Evaluation of OCE's lesson plan for 9-12 year old students on emotions related to climate change

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While a thorough understanding of the science of climate change is essential, the psycho-social aspect of this phenomenon cannot be ignored. We now know that psychological burdens of climate change are affecting a large number of youth globally (Marks et al., 2021). Research has shown that children tend to manage eco-anxiety through meaning-focussed, problem-focussed or de-emphasizing coping strategies (Ojala, 2012). Effective climate change education (CCE) thus needs to address these affective aspects to enable changes in behaviour, choices, and habits of students. OCE's pedagogical plan on eco-anxiety provides teachers with a tool to focus on the psychological impact, further building on the cognitive understanding of climate science imparted by other lessons concerning climate science. Taken together, these lessons will build an interdisciplinary and holistic picture and orient students towards positive action to combat climate change.

The proposed research project study will evaluate the effectiveness of OCE's lesson plan in managing eco-anxiety and provide a better understanding of eco-anxiety in teachers and 9-12 year old.

Hypotheses and research objectives: Currently, the OCE is conducting a pilot evaluation of the lesson plan on emotion. Using a standardised eco-anxiety and anxiety-coping measurement questionnaires, she will collect student and teacher data before and after teachers implement OCE's activity on emotions regarding climate change.

Research Question and Methods: This study addresses the question whether students and their teachers are able to better manage eco-anxiety and develop an action-oriented attitude upon using OCE's lesson plan. This will be a randomized controlled trial approach, with up to 80 teachers from France invited to voluntarily participate in the study with their classes. Teachers will be randomly sorted into two groups. Teachers in the treatment group will receive training and conduct two activities in class - one on consequences of global warming, and one on emotions. Those in the control group will conduct only the activity on consequences of global warming. In both cases, propositions of follow-up activities on prospection through artistic expression and project-based activities will be proposed to the participants. Data will be collected from both groups before and after the activities. Standard tools measuring eco-anxiety levels and behavioural approaches will be used for quantitative data (Hogg et al., 2021; Ojala, 2012).
**Expected Outcome:** The study will provide a scientific validation of the education resources created by OCE and help in making our current and future CCE resources more impactful. It will contribute towards a better understanding of eco-anxiety in young children. If found to have a positive impact on eco-anxiety management, this lesson plan will help make CCE more holistic.