

ABSTRACTS

BALOGH, BRIGITTA: Wholeness in Imperfection – Non-Mechanical Conceptions of Health, the Concept of Spirit and Conductive Pedagogy

The aim of the paper is to sketch a possible conceptual framework for the theoretical contextualization of the conductive pedagogy elaborated by András Pető. Albeit such an attempt could be inspired by several different theoretical approaches, the paper limits itself to elaborate one of them, namely a framework based on G. W. F. Hegel's concept of spirit. We discuss the significance of this concept in the context of the conflicts between mechanical and organic conceptions of nature in the 18th and 19th centuries, emphasizing the latent survival of this conflict until today. In this context, the Hegelian concept of spirit proves to be a model of current relevance, insofar as we can find its main strength in the fact that it not only takes account of the specific human phenomenon of the dynamic interference of givenness and free action, but also goes to pose it as a fundamental issue for understanding human beings. In the light of the model explored, human health itself turns out to be a kind of ability of integration, and at the same time a relative concept in the sense that, on the one hand, it can not be defined by "objective" criteria, while on the other hand, it remains always correlated to the concrete features of the particular human being. We do not aim to provide a comprehensive overview concerning conductive pedagogy's vision on human beings, but we confine ourselves to analyse some moments of great significance from the point of view of the theoretical status and practice of this pedagogical system. So, we discuss the theoretical problem of the "inertia of scientific concepts", the significance of the concepts of orthofunction and dysfunction, and a possible interpretation of the method of rhythmic intending. As a conclusion, we point out that the conception of human beings outlined in the course of the actualization of the Hegelian concept of spirit turns out to be not only fitting for a precise articulation of the aspectual features of conductive pedagogy, but it is able to articulate such essential nuances and particularities of it which could not be apprehensible within the framework of a less complex theoretical model.

Keywords: *mechanical vs. organic conceptions of nature, man as spiritual being, health, conductive pedagogy, G. W. F. Hegel, András Pető.*

NAGY-CZIROK, LÁSZLÓNÉ: Misconceptions and conceptual changes – How does science worldview of students change?

The formation of our study was inspired by theories on scientific misconceptions and the research of the pupils' viewpoints. In the course of our research, the frequency of misconceptions was investigated in 2167 pupils aged 9-16 in relation to age, inductive thinking, and academic performance in mathematics. The first sixteen questions of our questionnaire were based on previously published Hungarian research results, while the remaining nine were derived from popular beliefs and common discourse. The data was collected in 2017. On average, 12 out of 25 responses were incorrect. Eight basic questions were answered erroneously by less than half of 10 to 11 year-olds. Certain misconceptions could first be observed to be rectified somewhat in the 8th or 10th grades, while others showed no apparent improvement at all. At least one question was identified where the frequency of misconceptions increased over time. We found that the occurrence of some misconceptions shows a positive correlation with year-end math scores. Overall, the most significant decrease in the ratio of misconceptions was observed among 8th graders. According to our results, misconceived views are frequently due to the significant deviation of everyday usage from the language of science. In this context, we also talk about the responsibility of teachers. We also argue that not all children should be discouraged from adhering to their own interpretations of the world – or more precisely: not everyone at the same age. We show that not all of the errors can be referred to as legitimate misconceptions because either their incidence rate or resistance to education is small.

Keywords: *scientific misconceptions, changing world view, re-interpretation of words, implicit learning, thinking ability, phenomenon explanation*