University of Basel

Partnering for Change: Link Research to Societal Challenges

Video Transcript

Goals and principles of transdisciplinary research

[Tobias Buser] Complex and wicked societal challenges require specific responses. The actors involved need new approaches to collaborate and to jointly produce knowledge. Transdisciplinary research offers a promising approach to tackle such challenges. What are its aims, and what principles guide its research processes?

It is not possible to answer these questions unambiguously. Transdisciplinary research was developed in several contexts and thematic fields. Hence, there are several definitions that differ slightly when it comes to describing aims and principles. So, let us focus on the context at hand. What is the objective of transdisciplinary research if it addresses societal challenges? In that case, it aims at transgressing boundaries between scientific disciplines as well as between science and practice. It does so to develop knowledge that can help to solve, mitigate, or prevent societal challenges.

As to the principles to give you guidance, we turn to the work of several authors, most of them writing in the field of sustainability science. We are operating with seven principles. We develop project goals based on actual or upcoming societal challenges. We need to be aware that we deal with complex systems that include manifold interdependences and interactions. We promote what is perceived as common good. For this, we develop knowledge and practices that consider questions of justice and power as well as the interests of the different actors.

We accommodate and integrate different perspectives, including academic and non-academic knowledge. We appreciate distinct knowledge and values. Thus, we address issues that are often contested between different actors. We do not only need to create knowledge to understand a problem. We also need to generate knowledge that helps to overcome the problem. Therefore, it is important to produce three different kinds of knowledge: systems knowledge, target knowledge, and transformation knowledge.

We perceive science as part of a social learning process. We want to be societally relevant and scientifically valid. Hence, we need to link abstract knowledge to case-specific knowledge. At first sight, these principles look overwhelming, but we come back to them. And to make sense of them, we invite you to work with the case studies in this course. A definition of transdisciplinarity cannot fit all purposes. However, for our context, we would suggest the following elements: If we produce knowledge in a transdisciplinary setting, this knowledge should help to solve, mitigate, or prevent societal challenges.

This means we do not only produce knowledge to understand the problem, but also to help addressing the problem. The transdisciplinary process brings together many stakeholders: researchers from different disciplines, actors from civil society, the private and the public sector. They jointly analyse the problems and discuss what could be more desirable futures. They cooperate on strategies and actions that support necessary changes. In a nutshell, transdisciplinary research links societal problem-solving with scientific knowledge production in a process of co-producing knowledge.