

# Critical thinking in sustainability education. Students' argumentations in open forms of teaching

## Keywords

Critical Thinking; Phenomenbased Learning; open lessons; UN SDGs; Reasoning

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## Abstract (500 words)

## Abstract (300 words)

Critical thinking (Ennis, 1987) is an important educational goal in schools, and the question must be asked as to how students can be educated to become critical thinkers (Abrami et al., 2015; Abrami et al., 2008). To date, only a few teaching arrangements have been described that aim to develop critical thinking. In addition, there are few findings on how critical thinking can be traced in pupils' statements.

This presentation shows how students (class 7-9) formulate arguments for their decision-making as a main task of critical thinking in open and interdisciplinary teaching arrangements in which they deal with their own questions within the UN SDGs in a project-oriented manner over a half-year (Kohnen & Rott, 2023). Different subjects, such as foreign languages, provide lesson quotas for this format. The aim is therefore to include aspects of language learning, but above all intercultural learning.

Group interviews (25 interviews, 92 students) are analysed in which the pupils are asked about their projects and plans. The data is analysed using qualitative content analysis, whereby dense passages are examined

more closely using objective hermeneutics (Wernet, 2006).

The available data can be used to show how students justify their choices for topics and projects. It can also show how the projects have developed over time and which developments the students recognise in themselves. Aspects of critical thinking can be worked out in more detail, which are also closely linked to questions of transformative learning. These include aspects of collaboration, empathy and tolerance of ambiguity.

Transfer ideas for foreign language teaching and ways in which foreign language teaching can introduce broader perspectives for critical thinking will be considered.

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