Research into the effectiveness of the empirical pedagogical method "practical and innovative work"

This article deals with the problem of increasing the effectiveness of empirical pedagogical research. This study was motivated by the infrequent use of the practical assessment of didactic materials in pedagogical studies devoted to the theory and methodology of teaching and upbringing. To determine the effectiveness of practical and innovative work when assessing the quality of didactic materials developed for teaching physics at secondary school based on an activity-oriented educational approach. This study is part of a larger research project focused on the didactic basis of problem-based learning. The project is based on the principles of personality-oriented developmental education and system approach. In this particular study, the following empirical methods were used: literature review, expert evaluation and survey. It was found that the method of practical assessment of didactic materials is rarely used in pedagogical studies on the theory and methodology of teaching and upbringing. However, numerous researchers apply a hybrid method combining pedagogical experiment and practical testing. The necessity of using the method of practical assessment of didactic materials as the final stage of the empirical part of pedagogical research was substantiated. The method of practical and innovative work showed a high level of effectiveness when assessing the didactic characteristics of the educational materials developed by the author for teaching physics at secondary school (the didactic complex of problem-based learning "Physics – 7–9 form"). Practical assessment of didactic materials should be applied more widely as part of empirical pedagogical research on the theory and methodology of teaching and upbringing.

Keywords: empirical methods of pedagogical research; effectiveness of practical and innovative work; didactic comple.