

## The future of online learning in higher education

Dr. Peter B. Sloep, Open University of the Netherlands

Massive Open Online Courses have dominated the headlines for some time. These MOOCs consist of videotaped lectures, interspersed with quizzes, usually concluded by a test that can be automatically graded. They are a prime example of online learning environments. Admittedly, over 15 years already, universities have used virtual learning environments to support their lecturing. MOOCs are different in that they are positioned as an alternative to lecture-based teaching. Dichotomies simplify arguments, but there is the danger that other options are missed. In the present case, a whole range of them is. This becomes clear once we view educational science as a design science. The history of open and distance learning (ODL) illustrates how this works.

In the distant past, these institutions developed paper-based courses that essentially replaced lectures. They adopted an instructional model that tried to anticipate the problems students would run into by carving up the subject matter text in about four-hour units and interspersing the text with explanations of technical terms, short quizzes to go with difficult passages, formative assessments with feedback, etc. The Web 1.0 version of the Internet made little difference to this instructional model. The underlying pedagogy remained a behaviourist one, with a transmission model of teaching. At this stage ODL very much resembles learning in MOOCs. The advent of the social the web (Web 2.0), offered new opportunities. The old model gave way to social-constructivist forms of learning, with students as active producers rather than passive consumers, required to work in virtual groups on often authentic assignments and skills being emphasised over knowledge.

Lacking existing templates, ODL institutions had to think about their teaching in terms of designs, that is inventorying user requirements and evaluating their designs' efficacy. The discussion about MOOCs should be viewed in this perspective. If we want genuinely to assess MOOCs, indeed the benefits of online learning for traditional higher education in general, we must start viewing all educational arrangements - lecture-based teaching as well a MOOCs - as resulting from design decisions. Then we will realise that the future of online learning in higher education depends on the design decisions we make, not on whether MOOCs are better or worse than lectures.