Formative evaluation of school workshops to co-create the energy transition

Brief abstract

As part of <u>Energy for Future</u>, students will run, improve, and evaluate a school workshop on the energy transition. Students will collaborate to adapt workshop tasks that reflect the complex interactions of people, nature, technology, and society. They will run workshops and interview participants.

This is a sister project to the project "Quantitative assessment of school workshops to co-create scenario-based energy transition".

Name of supervisor(s)

Prof. Beate Seibt, Social Psychologist

Assoc. Prof. Charles Samuelson, Social Psychologist

Associate professor Marianne Zeyringer, Energy systems modeller

Postdoc Karin Fossheim, Political scientist

Preferred background of candidate(s)

Master studies in social, educational, or natural sciences with an interest in climate change mitigation or the energy transition. Experience with teaching or conducting workshops is a big advantage.

Number of available projects

This is one collaborative project for 2 students.

Preferred project period

Part-time April-October

Background of the project

The offered project is part of a larger funded project delivering and evaluating school workshops in Norway. With these workshops, we will answer the question: What energy systems do young Norwegians envision for their future? The workshops will use design-focused learning activities to foster systems thinking and envisioning a renewable-energy based future. Integrating serious games will allow us to quantify where in their local environment students could or not imagine wind turbines and what amelioration options can lift barriers. We will sample different regions in Norway and base the workshop cases on interviews with stakeholders about regional plans and options. The planned research is twofold. 1. We will evaluate the impact of participating in 5-day workshops through pre- and post-questionnaires. We expect the intensive and creative work on regional climate change mitigation through renewables to increase understanding and empowerment regarding climate solutions, and more positive attitudes about wind farms. 2. Based on the workshop generated results, we will develop GIS layers for different social acceptance scenarios and use those in an energy systems model for Norway, to design possible future energy systems as envisioned by young people. From these, we derive recommendations for planning procedures as well as parameters, and provide them to relevant stakeholders. This collaboration between psychological and technological research groups thus allows the integration of feasibility and desirability of energy solutions, combining technical parameters for options with social parameters for choices.

Outline of project work including expected outcomes/deliverables

You will work together to refine teaching materials, concepts and content for a workshop for adolescents aged 16-17 on climate change mitigation, the energy transition and the sustainable economy of the future.

You will travel to different schools and hold the workshops, together with someone from the core team. Through interviews and analyzing the material created in the workshops, you will evaluate what works well and what can be improved to strengthen the workshop impact.

In doing so, you will work towards answering the following questions:

- What is important for the adolescents to learn about climate mitigation, the energy transition, and the world we should be trying to build with them?
- Based on experience from the pilot workshop, how can these contents be delivered in an engaging, interactive way?
- What additional illustrations, videos, quotes, art works etc. help deal with these issues, increase grasping the topics and engaging with them in a creative way?
- Based on the pilot study, which workshop activities work best to achieve these goals?
- What can we learn from the adolescents about their experience with the workshop?
- How well do the workshop activities fit with the evaluation measures and how can we improve that?
- What problems can arise during workshop delivery and how can we deal with them?
- What additional schools, regions, municipalities should we recruit for the workshop?

You will deliver the results of the formative evaluation in the form of an engaging report that may lead to a manuscript.

There will be a possibility of continuing as a research assistant in the project, helping with further workshop delivery and summative evaluation.