



in Engineering Science and Sustainability under the auspices of UNESCO

# Problem Based Learning (Problembaseret læring)

## Knowledge about:

- central approaches, concepts and techniques in problem based learning
- different problem types, project types and their mutual relations
- theory of science in a problem based learning context

#### Skills to:

- define problem based learning with theory as well as own experiences as starting point
- plan and manage problem based project work taking into consideration the given problem type, team constellation and the duration of the project
- identify, analyse and formulate an open and complex problem considering its human and societal context
- point out relevant focus areas, concepts and methods to open and sustainable problem solving of complex problems
- discuss methodological impacts of different theory of science positions when working problem based
- analyse, compare and evaluate the processes of working with different problem types
- analyse and evaluate the processes of working team based in a problem based project, including project planning, monitoring and team development

## Competences to:

- develop study practice aligned with a problem based, project organised and digitalised learning
- point out, try out and evaluate relevant techniques and approaches to improve a problem based project work
- transfer own experiences from a problem based project to guidelines for comparable projects
- evaluate own progression in problem based learning, based on experience and learning theory

### Examination format:

Written exam

#### Assessment:

Passed/Not passed