

Abstract

The diploma thesis deals with teaching geometry at the basic school - what is the position of geometry in comparison with mathematics and other school subjects at present day? The thesis describes didactic teaching principles of geometry, its methods and work forms. It deals with the teacher's attitude to its teaching.

Research is divided into two parts. In the first part it deals with detecting relations and teacher's attitudes to geometry. It explores possible influence to positive or negative attitude to it, and how these impulses influence their today's attitude to geometry as a school subject. The second part of the project detects positive or negative influence of teacher's attitude to geometry on pupil's results from this subject. It deals with particular data from worksheets which were done by pupils from the 5th class and compares them with answers of their teachers in the questionnaire about popularity of teaching of geometry. The assumption is that the results of pupils who are led by the teacher with positive attitude to geometry will be better than the results of pupils who are taught by the teacher with negative attitude to the geometry. It studies differences in results among particular tested schools and differences in achievements between boys and girls. In the thesis the graphs are used to visualise gained data.

The thesis is completed with a worksheet file which should be used for teachers as a theme for improving quality of teaching geometry.