

## **Abstract**

The thesis called *The Ways of Presentation of Mathematics in the 7th Grade of Montessori School* provides with a description and detailed analysis of Montessori principles with regards to their use and fulfilling tasks during lessons of mathematics at Montessori Schools. Its further aim is to check out in the course of lessons if the three Montessori principles - discovering of facts by an individual, work with mistake and individual approach - are being applied during the presentations of new topics to the 7th grade students of Montessori school.

The thesis consists of theoretical and practical parts. The theoretical part deals with establishing of educational areas of mathematics and its application within the „The Framework Education Programme for Elementary Education“ and description of current trends in mathematics, didactic constructivism represented by Hejný and Kuřina. Further on, it describes Montessori principles and their application and use during the teaching of mathematics and ways of presentation of mathematic topics in Montessori classes. The end of theoretical part is a comparison of Montessori principles during the mathematic lessons and didactic constructivism.

In its introduction, the practical part refers to the theoretical concept of education in the second cycle of Montessori Elementary School Na Beránku. Using the method of application research (Korthagens cycle), I focus on the description of presentation of new mathematic topics and detailed analysis of the three chosen Montessori principles - discovering of facts by an individual, work with mistake and individual approach.

The reflection of made presentations has revealed that all three chosen principles are followed during presentation of new mathematic topics and frequency of their use proportionally corresponds with the amount of individual work and amount of didactic materiál.