ABSTRACT

Riana Aulia Amalia (2024). ***Mathematical Critical Thinking Ability and Leaning Motivation of Junior High School Students Through Problem Based Learning Assisted by Wordwall*.**

The study aims to find out: (1) Investigate whether the improvement of students' mathematical critical thinking skills is higher in the Problem Based Learning model assisted by Wordwall compared to the conventional learning model. (2) Examine whether students' learning motivation is better in the Problem-Based Learning model assisted by Wordwall compared to the conventional learning model. (3) Determine whether there is a positive correlation between students' mathematical critical thinking skills and learning motivation in the Problem-Based Learning model assisted by Wordwall. (4) Assess the effectiveness of the Problem-Based Learning model assisted by Wordwall in enhancing students' mathematical critical thinking skills. The study employed a quasi-experimental or pseudo-experimental method with a non-equivalent control group design. The entire population of eighth-grade students at SMP Pasundan 8 Bandung was used for the study, and the research sample consisted of two classes. The instruments used in this study are in the form of mathematical critical thinking ability test descriptions that have been tested and declared valid and learning motivation questionnaires that have been declared valid. Data analysis was conducted using IBM SPSS 27 for Windows. The research results show: (1) The improvement of students' mathematical critical thinking skills is higher in the Problem-Based Learning model assisted by Wordwall compared to the conventional learning model. (2) Students' learning motivation is better in the Problem-Based Learning model assisted by Wordwall compared to the conventional learning model. (3) There is a positive correlation between students' mathematical critical thinking skills and learning motivation in the Problem-Based Learning model assisted by Wordwall. (4) The Problem-Based Learning model assisted by Wordwall is effective in enhancing students' mathematical critical thinking skills in junior high school.

Keywords: *Problem Based Learning*, *Critical Thinking, Learning Motivation*