Contribution ID: 173 Type: Oral presentation

Conceptual Understanding of Climate Change of German A-level Students

Wednesday 5 July 2023 17:00 (20 minutes)

This study examines the conceptual understanding of the scientific principles of climate change of German A-level students using the CCCI-422 climate change concept inventory. The sample under investigation consists of 501 A-level students of five German upper-level secondary schools (Gymnasium) representing the complete A-level student body in their schools. Results show that the CCCI-422 seems difficult for the A-level students, because less than half the items were answered correctly. Alternative conceptions known from literature (e.g. ozone hole explanation) can be approved with this instrument and this sample. The self-assessment drops from pre to post strongly and becomes more realistic.

How would you like to present your contribution?

Live in Košice (time slot to be allotted based on the programme)

Target education level (primary)

Upper-secondary education

Target education level (secondary, optional)

Author: Dr WACKERMANN, Rainer (Physics Education, Ruhr-University Bochum, Germany)

Co-authors: Dr WÖHLKE, Carina; Dr SCHUBATZKY, Thomas; Dr HAAGEN-SCHÜTZENHÖFER, Clau-

dia

Presenter: Dr WACKERMANN, Rainer (Physics Education, Ruhr-University Bochum, Germany)

Session Classification: Contemporary and modern physics

Track Classification: Contemporary physics and modern physics at school