

How to train transdisciplinary competences? Insights from a lecture on “System Analysis and Scenario Technique”

Valentin Fiala, Bernhard Freyer, Milena Klimek, Alexandre Fahringer

University of Natural Resources and Life Science, Vienna (BOKU), valentin.fiala@boku.ac.at

Abstract: *In this article we evaluate if the lecture “system analysis and scenario technique” at BOKU University can equip students with necessary competencies to perform transdisciplinary research to foster the integration of science, technology, policy and practice. Furthermore we investigate what the most effective didactic methods applied in the lecture are and if it qualifies as a transdisciplinary pedagogy. The lecture follows the simplified framework of a transdisciplinary case study and tries to transfer such an approach into the traditional curricula of master programs. An online survey among former participants of the lecture was conducted. Results for the years 2015/16 and 2016/17 indicate that indeed the lecture has potential to increase transdisciplinary competencies among participants and could therefore qualify as a transdisciplinary pedagogy. Students expressed that the most effective didactic method is work with real world cases and stakeholders from outside the university. However the study also shows that there are limits in integrating real world cases within the lecture. Students complain about the high workload and time constraints. Short-term solutions might include optimizing case selection and student guidance. Long-term solutions beg for a reorganization of traditional Austrian curricula that would allow working on the cases for more than one semester and ideally the alignment and timewise matching of other lectures.*

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