PEDAGOGY

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Methods of formation of cognitive universal educational activities of schoolchildren studying mathematics

It is considered the essence of cognitive universal learning activities and the specifics of their formation in the study of mathematics. The content of the construct being studied is specified, both in accordance with the state educational standard and in the context of the practice of educational activities in mathematics. The scientific approaches of experts-methodologists and teachers-practitioners to the definition of the specifics of cognitive universal learning activities, formed in the mathematics lesson, are considered. The key cognitive universal learning activities are specified and described. Modern didactic approaches to the selection of means for the formation of cognitive universal learning activities within the framework of mathematical education have been studied. The role of teaching and research activities of students is substantiated, examples of its implementation in the practice of teaching mathematics are given. The essence of educational projects is considered in detail, options for using "smart maps", research cases, etc. are described. The use of electronic educational resources, as well as heuristics in solving creative problems in mathematics, is substantiated.

Key words: cognitive universal educational activities, mathematics, means of forming cognitive universal educational activities, educational and research activities, educational project, heuristic methods, «mind maps».

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