Subproject 2 – transformation of concepts; the case of Sustainabel Development
In Subproject 2, we plan to investigate in what way a particular cross-subject and multifaceted concept, namely sustainable development, is transformed in the different school subjects. The concept is included in the national curriculum (Lgr 2011) as an important objective to consider in the teaching of all subjects (Swedish National Agency for Education 2011). The sustainability concept has a complex history as it was developed in the interaction of policy writing and research. The concept had its media impact in 1987 when the Brundtland commission (WCED 1987) suggested that it involves "a development that satisfies present needs without jeopardising the possibility of future generations to satisfy their needs". To achieve this end, environmental, social and economic (three dimensions) goals need to be reached. To solve environment issues solutions are often found in the other dimensions.

The purpose of Subproject 2 is to investigate, on the basis of ATD, how different steps in the educational transformation process are shaped in different school subject traditions. Previous research has shown that the teaching of environment and sustainability issues on the whole adheres to three teaching traditions: a fact-based, a normative and a pluralistic (Öhman 2004). Sund and Wickman (2008) have in addition shown that science teachers have different reasons for their teaching. However, little is known of what non-science teachers think or do. In an earlier major national quantitative ROSE study, we have shown that that teaching traditions on sustainability differs between social science and science subjects, while language and mathematics teachers have difficulties in integrating the perspective in their classes (Borg et al. 2012). Why or how such differences have arisen is not clear. The aim of Subproject 2 is therefore to study how practice (praxis) and knowledge (logos) are linked in terms of the sustainability concept. In this way, we expect to gain knowledge of how the transformation process develops in different subject traditions.

We intend to conduct a literature survey of how the concept of sustainability is formulated in different academic traditions. The study is supplemented by a Delphi study (De Villiers, DeVilliers & Kent 2005) with subject experts to add empirical perspectives to the subject traditions. Concurrently with this study, textbook analysis in school subjects will be a conducted along with in-depth interviews with teachers whose teaching of sustainable development will be mapped through observations. The subproject results will give an overview of how a cross-subject and holistic concept such as sustainability is orchestrated in some subjects. In addition, we should get knowledge of possibilities of and challenges to the teaching of sustainable development. Based on this knowledge and the practices generated in Subproject 2, we will conclude with a questionnaire on sustainable development distributed to teachers. The responses will enable generalisations of the transformation process based on the subjects involved. The survey is to be carried out in the second half of the project.

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