ABSTRACT

SHABIRA FITRAH AMALIA. *Improving Mathematical Problem Solving Ability and Self-confidence of High School Students Through Discovery Learning Model Assisted by Quizizz*

This study aims to determine: 1) improved mathematical problem-solving skills of students who obtained the Discovery Learning model assisted Quizizz higher than students who acquired the regular learning model; 2) self-confidence of students who obtained the Discovery Learning model assisted by Quizizz was better than students who obtained the usual learning model; 3) a positive correlation between the improvement of mathematical problem solving ability and self-confidence of students who obtained the Discovery Learning model assisted by Quizizz; 4) the effectiveness of the Discovery Learning model assisted by Quizizz on improving students' mathematical problem solving ability; 5) the effectiveness of the Discovery Learning model assisted by Quizizz on students' self-confidence. The method used in this research is a quasi-experiment with a non-equivalent control group design. The subjects in this study were X grade students of SMA Negeri 22 Bandung in the 2023/2024 school year with a sample of two classes, namely class X-2 as an experimental class treated with the Discovery Learning model assisted by Quizizz and class X-4 as a control class treated with the usual learning model. The research instruments used are mathematical problem solving ability tests and self-confidence questionnaires that have met the question criteria. The research data were processed and analyzed using the IBM SPSS Statistic 27 for Windows program. The results showed: 1) the increase in mathematical problem solving ability of students who obtained the Discovery Learning model assisted by Quizizz was higher than students who obtained the usual learning model; 2) self-confidence of students who obtained the Discovery Learning model assisted by Quizizz was better than students who obtained the usual learning model; 3) there is a positive correlation between the improvement of mathematical problem solving ability and self-confidence of students who obtain the Discovery Learning learning model assisted by Quizizz; 4) the effectiveness of the Discovery Learning model assisted by Quizizz on improving students' mathematical problem solving ability is classified as moderate; 5) the effectiveness of the Discovery Learning model assisted by Quizizz on students' self-confidence is classified as moderate.

Keywords: Discovery Learning, Quizizz, problem solving, self-confidence