsewhere, that will extend their options and facilitate more differentiation in study routes,' says Wild.

ONLINE MASTER'S

Many universities are experimenting with online education. It is affordable and flexible, and makes the ideal of lifelong learning a step closer. 'Wageningen is in the vanguard because we also offer one or two Master's online,' says Wild. Unlike the open-access, free MOOCs, these are complete Master's programmes that can take



up to four years depending on the pace of study. The students come to Wageningen for a few weeks for lab work and to prepare their thesis.

In September 2015, the university launched the first two Master's: *Plant Breeding and Nutritional Epidemiology and Public Health*, with about 35 students each. The average age of the students is 31. They come from many different countries, including the Netherlands. 'It is noticeable that these people are generally linking their study to their career, which is quite different to a full-time degree. The dropout rate is higher and personal circumstances play a bigger role.' A new online Master's programme – *Food Technology* – is due to start next September.

CAMERA TRAINING

'I never expected us to build up such a large open-access online portfolio so quickly. Our teachers are really enthusiastic about the possibility of sharing their knowledge worldwide,' says Wild. The teachers are given training in how to perform in front of the camera and there is a production team with technicians and educational specialists.

What is more, the online materials that are developed are also used in the regular teaching programme. This plays a key role in the selection of topics. 'We look at subjects that are taught on campus to see whether it is worthwhile developing them further or revamping them. And we look at whether a MOOC can serve as a review course for students to brush up on their knowledge, like *Food Safety*, which deals with the elementary principles from the Bachelor's degree. The topics also have to fit with Wageningen's profile and to appeal to a broader target group.'

Wageningen offers its open online courses via the American platform EdX. The MOOCs can be done as separate courses or in series clustered around themes such as food security or biobased sciences. 'That can be interesting for the professional learning market,' ex-

plains Wild. 'Employees at large companies such as Shell and Friesland Campina can further develop their expertise or acquire new knowledge in their discipline. The same applies to Wageningen alumni.'

The desire to refresh her professional knowledge was precisely why Anja Janssen did the first *Nutrition and Health MOOC* in 2015. She graduated in *Food Technology* at Wageningen in 1992. She lives in Wageningen and works as a freelance journalist and text writer in the field of nutrition. 'A MOOC costs nothing, doesn't commit you to anything and I could do it in my own time. The lack of commitment is also a downside as no one is keeping tabs on you,' says Janssen.

She did not need a certificate but Janssen still completed the exam questions. The MOOC brought back a lot of knowledge that she had forgotten over the years, she says. 'One part was about how much value to attach to nutritional research, for example that epidemiological research says less than a clinical trial. I can really use that background knowledge in my work.' ■

MOOCS

Wageningen's assortment of MOOCs ranges from *Nutrition and Health* and *Food Security and Sustainability to Biobased Sciences, Animal Behaviour, Soil Management and Urban Development*. A list of all the MOOCs can be found at www.wur.eu/moocs

New ideas are welcome for the online portfolio. Send an email to mooc@wur.nl. The MOOCS can also be found on Facebook: www.facebook.com/MOOCsWUR.

Wageningen also offers other forms of online education, such as online Master's and professional education courses. For a overview of all online courses, see: www.wur.eu/onlineeducation

