Abstract
The aim of this thesis is familiarization with the atomic analysis method. The historical development of the method, its current use and the author’s practical experience together enable a comprehensive conception of the method to be formed. A substantial part of the thesis consists of an experiment with six fourth grade pupils resulting in three distinct outputs. First, a survey of the historical development of atomic analysis. Second, educational material processed in Microsoft Class Server, which has already been used and will continue being made use of in training primary school teachers at the Faculty of Education at Charles University in Prague. Third, a demonstration of the atomic analysis of a specific video recording and accompanying written material obtained from the experiment.
Keywords: atomic analysis, students' mistakes and misconceptions, constructivist approach, combinatorics, experiment