6 - Nature of Science: History, Philosophy and Sociology of Science | Empirical

SP - (16389) - THE RELATIONSHIP BETWEEN EPISTEMOLOGICAL BELIEFS AND MOTIVATION TO LEARN SCIENCE AMONG SIXTH GRADERS

Márió Tibor Nagy (Hungary)^{1,2}; Erzsébet Korom (Hungary)^{2,3}; Gábor Z. Orosz (Hungary)^{1,2}

1 - Doctoral School of Education, University of Szeged, Hungary; 2 - MTA-SZTE Science Education Research Group; 3 - Institute of Education, University of Szeged, Hungary

Short Abstract

Epistemological beliefs (EB) have an important role in the learning process. Beliefs about knowledge and knowing can affect learner's achievement, cognition, learning strategies and even their learning motivation. Several empirical studies have reported that epistemological beliefs are in relation with achievement-related motivation, although some motivation components are not equally emphasized. The aim of this study is to explore sixth graders' epistemological beliefs in science and to investigate the relationship between four EB dimensions and the motivation components (intrinsic motivation, self-efficacy, self-determination, grade motivation and career motivation). In the study two questionnaires – EB survey by Conley et al. (2004) and SMQ II (Glynn et al., 2011) – are being used among 153 sixth graders. The results show that students have less sophisticated views on the source and certainty dimensions. Moreover, significant positive correlations were found between the justification of knowledge, all motivation components and achievement in science. The findings of this study can contribute to our understanding of EB and the development of an intervention.

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