



Cross-Impact Analysis – a tool for inter- and transdisciplinary knowledge integration (Module 1)

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This teaching resource is allocated to following University:

BOKU – University of Natural Resources and Life Sciences Vienna

Institution:

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<http://www.sustainicum.at/de/modules/view/125.Cross-Impact-Analysis-a-tool-for-inter-and-transdisciplinary-knowledge-integration-Module-1>



Gruppenarbeit



**5 bis 10
Studierende**



**Bis zu 3
Vorlesungseinheiten**



**Internet
Verbindung
erforderlich**



English

Many decisions in the field of sustainable development have to be taken in the context of uncertain and incomplete knowledge. In this situation, a systematic integration of a range of research-informed judgments, expertise from different disciplines and experienced-based knowledge is often the best way forward. The scenario technique offers several tools to strengthen inter- and transdisciplinary knowledge integration and to deal with uncertainty. Two of these tools are presented in two modules. Each

module consists of a theoretical introduction (25%) and an interactive part (75%). Participatory exercises serve to deepen the knowledge of the technique acquired and put it to practical use. Both modules can be implemented separately as well as consecutively (module 2 after module 1). 1. Cross-Impact Analysis (knowledge integration, understanding the complexity of a system and the options of action) 2. Scenario Development (knowledge integration, ranking, deriving simple scenarios)

The cross-impact analysis supports inter- and transdisciplinary dialogue processes on complex systems. It helps to integrate knowledge and expertise across disciplines. Moderations techniques help to identify the system's driving forces that are integrated into the excel spreadsheet for the cross-impact analysis. The results of the expert-based assessment help to identify particularly active factors that are promising targets for purposeful intervention or factors that can better serve as indicators for the state of the system. The analysis helps to understand the complexity of the system and illustrates that the knowledge of different disciplines must be integrated to get a full picture of the system or problem.

Werkzeuge und Methoden



Schriftliches Material, Präsentationsunterlage(n)



Brainstorming



Diskussion/Debatte



Simulation

Lernziele

The students know how to apply a cross-impact analysis to integrate cross-disciplinary knowledge.

Bezug zur Nachhaltigkeit

Complex problems of sustainable development need the integration of inter- and trans-disciplinary knowledge and an understanding of system dynamics.

Vorausgesetztes Wissen

Benötigt kein spezielles Vorwissen

Vorbereitungsaufwand

Niedrig

Zugang

Free

Gefördert von

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