

Conceptualizing Awareness in Environmental Education: An Example of Knowing about Air-related Problems

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ABSTRACT *The notion of environmental awareness has been controversial in environmental literacy. Environmental awareness has been traditionally understood as conceptual awareness, but this study takes into consideration activity-related aspects of awareness, which should be integrated into an ontological model of developing environmental literacy. The empirical part of the study investigated the components of conceptual awareness using the model of air-related environmental issues. Eight classes of students (N=204) filled in an open-ended questionnaire one week after teaching about environmental issues was completed. The questionnaire investigated the extent of their awareness regarding the greenhouse effect, the depletion of ozone layer, acid rain and air pollution at general and local level. The teachers of the eight classes answered a different questionnaire relating to the teaching methods they used. The findings indicated that the students exhibited in their answers both conceptual and activity-related components of environmental awareness, and they faced difficulties in combining global and local aspects of environmental issues. Three types of students were identified on the basis of their awareness about the examined air-related issues: with mainly task- and process related and contextual awareness, with mainly social and contextual awareness, and with awareness where all aspects were combined. The active student-centred teaching method was related with the development of mainly the social and contextual awareness. Some students who participated in student-centred activities outdoors belonged to the awareness type in which task- and process-related contextual awareness was prevalent. The teacher-centred traditional methods developed both task- and process-related, and social and contextual awareness components.*

KEYWORDS: Acid rain, air pollution, environmental awareness, environmental literacy, greenhouse effect, ozone layer depletion.

The Role of Awareness in Environmental Literacy

There are two discrete lines of argumentation relating to the environmental awareness. The first one considers environmental awareness as conceptual knowledge, while the second considers environmental awareness as closely connected to the actions and system components, where intentions and values also play an important role.

The aspects constituting environmental literacy, such as, "people's ability to deal with their immediate surroundings in an effective and stimulating manner" (Steele, 1980, p. 225), or environmental competence that indicates a "person's

