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## **Eco-anxiety in the global classroom - educational strategies about biodiversity in a sustainable perspective**

From all over the world it has been reported that children are increasingly suffering anxiety and grief about climate change, what has been termed “eco-anxiety”. The anxiety is partly built up by concerns for species survival. One million animal species are threatened by extinction, and fundamental system changes are needed to save the quality of life worldwide, according to the IPBES (2019) report.

Swedish preschools and elementary schools have long traditions of education for sustainable development, primarily by visiting nature and recycling materials. However, young people’s concerns about climate change force schools to reorient education towards a more global world where sustainable and ethical values include all forms of life.

The **aim** of this study is to investigate what can affect the way students, teachers and whole schools do or do not engage with the challenging issues in a global learning agenda with a special focus on biodiversity loss.

### **Theoretical framework**

The study takes its theoretical point of departure regarding learning and teaching from Dewey’s (1934/1980) aesthetic theory that makes it possible to study pupil’s engagement and their meaning making as a holistic process. Important for the study is also Roberts (2007) argument that studies in science education not purely should be related to pupils’ natural scientific general knowledges and their opportunity to work with inquiry but also to values related to their attitudes and engagement.

### **Action research**

The study will be conducted in three steps related to action research. Firstly, a questionnaire will be sent to preschool teachers and teachers to investigate to what extent and in what areas are they teaching about biodiversity. Secondly, preschool teachers and teachers, will participate in focus groups to discuss how we can reach beyond their present teaching. Thirdly, will we together with preschool teachers and teachers finally develop holistic educational models where discussions about sustainable and ethical values are given a significant role in science education.

### **Expected findings**

An expected result is to achieve models for education, together with teachers, where sustainable and ethical discussions embracing different life forms in both local and global contexts will contribute to meaning making and a holistic approach in the classroom.

### **Relevance to Nordic educational research**

The study is relevant for the Nordic educational research since it will identify how Nordic schools may use eco-anxiety as a catalyst for developing interest, knowledge and engagement

about complex issues related to climate change, such as sustainable and ethical dimensions of anthropogenic biodiversity loss.

In this symposium participants are invited to share reflections on how schools may transform eco-anxiety to action competence.

Dewey, J. (1934/1980). *Art as experience*. New York: Touchstone.

IPBES (2019). *Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*. IPBES secretariat, Bonn, Germany.

Roberts, D. A. (2007). Scientific Literacy/science literacy. In S. K. Abell & N. G. Lederman (Eds) *Handbook of research on science education*. 729-780. Mahwah, New Jersey, USA: Lawrence Erlbaum Associates.