Abstract
In this thesis, we assume a pan-European issue of the decline of interest in science and science education. In connection with this issue we conducted a literature search. We have also mapped the literature related to the issue of education research in the Czech Republic and the rest of the world. In an effort to increase pupils’ interest, increase enthusiasm for science, we deal with activation teaching methods that compare with frontal teaching. As a motivational method we chose a research method of teaching. We prepared a lesson, which we tested among pupils of secondary school. In this work we watched 16 hours in 6 classes. Those lectures were inquiry and frontal way led. The results are presented in the practical part of this thesis. During lectures we wanted to stimulate students' interest in science and science research.

Keywords
academic instruction, frontal teaching, science education, cooperation, sensors Pasco, microscope, pupil, elementary school, Key Competencies