

## **ABSTRACT**

In the thesis, results of a research focused on monitoring strategies used by students during problem solving are presented. It follows previous studies conducted with the use of think-aloud method. Due to limitations of this method, an eye-camera is used. The record of the camera is used not only to analyse student's problem-solving process, but also as a tool eliminating one of the RTA limits – inaccuracies due to forgetting. The strategies were investigated among economics-oriented vocational school students in the first grade. They solved indicator tasks from the Methodical Comments and Tasks for Educational Standards in Lower-Secondary Education. The research sample was selected based on a pre-test composed of the selected tasks. According to the results, the students were divided into four categories, two students of each category were selected for the research. They solved a second set of the tasks. Based on eye-tracking and think-aloud data, their problem-solving processes were mapped and false-positive results were eliminated. The research results show that the students used the most expansive strategies, mainly work with the periodical table. However, in most cases, these strategies did not lead to a correct solution, due to the students' problems during solving. In these cases, they used limiting strategies in the end, which influenced their answers.