

INTREPID Training school

Session on “Revisiting transdisciplinary research framework of competences” by Daniel Lang & Henrik von Wehrden

Scope: While we focused approaches to structure transdisciplinary research in the first part, in the second part we focus on the competencies and skills required for (transdisciplinary) sustainability research. Following a publication from Wiek et al. 2011 we present a framework to structure key competencies in sustainability. We will discuss how these core competencies can be matched with the different phases and design principles in transdisciplinary research. This will allow for a clearer focus of the research process, assist composing adequate teams for sustainability research projects and aid the students to see which competencies they might need to strengthen.

Aim: This session will match the general framework of transdisciplinary research with core competencies in sustainability sciences. We will challenge participants to reflect which skills are needed at which phase of the research process, thereby creating a reflection process that aids career planning as well as experience in conducting projects. This will serve as a starting point for the integration and structuring of further projects both conducted during the workshop as well as derived based on background knowledge from the participants.

Outline of the session:

- 1) Introductory input (15 minutes).
- 2) Discussion on competencies and research stages (20 minutes)
- 3) Breaking down cases into required competencies and research stages (40 minutes)
- 4) Discussion on competencies and research phases (15 minutes).

Group Exercise:

- 1) Each participant is a member of a working group of 4 persons.
- 2) Participants will together reflect on the competencies that are necessary for the given project.
- 3) The group will divide competencies among members.
- 4) Responsibilities will be matched with the research phases.
- 5) Participants will reflect potential lack of competencies.
- 6) Each participant will identify the most critical stages in matching competencies with research phases in a cross-matrix.
- 7) The selected case of each group is presented following the different research structures using a 2-minute pitch.
- 8) A final discussion will align research phases with competencies.

Lessons learned: The participants will learn to match transdisciplinary research stages with core competencies.