The Analysis of Secondary School Students' Problem Solving Skills According To Solo Taxonomy*

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Keywords:	Abstract
mathematics, middle school students, problem, problem solving, solo taxonomy, non-routine problems. **Paper Type:** Research	In this thesis, the level of problem solving skills of secondary school students was examined according to the SOLO taxonomy. In the research, a problem solving test consisting of 10 open-ended problems was first administered to 305 eighth grade students as a written exam. By examining the answers given by the students to the problems in this exam, interviews were conducted with 19 students selected by the criterion sampling method, one of the purposive sampling methods. In the research, case study, one of the qualitative research methods, was used in order to make an in-depth analysis. As a result of the research, the levels which the answers given by the students to each problem correspond to were determined in the SOLO taxonomy. In the research, it was found out that the students mostly gave answers in accordance with the unistructural and multistructural levels. It has been determined that while students who reach higher thinking levels are in the minority, students at pre-structure level are relatively high. As a result of the research, it has been seen that the SOLO taxonomy is an effective tool in examining problem solving skills. In addition, it has been determined that the SOLO taxonomy provides convenience in detecting subject deficiencies and misconceptions and is appropriate to be used in the evaluation phase in mathematics lessons.

* The first author of this article is in her master's thesis titled "The Analysis of Secondary School Students' Problem Solving Skills According to SOLO Taxonomy".