STIMULATION OF EXECUTIVE FUNCTION 'SHIFTING' IN TEACHING MATHEMATICS

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ABSTRACT. Executive functions are mental processes which manage, control and organise human cognition. They represent the fundamental level of mental functioning. The research team from the Faculty of Education, University of Presov is designing a comprehensive program for stimulation of executive functions of pupils aged 9-10 years within the APVV project scheme. Three executive functions: inhibition, working memory and shifting were specified to be stimulated by the program. Mathematical component of the program is focused on stimulating and reinforcing pupil's executive functioning on the background of mathematical curriculum. This paper provides an outline for designing tasks aimed at stimulating the executive function of shifting. Shifting is the ability to switch fluently between multiple sets of cognitive operations. The authors also propose the guidelines for assessing and interpreting the performance of pupils in such tasks.

KEY WORDS: Executive Functions, Primary Mathematics, Cognition, Teaching

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