PEDAGOGY

Viktor A. Nefedovskiy[1], Yuri A. Savitskiy[2], Lyudmila M. Medyanikova[3]

[1, 2, 3]*Krasnodar Air Force Institute for Pilots named after Hero of the Soviet Union A.K. Serov, Krasnodar, Russian Federation)*

Theory of processing research results in the field of spatial thinking development

The article discusses the problem of processing data obtained when solving typical problems in the development of spatial thinking. Examples of the stages of spatial thinking development are described. The structure of the data obtained during the exercises is presented. The opposite approaches for different data grouping methods are considered. Algorithms of actions for processing the obtained results are proposed. Approaches to the analysis of test results are shown. The advantages and disadvantages of the methods used for analyzing test results are analyzed. It is concluded that in order to obtain reliable results, it is necessary that the sample be large enough, the signs for analysis are correctly selected so that they divide objects into clusters and sensitivity analysis to the choice of method and parameters should be carried out.

Key words: spatial thinking, spatial images, information, cluster analysis hierarchical methods.