

Context

In the ECB master's course Design Studio, multidisciplinary teams of UT students (prospective teachers in different subjects) learn to develop meaningful education materials together with secondary schools in the region. These teams are challenged to design and evaluate lesson series and projects for themes as expressed in the Sustainable Development Goals of the UN.

Secondary schools in the region are interested in the results of our student teams. We therefore want to connect this Master's course with our school networks in the region in a sustainable way.

Dec - Feb • Stakeholders meet to make agreements discusses outcomes educational research from HBO • discusses wishes/options from the schools • Connect UT students, schools and teachers Sept - Jan Feb - June • HBO Student uses project for educational • UT students develop projects in collaboration with schools research Promotion by Pro-U for project • HBO student improves project presentations June - Sept • Linking school, project and Project research student (HBO) lecturer presentations (HBO)

Figure 1: routine/scenario for cooperative design work UT and HBO 'lerarenopleiding' and secondary schools

Objectives

 How can we support student teams to cooperate with the secondary schools in the region before, during and after the design and evaluation of the challenge-based teaching and learning materials?

Related to this question:

- What is needed from the course coordinator, university teachers, student teams and schools to sustain the cooperation?
- In what ways can the course coordinator, university teachers, students and schools best communicate the results of the teams (the challenge-based teaching and learning materials) with other secondary schools?

Proces

Start: during a collaborative workshop with school coordinators, teachers (secondary school, UT and HBO) and the course coordinator issues and possibilities regarding the cooperation and communication of results are discussed.

This has led to routine/scenario for cooperative design work (figure 1) and a platform for communicating educational materials with all secondary schools (figure 2).

During: the draft solution has been field tested during the course itself. The first steps were executed successfully, but unfortunately linking developed projects to hbo students was not successful.

After: The draft solution will be refined. The educative materials of the student teams are communicated with all involved during the online presentations and website.

Results

The Design Studio teams have produced a number of nice projects. To communicate these challenge-based teaching and learning materials:

- the following website has been launched (see figure 2):
 https://www.utwente.nl/onderwijs/pre-university/pro-u/archief-pro-u/onderwijs-onderzoek/ontwerpstudio/.
 This website is part of Pro-U: the professionalization platform of the UT for educational practice. Projects can be adapted by interested schools after downloading the published materials.
- Every year, students present their results during an online (Teams) meeting, so teachers can easily join. During the meeting, there is time for discussion.
 Pro-U promotes this meeting through their website and newsletter.

Good practice, pitfalls, and lessons learned

- Very little is done about interdisciplinarity in schools, therefore students appreciate this course. Due to this course schools also become acquainted with this type of education and the developed website offers a source of inspiration.
- Teachers appreciate that student develop materials for their lessons an students are happy that their developed materials are useful for schools. But in practice it often proves difficult to coordinate the testing of materials. Students have to follow the time path of the curriculum and teachers are stuck on their school schedule.
- It turned out to be more feasible to test the developed material during the internship of one of the students than to specifically recruit a school for this purpose.
- Although schools often have specific wishes with regard to teaching materials, the lessons developed by students can serve as a source and inspiration for teachers.
- Students appreciate working together with students from other 'subjects'. This gives them new insides. In the future it would be also interesting to include students from other studies, such as ATLAS and Educational Science & Technology.
- Cooperation with HBO teachers was explored, but needs further attention.

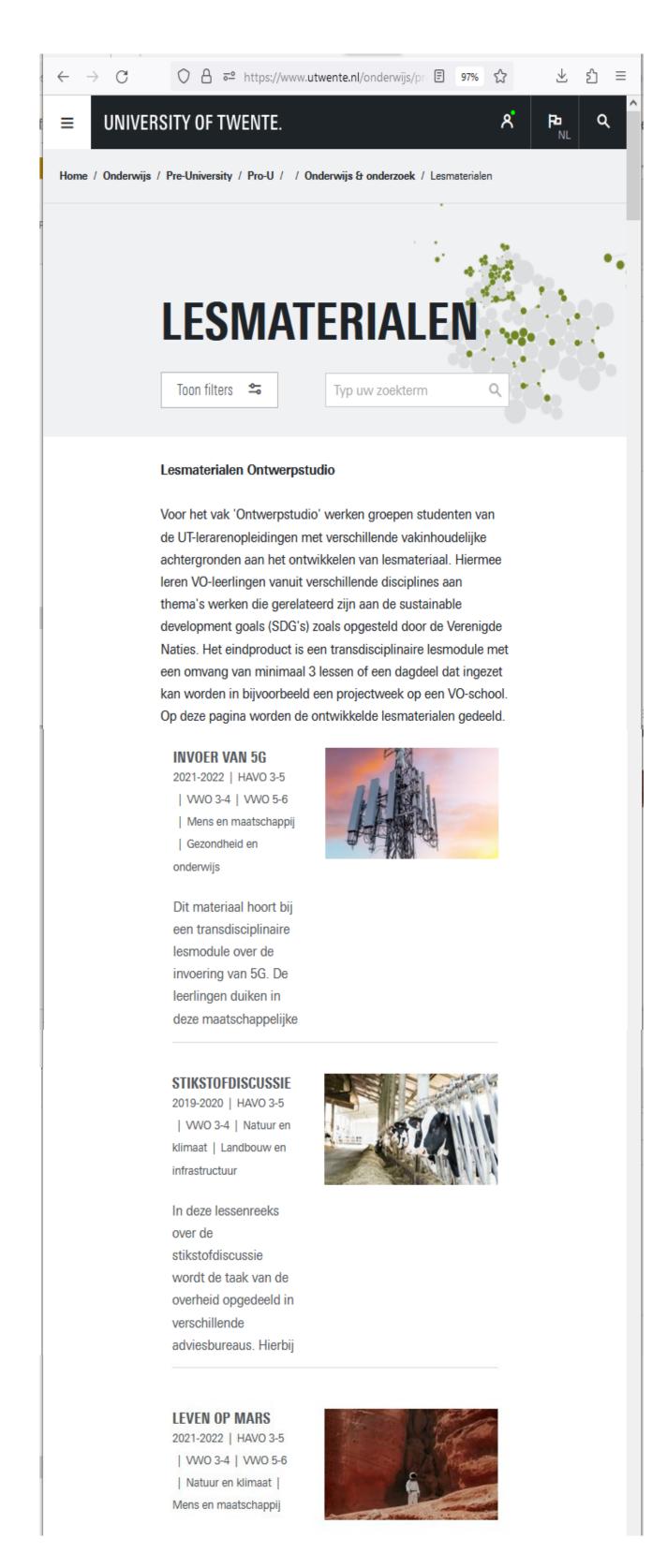


Figure 2: Internet page with created challenge-based teaching and learning materials https://www.utwente.nl/onderwijs/pre-university/pro-u/archief-pro-u/onderwijs-onderzoek/ontwerpstudio

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