

## **Abstract**

The main topic of this thesis are map skills, and the key point of interest are strategies used for map analysis. General reference map was found as a suitable map given its frequent use in the school atlases. The main goal of this study is evaluation of the general reference map analysis strategies in terms of their dimensions, i. e. their repertoire, distribution, efficiency, and adaptability. 20 upper secondary school students participated in an eye-tracking experiment that consisted of the test and the follow-up questionnaire. The eye-tracking data were analyzed qualitatively and quantitatively to obtain information about the strategy dimensions. Results showed that students used broad repertoire of strategies when analyzing the general reference map and they pointed to the most chosen strategies as well. In some cases, students used more than one strategy to solve the task and thus the most frequent strategy combinations were detected. The efficiency of strategies was evaluated based on the students' success rate and the length of the solving cycle which was affected by the type of elements, respectively map content, used for solving the task. The ability to adapt to specific task demand was proven by addition of elements needed into the strategy or using entirely different strategy type. The eye-tracking technology was proven to be relevant for the study of strategies used when working with map and it is suitable tool for data acquisition in this topic.