CLIMATE LAB

A seminar to forster Education for sustainable development

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Learning goals – Climate Agency

Guiding Goal: Promote the most effective **Climate Agency** among students so that they can develop **solutions to the climate crisis** and other key epochal problems.

Climate agency can be understood as **a competence to shape and act in relation to the climate crisis** and, based on Weinert's concept of competence, can be defined as follows (Weinert 2001: 27f.):

Cognitive skills and abilities to solve [climate-related] problems, as well as the associated motivational, [intentional], and volitional readiness and skills to successfully and responsibly use problem solving [for climate-smart and sustainable development].

The competence construct *Climate Agency* can be differentiated into **several sub-competencies**. These are definable *independent competencies for solving partial aspects of complex climate and sustainability problems* (Rieß et al. 2018: 301):

knowledge acquisition	systems	antizipation
... gain, assess and apply knowledge in an interdisciplinary and multi-perspective manner.	... think and act in a networked way.	... think and act with foresight.
creativity	**perspectives**	**cooperation**
... think and act critically-constructively (creatively).	... take different perspectives, evaluate them and use them for actions.	... work on and solve sustainability-related problems together.
partizipation	**critical thinking & reflection**	**responsibility**
... constructively help shape social processes.	... reflect on values and actions and use them as a further basis for action.	... experience themselves as part of the world and take responsibility for it.

Fig. 1: Sub-competencies of a *Climate Agency* (modified after Education 21 2016: 3f.)

Description

The Climate Lab project seminar offers students the opportunity to engage with the **topic of climate protection and climate justice** and to become active. During the seminar, students work together in **interdisciplinary small groups** to **develop and implement specific projects**. Through this cooperation of **students from different disciplines**, a broad spectrum of expertise and competencies is brought to bear in order to find innovative **approaches to solutions**.

By focusing on **the implementation of measures for climate protection and justice**, the project seminar initiates a **transition from the level of knowledge to the level of action.** In doing so, the projects should not only be effective, but also **socially just and sustainable**.

Basic data

- duration: 2 semesters (at least 4 ECTS credits)
- work on projects (planning & implementation)
- work in interdisciplinary small groups
- contextual reference to „Climate Change & Sustainability"
- authentic & self-selected problems
- product at the end of the project work
- self-determined project selection and implementation
- lectures in an advisory capacity

Competence structure model

The following competence structure model was developed for the **theoretical foundation** and **empirical description** of a *climate agency*. This model supports the **localization of target operationalizations** and the **relationships** between them.
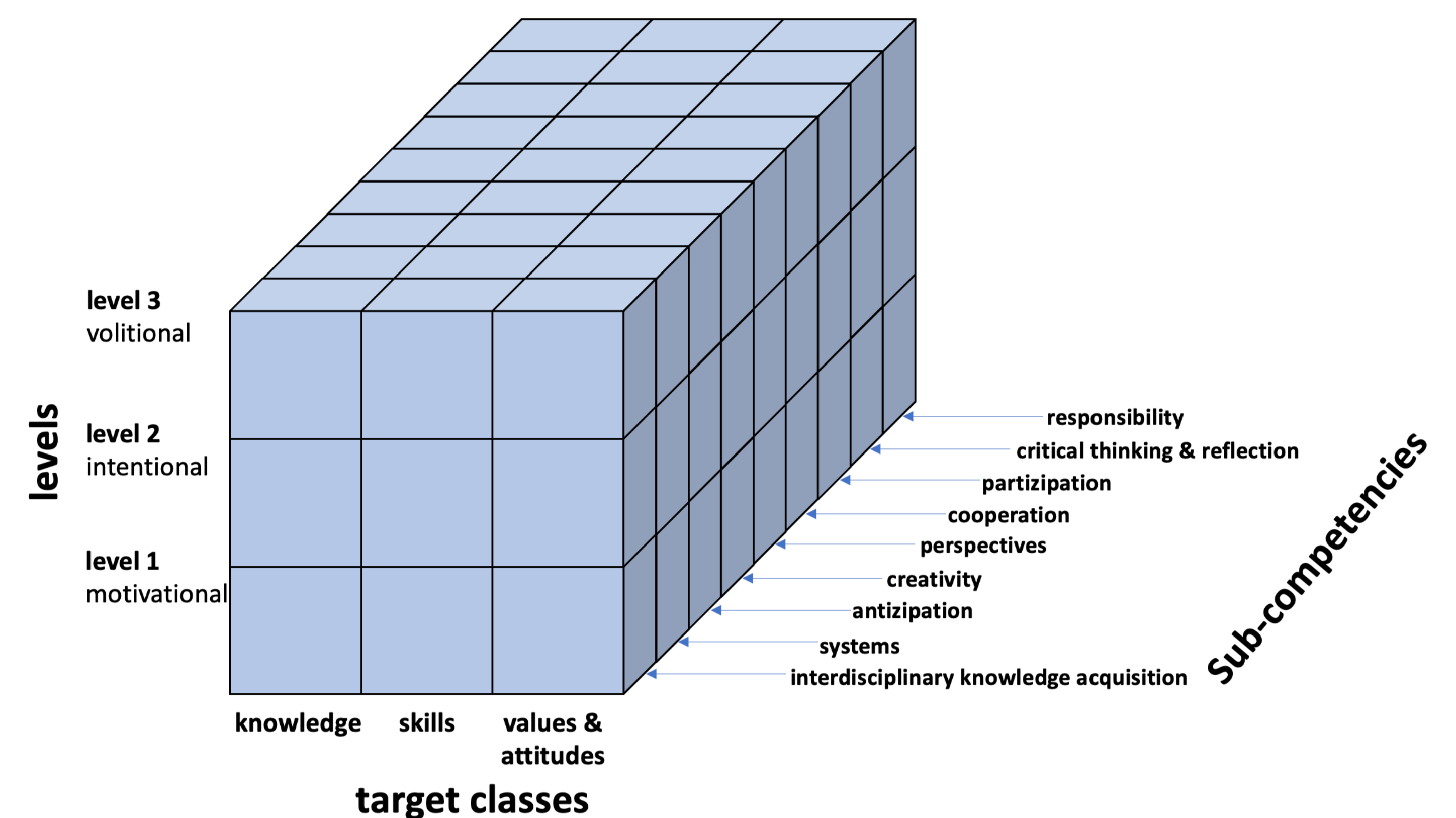

Fig. 2: Competency structure model with levels, target classes and sub-competencies according to Fig. 1

Topics for *Climate Literacy*

Es lassen sich folgende Themenfelder mit Bezug zur Klimakrise herausarbeiten:

Fig. 3: 24 overarching themes of climate literacy (based on the UN's 17 SDGs)

Topics for key qualifications

These are **knowledge, skills & values** that do not have to have a central thematic reference to the climate crisis. Key qualifications should support the action-oriented work in the Climate Lab in a meaningful way.

Fig. 4: Superordinate topics of key qualifications

Timing of the project seminar

Initial phase: group identification and development of a project idea

Planning phase: preparation of project outline, time and work plan

Implementation phase: Implementation of the project in small groups, exchange with external stakeholders and interim presentations

Evaluation and application phase: Final presentation on a project day with supervisors, external guests and evaluation of the process.