

## **ABSTRACT**

The thesis on "Critical places at the first stage of primary school in the teaching of mathematics by the Hejný method" focuses on the problematic places of the Hejný method, which make it difficult for teachers and especially their pupils at the first stage of primary schools.

In the theoretical part of the thesis, the constructivist and transient educational style teaching of mathematics using the Hejný method are characterized. The critical points in mathematics identified in the project of the Grant Agency of the Czech Republic are also introduced and conceived into a unified structure. The theoretical part also includes an analysis of pupil solutions to mathematical tasks from the 2015 TIMSS international survey.

The empirical part deals with the experience and view of primary school teachers in teaching mathematics by the Hejný method. The first research survey finds from future primary school teachers their experience and opinions on this method. The second research survey focuses on the identification of problematic places and roles in the teaching of mathematics by the Hejný method from the point of view of teachers who teach mathematics using the Hejný method at the first stage of primary schools. The questionnaire survey was carried out using the questionnaire method, which identifies problematic places in different areas of teaching. The identified critical points will then be compared with the critical points in the teaching of mathematics identified in the GAČR project.

## **KEY WORDS**

Hejný method, constructivist approach, didactic environments, problematic places, mathematical tasks, primary school teacher, questionnaire survey