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Diagnostics of pupils' meta-subject competence during lessons on mathematics in secondary schools

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Abstract

© 2016 Khuziakhmetov and Naumova. The relevance of diagnostic meta-subject competence measures in secondary schools is caused by the fact that the importance of a meta-subject competence formation was officially defined in educational standards, but there are still no qualitative and informative diagnostic tools for this competence development. The purpose of the article is to develop and test a method of pupils' meta-subject competence diagnostics in secondary schools during mathematics lessons. The main method of the research is modeling. This method was the basis for further methodic set development and the pedagogical experiment, which allowed to use the approved methods. During the research we created a complex set of methods for pupils' meta-subject competence diagnostics in secondary schools during mathematics lessons, which allowed to assess levels of pupils' meta-subject knowledge and skills, to identify problematic aspects of their meta-subject competence, to define advantages of the method set and to develop recommendations for its further use. The developed diagnostic method set can be used by teachers of mathematics in secondary schools to assess levels of pupils' meta-subject competence, which helps to draw further plans for individual meta-subject competence development in the system of mathematical education.

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Keywords

Diagnostics, Mathematics, Meta-subject competence, Meta-subject knowledge meta-subject skills, Secondary school