Possibilities for Motivation in Hard Sciences Teaching

Radka Dofková

Palacky University in Olomouc, Faculty of Education, Department of Mathematics, Olomouc 771 40, Czech Republic
E-mail: radka.dofkova@upol.cz

KEYWORDS Creativity. Didactic Games. Lifelong Education. Pedagogical Constructivism. Psychology

ABSTRACT This paper focuses on the relevance and importance of motivation in one of the subject of hard sciences namely mathematics in the context of lifelong learning. The introduction identifies and summarises basic theoretical issues of motivation: a definition from the perspective of psychology and education, the basic divisions and different approaches used to motivate children and adults. There is a description of the pitfalls and difficulties in motivating students in mathematics, as encountered by teachers in educational practice. Paper presents the results of undertaken research at elementary school. Finally it also explores possible solutions in teaching methods which use pedagogical constructivism, a tool used to increase students’ attention and to provide motivation within mathematics teaching.