

Abstract

Title: Pupil's personality and solving problems of school Mathematics by heuristic strategies

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This thesis deals with the relationship between the type of pupil's personality in the dimension of information reception and their ways of solving problems of school Mathematics with the use of heuristic strategies at the lower secondary education of basic school and in the corresponding years of grammar schools. The theoretical part summarizes the knowledge of heuristic strategies in the teaching of mathematics at the lower secondary education of basic school and their application on examples. Furthermore, the theoretical basis of type theory and its use in education is explained.

In the practical part the results of the typological questionnaire are presented and an extensive qualitative analysis of the student's problem solving is offered. The resulting findings are supported by concrete examples of students' solutions. In this diploma thesis, there is evidence that the intuitive pupils use the heuristic strategies of problem solving more often than the sensory pupils and are more successful in solving non-traditional tasks.

Keywords: heuristic strategies, MBTI, type theory, problem solving