

Workshop overview Inspiration Day: April 14, 2022

Personal Development in Challenge-Based Education

Workshops

1. Fostering self, co and socially shared regulated learning in Challenge-based Education

Karolina Doulougeri, Gunter Bombaerts and Jan Vermunt (TU/e)

In Challenge-based Education (CBE), students learn through open-ended and real-life challenges. In this context, students are encouraged to regulate their own learning (self-regulated learning) by setting their own goals, monitoring and evaluating their progress. Still, learning is also social and collaborative, and the interaction with teachers (co-regulated learning) and groups of peers (socially shared regulated learning) also plays an important role.

In this workshop, a brief overview of the key theoretical concepts mentioned above is given and it provides participants with practical insights and tools on how to foster self, co, and socially shared regulated learning in a CBE environment. For example, the use of reflective exercises such as learning portfolios and coaching as a means to scaffold students' learning will be discussed. The workshop aims to engage participants in active discussions and the development of take-home messages related to the topic.

2. Personal development course in support of CBL

Karen Peters (WUR)

Challenge-based learning comes in different forms. In this workshop, the ways in which personal development can be facilitated in extracurricular challenges are further explored. For this, WUR has developed the student challenge learning journey course I and II. In this workshop the courses are presented and explanations will be given about the intentions and ideas behind the course. Hereafter, we will explore if this format could be of added value for TU Delft and/or how education can support challenge-based learning.

3. Reflection for personal development in CBL

Linette Bossen, Nazli Tumer, Aimee Sakes, Costanza Milano (TU Delft & Reframing Studio)

In 2019 the faculty of 3mE posited their ambitions in their strategic vision to create a challenge based and student-centred learning programme called: "Reflective Engineering". In September 2020, this vision was realised in the new MSc programme for Robotics. In 2021 the department of Bio-Medical Engineering started to implement the faculty vision in collaboration with Reframing Studio and 4TU.CEE. They had already developed a "Vision on the Future Engineer" that offers a framework to embed the challenge-based and personal developmental elements proposed in the faculty vision. The two approaches used to create a curriculum that meets the faculty vision is explained in this workshop. The facilitators will stimulate participants to use the lessons learned and apply the framework "vision of the future engineer" to their local context.

4. Sustainable DG profiles for personal development in grand challenge education

Eva Rood and Anna de Waard-Leung (Rotterdam School of Management)

Eva Rood & Anna de Waard-Leung both work at Rotterdam School of Management (RSM), the business school of Erasmus University. They will share how they use the framework of the UN's Sustainable Development Goals to communicate how RSM intends to 'live' the mission "to be a force for positive change in the world", and how RSM integrates this mission in its learning materials, learning outcomes (including the development of a competency framework), and a personal development trajectory in the undergraduate programmes.

5. Dealing with uncertainties

Casper Smits and Caroline Wehrmann (TU Delft)

Throughout the learning process of challenge-based education, students are faced with a variety of uncertainties. Every student experiences uncertainty differently, and at different phases of the learning process. Three types of uncertainty can be discerned: task, social, and individual. To help students deal with these uncertainties, they are explicitly asked to reflect on and discuss how they experience uncertainties and what they need to deal with them. This concerns both the development of their own competences and the role others (lecturer, commissioner, peers) could play in their learning process. This workshop discusses what role the lecturer could take in order to help students deal with uncertainty in challenge-based education.

6. The acquisition of knowledge, competence and general skills in CBL: what is (not) learned and when

Ruurd Taconis (TU/e)

In CBL, students learn by engaging in open-ended real-life challenges in interdisciplinary teams. Research has identified several positive outcomes. It also brings education closer to (professional) reality. But what can promote the acquisition of the various domain-specific and general skills. And how is theoretical knowledge acquired by doing CBL projects? What elements of the educational setting can influence this, the latter in particular? A collaborative exploration, informed by findings from the literature.