

Programming for teachers: supporting participants in defining their learning path in a flexible online learning trajectory course

Majid Rouhani

Norwegian University of Science and Technology

Abstract

A fully online and flexible learning-trajectory course for in-service teachers aims to include students with varied programming knowledge, interests, and application needs. The goal is to align the diversity in the target group and flexible learning-trajectories so that every student chooses the right path based on his/her background knowledge and interest. This paper presents a study of helping students reflect on their learning needs and choose the right learning-trajectories in such a course. Students with little or no programming knowledge might find the course content overwhelming, and therefore it might be challenging to find the right learning-objectives/trajectories. We use questionnaires to investigate the prerequisites, competencies, expectations, interests, and needs of each student's local practices. Based on the results, the instructors will support participants through communications channels and webinars to select a learning path that is best fitting each student. Besides, course instructors will identify the "mainstream" in the class and follow them tightly using online webinars. One of the main concerns of providing a flexible learning trajectory course is that many students may struggle to find their learning path and find the course content overwhelming. This paper reflects on how webinars may affect the selection of learning paths for each student.

Keywords: Online course, Programming for teachers, Flexible learning trajectories, Learning Objective, Webinar