

## **Eighth Grade Students' Associations of Geographical and Environmental Concepts** (A Comparative Study between Turkey and Bulgaria)

### **Abstract**

The paper presents the construction and use of a free word association test for revealing the scientific conceptual structures of 8<sup>th</sup> grade students, concerning geographical and environmental stimulus words. The test contains eight stimulus words, which retrieve a cluster of associations most of which are based on geographical and environmental education and are studied as associated. Four groups of students from four schools – two in Turkey and two in Bulgaria are comparatively assessed and the results analyzed. Variables, concerning the social status of students and their interest in geography and environment are compared and differences between them are outlined.

**Key words:** *environmental concepts, geographical concepts, word association test.*

### **Introduction**

The secrets of learning and cognitive development of people have been attracting scientists' attention and effort since ancient times. They are a subject of inquiry of many branches of science: psychology, neuropsychology, neurophysiology, biology, ethnology and many others. Cognitive scientists study the multiple forms of category learning and have come to the conclusion that it depends on different brain systems. Goswami (2001) shows the importance of relational and surface similarity in analogical reasoning. The structure of the conceptual understanding and the richness of students' representations are essential in perceiving analogy. Ratzan