Educating for Sustainable Food Value Chains: Insights from an Open Online Course

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Abstract

The 2030 Agenda recognises that food value chains (FVCs) play a leading role in ensuring food security and the implementation of the Sustainable Development Goals (SDGs). SDG 4 "Quality education" emphasises the role of universities in this context. Tertiary education institutions are increasingly responsible for providing free and open access education. Digital educational formats such as eLearning and MOOCs (Massive Open Online Courses) offer enormous potential for global, inclusive and high-quality education.

The Zurich University of Applied Sciences has developed a free and open eLearning course to educate students around the globe about the design of sustainable food value chains focusing on the UN SDGs. The eLearning consists of three modules and is accessible online (https://gof-summerschool.org/elearning/). In order to improve the learning impact, the course was developed in an iterative process. After the development phase, we evaluated the eLearning with 30 students from our summer school "Geography of food". The results of the evaluation were used for adaption of the whole course. And a further, second round evaluation will be conducted.

The most stated message was, that the eLearning "was fun, interesting and kept me focused on the topic". The majority stated that they learned a lot. However, the participants criticised that the third module of the eLearning was not as interesting as the others. Considering this feedback, we unified the design of the three modules and redesigned the third module, putting a strong focus on enhancing the storytelling-aspect and graphical layout.

We conclude that the success of the eLearning is closely related to its attractiveness (storytelling, graphical layout, interactivity). This is proved by the negative feedback for module 3, where the focus on storytelling and graphical layout was weaker. To provide an international success, other aspects like the simple registration-process and the focus on an international environment may be important. In conclusion, the following requirements have been identified as essential to achieve maximum impact:

- Unrestricted and easy access
- An attractive learning environment
- Scientifically sound, relevant content

We see great potential in free online eLearning, where universities can contribute to accessible and inclusive education to improve knowledge about food security. Stronger North-South cooperation and collaboration with interaction designers could further increase the positive impact of such projects.

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