# Pedagogical strategies for the complex and uncertain sustainability classroom

## **Supervisors**

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#### **Description:**

Sustainability education concerns itself with teaching about wicked problems, such as climate change, loss of biodiversity, plastic pollution of the oceans and food safety. What makes these topics so complicated to deal with and emotionally charged, is the fact that (1) they are hard to define (unclear boundaries) and keep changing at the same time that you are trying to solve them, (2) they often involve information that is incomplete and contradictory, (3) they involve multiple actors each with their own values and objectives, (4) they require inter-disciplinary and imaginative problem solving, and (5) there is not one optimal solution. Wicked problems can be so overwhelming that people experience a lot of strong negative emotions. So how can we teach children, youth and students the competences they need to deal with these issues? How can we help young people to prepare for a rapidly changing world? It seems obvious that they will need to encounter some of that uncertainty in (or outside!) the classroom, but how can we as teachers employ pedagogical strategies to guide this process? There are many fascinating topics a MSc student could further explore. Here are some examples, but note that if you have your own ideas, we are all ears to hear about them:

- How do learners experience learning about the uncertainty inherent to sustainability challenges?
- What pedagogical strategies can teachers e.g. in the environmental sciences employ to *deal with* eco-anxiety experienced by students?
- How can we employ *authentic learning environments* for developing the competences needed to deal with sustainability challenges?
- What is the role of conditional and unconditional language in the sustainability classroom?
- Which uncertainty competences do teachers need to develop themselves, to be able to teach learners how to handle uncertain sustainability challenges?

### **MSc and ECTS:**

Students doing a MSc Environmental Sciences (MES), Animal Sciences (MAS), or Organic Agriculture (MOA) can apply for this thesis as part of their educational track (See Study Handbook for requirements). Students from other programmes are invited to conduct the project under shared supervision with another chair group. This should be a chair group listed by your study programme as optional chair group for doing a thesis. Please contact your study advisor to inquire about the possibilities. This thesis project can be 24 or 36 ECTS in consultation with the supervisors and depending on your availability.

#### **Location:**

In consultation with supervisors

# **Planning:**

In consultation with supervisors

#### **Contact:**

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