## Education as an authentic inquiry into real-world challenges: Selecting well-chosen teaching content

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This interactive workshop is aimed at teachers who (want to) **engage with real-world challenges in education** and is based on pragmatist educational research on this topic. Such challenge-based education (Gallagher & Savage 2020) provides the students with **unique educative opportunities** (Van Poeck & Östman 2020) such as the chance to acquire specific knowledge, insight and skills, space for creativity, engagement and commitment, the motivating experience of being able to make a difference, and the challenge to learn to deal with how different people may each have their own idea of how to solve this problem. Such educative moments are less likely to emerge during theoretical lessons or mere reflective, hypothetical classroom discussion where no 'real' challenge is at stake. When dealing with real-world problems, what is said and done is not non-committal: one has to find a solution together, not everyone thinks the same and there may be resistance. An ideal context for pluralistic education without the risk of falling into 'anything-goes' relativism (Öhman & Östman 2019; Van Poeck 2019).

We address a key didactical task in the design of challenge-based education, that is, how to organise teaching and learning practices as an authentic inquiry into real-world problems for which single right answers and solutions are not known in advance - instead of as a well-planned pseudoinquiry meant to let the students 'discover' solutions or answers predefined by the teacher. After briefly addressing the pedagogical potential of challenge-based education, we focus on what this requires from the teacher. In particular, we engage with the key didactical challenge of selecting well-chosen teaching content for education practices as an authentic inquiry into real-world problems. We first introduce the concept of 'didactical carving' to discuss the crucial task of teachers to 'carve out' of massive, complex societal problems a teaching topic that is both in reach of the students and faces them with an authentic challenge to explore and try to tackle. The participants list relevant challenges, each of them selecting one that can be addressed in their specific context and engage in a didactical carving exercise with the help of tools developed through didactic research. Subsequently, they make an inventory of resources that can help the students to address the sustainability challenge by listing what the discipline they teach has to offer in this respect as well as what the local environment (incl. the campus), actors in the local community, organisations, media, etc. have to offer. Crucial, here, is selecting resources that take the students along in in an authentic problemsolving process, i.e. that support them throughout the four phases of a full problem-solving cycle: exploring the problem, coming up with possible solutions, implementing solution proposals, and evaluating the problem-solving.

The workshop's **potential for transformation** is that it contributes to capacity-building for engaging with tackling real-world challenged in education. The participants gain increased insight in the unique pedagogical potential as well as possible pitfalls involved, identify relevant challenges that can be addressed in the context of their own education practice and purposes, and develop increased capacities to design teaching and learning practices as an authentic inquiry into real-world challenges.

## References

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