Creating Impact on the Ground with Water Education

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SUMMARY

Traditionally the water sector uses a lot of commercial software with expensive licenses for hydrological models and analysis of spatial data. However, the developments in open source software are going so fast that it is currently a good alternative. Yet for many professionals in the water sector, open source is still unknown territory. There is also little attention for it in education at universities.

At IHE Delft Institute for Water Education we have developed educational products where the GIS concepts are software-neutral, but the exercises are done with Free and Open Source Software for Geospatial (FOSS4G) only, such as GDAL, QGIS, PCRaster.

The educational materials consist of free and paid course materials. With OpenCourseWare (OCW) and Open Educational Resources (OER) participants don't need to register and can follow courses or watch videos on YouTube channel for free without support. For participants who need assistance and want to receive the official QGIS certificate there is a paid online course. Participants who need face-to-face training can come for short courses for professionals or request for tailor made trainings. In our MSc programmes we use all these materials in the form of blended learning. Theoretical lectures have to be prepared by watching videos before coming to class. In the class we start with a Q&A session followed by a Kahoot Quiz to test their knowledge. Then we proceed with the exercises. The new work book QGIS for Hydrological Applications is used in the face-to-face trainings.

In all courses we use open data and the participants are also introduced to spatial data infrastructures (SDI) and good practice with geo-information management. During each face-to-face class a mapathon is organised in cooperation with the Red Cross and Missing Maps.

They also learn how to become part of the open source geo communities.

This presentation will also cover the business model and monitoring and evaluation of the impact of the trainings.