MAKING A CHANGE!

Transformative science and peer-to-peer learning for empowering the youth amidst the climate crisis

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Background

• Living in the Anthropocene -> Global Grand Challenges (e.g., climate crisis) imposing existential threats to humanity
• Fundamental paradigm-shift is needed
• Young people represent a powerful source for this deep shift, willingness to act is very high (Schinko, 2020)
• Empowering young people to become “system changers” is challenging within current educational systems
  • Prioritize instrumental learning in an individualistic and competition-oriented environment over critical thinking, reasoning and reflection, and co-creation of creative actions
Motivation

- **Transformative learning** is needed to change unsustainable values, attitudes, habits, and behaviors (Frisk & Larson, 2011)
  - Alternative forms of knowledge (i.e., procedural, effectiveness and social knowledge)
  - Novel spaces for critical thinking, reflexivity, and experimentation

- To contribute to sustainability transformations, science itself must become transformative (Anne et al., 2020)
  - Knowledge transfer is no longer enough, it is all about effectiveness in translating knowledge into real climate action

- Education and research institutions, together with practitioners NGOs and students, must collaborate in providing impetus for necessary social changes
Objectives

• **The makingAchange peer-to-peer training** sets out to build up climate competences in schools and provide complementary (inter)personal and social skills for enhancing self- and response efficacy

• **Final product**: standardized open access peer-to-peer training concept

• **This study** empirically explores the role of transformative science in Austria in supporting effective sustainability education that enables real climate action through a peer-to-peer training
## Methodology – transdisciplinary peer-to-peer training

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<th><strong>University students</strong>: trained to be science buddies for participating schools</th>
<th>• Lectures at Austrian universities – providing theoretical and methodological skills to students for acting as low-threshold science buddies for climate peers (in return for ECTS + cost reimbursement)</th>
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| **School students**: trained as climate peers to be champions in schools for climate change and sustainability related issues | • 4x1 day workshops within a schoolyear; encompassing knowledge enhancement and soft skills  
• Co-designed by researchers, practitioners, civil society organizations, teachers and students |
| **Scientists**: mentors for participating schools and students | • Scientists act as dialogue partners for climate peers and as trainers for science buddies, providing their professional expertise and experience |
| **Practitioners**: implementation mentors for participating schools | • Practitioners in youth participation and environmental education guide and assist climate peers in implementing climate action at their schools over the whole school year |
Implementation I
Implementation II

20/21: 58 Peers from 10 schools and 45 Buddies

21/22: 75 Peers from 17 schools and 27+ Buddies (number for summer term not yet known)

**Topics:**
- Climate Change basics
- Climate justice
- Mobility
- Agriculture/diet
- Consumption & waste
- Health

**Tools:**
- Science dialogues
- Soft skills training (e.g., art of hosting)
- Arts based science communication
Preliminary findings

• Indication that transdisciplinary peer-to-peer training
  • support students’ critical thinking and awareness of the climate crisis
  • enable peers to reflect about own stakes in context of sustainability transformations
  • provide them with new sense of agency, empowerment and skills for real transformative action (personal and societal level)

• Scientific evaluation of effectiveness ongoing!
Conclusions

➢ Societal change needs more than communicating scientific facts and offering scientific projections of future change

➢ Truly inter- and transdisciplinary research is needed to support the complex transformation towards a sustainable society

➢ The makingAchange peer-to-peer approach constitutes a long-term science-society education format, with high potential to
  ➢ Raise awareness for the complexity of the Grand Global Challenges of the 21. century
  ➢ Enable young people to shape their own sustainable living space in collaboration with others
  ➢ Stimulate transition of willingness to act into real transformative actions that make a difference
Thank you!
Any Questions/comments/advises?