

INVESTIGATION OF MIDDLE-GRADE STUDENTS' PROBLEM SOLVING PROCESSES AND PROBLEM SOLVING STRATEGIES FOR SOLVING DAILY LIFE PROBLEMS

Öğrt. Hatice Kübra Güler
Gaziosmanpaşa Üniversitesi, Eğitim Fakültesi
hatkub93@gmail.com

Yrd. Doç. Dr. M. Gözde Didiş Kabar
Gaziosmanpaşa Üniversitesi, Eğitim Fakültesi
gozde.didis@gop.edu.tr

Abstract

The development of problem solving skills, which constitutes an important component of learning stages, is emphasized as one of the main objectives of mathematics education in the middle school mathematics curriculum. The aim of the study is to examine 7th and 8th-grade students' problem solving processes and their problem solving strategies for daily life problems. Fifteen 7th grade and fifteen 8th grade students participated in this study. Two daily life problems were used in this study and students worked in groups of three on each problem during 40 minutes. The solution papers including the detailed solutions of the students constitute the data of the study. In the analysis of the data, the problem solving processes used by the groups were examined and problem solving strategies were determined. The findings of the study displayed that in both classes students similarly applied "make a table" and "make a list" as problem solving strategies. On the other hand, the findings revealed that the 7th and 8th-grade students had differences in the process of interpreting the problems. This study will provide mathematics teachers with an insight into students' problem solving skills for daily life problems and the strategies they used.

Keywords: mathematics education, problem solving strategies, middle-school students.