

Blending a MOOC with Interactive Teaching

Pierre-Yves Gilliéron and Bertrand Merminod (Switzerland)

Key words: Education; Engineering survey; Geoinformation/GI; GNSS/GPS; Photogrammetry; MOOC; Geomatics

SUMMARY

When Massive Open Online Courses became a hot topic in Europe. The Ecole Polytechnique de Lausanne (EPFL) decided to take the challenge and launched an internal call for proposals. At the Geodetic Engineering Lab, we saw a possibility to use contact hours for exercises and fieldwork, rather than telling stories and showing diagrams. External students were considered, but the main purpose was to modernise the first year course "Fundamentals of Geomatics" for approximately 250 civil and environmental engineering students. As the bid was successful, we started with the design of the lectures, followed by the recording sessions in a special studio. Combining photographs, sketches, speeches and quizzes into a video requires a precise script. For one hour of teaching, ten hours of preparation and processing are not always sufficient. The new formula for the course was implemented during the 2013 spring semester. The two hour session remained in the weekly program, with more assistants and other expectations. Regular students took classical mid-term and final exams. At this stage, an incidence of the teaching method on the level reached cannot be ascertained, but neither a miracle, nor a catastrophe took place. Simultaneously, the course was made available worldwide via the Coursera platform. Many people watched the short teaser. Some registered, but few of them did all the assignments and qualified for the distance learning certificate (issued by Coursera, not EPFL). The activity level of the website was monitored. Some elements of evaluation by the students have been analysed. Reactions are widely spread, from "Bring back the professor!" to "Why not 100% MOOC?". Surely, the second edition will bring a more balanced feedback and motivate some improvements. Having opted for a blended approach, the active promotion of this course outside - Western Africa comes first to mind - depends on partnerships with local universities.