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SP - (16587) - SUBJECT-RELATED ETHICAL KNOWLEDGE OF TEACHERS AS BACKGROUND FOR DEALING WITH UNCERTAINTIES

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Short Abstract

Science education aims at developing students' capability to make ethical-judgements, which requires an opening towards a critical and reflexive examination of ethical complexity and ethical aspects. Especially focussing scientific citicenship and the ability of students to deal with uncertanties, ethical arguments gain importance. Allthough specialized knowledge, in the field of professionalization research, is considered to be an important determinant of education quality, it is unclear whether teachers possess these professional skills (the ethical knowledge) needed to deal with this challenge.

Based on the analysis of ethical approaches such as the 'Moral Sensitivity Approach' and the 'Teacher Noticing Approach', the contribution deduces essential structures of a 'subject-related professional ethical knowledge': Knowledge of the distinction between ethical aspects and descriptive aspects, knowledge about the diversity of ethical aspects within a scientific topic and, last but not least, basic ethical skills needed to abstract ethical aspects from personal experiences and skills concerning the use of technical, ethical language when talking about these aspects.

The contribution analyses the relation of this professional knowledge to other facets of teachers' professional knowledge. Furthermore, it asks for empirical evidence on the question of whether the degree of this professional knowledge may explain difficulties in teaching ethical aspects.

The contribution is also intended to present the first empirical data that was collected using a test instrument that was developed to record the subject-related ethical professional knowledge of geography teachers. The test instrument is a quantitative tool that measures the aforementioned knowledge based on three dimensions and is collected through the use of text vignettes.