

## ABSTRACT

Widyaningsih, Ambarwati 2024. **The Effectiveness of Technology-Based Inquiry Learning on Motivation and Writing Skill**

This study aims to investigate whether the integration of technology-based inquiry learning enhances students' proficiency compared to utilizing solely inquiry-based learning. The study employs a mixed-method design with a quasi-experimental framework. The research participants consist of tenth-grade students attending SMA MUHAMMADIYAH KEBUMEN in the academic years 2023/2024. Additionally, qualitative data were gathered through semi-structured interviews to explore students' engagement and perceptions during the implementation of technology-based inquiry learning. The quantitative data will be analyzed using inferential statistics, including tests for normality, homogeneity, and hypothesis testing conducted with SPSS. Meanwhile, the qualitative data will be analyzed using thematic analysis methods.

The results of pre-test and post-test motivation control class was 71.57 for pre-test and 76.80 for post-test. Pre-test and post-test motivation of experiment class was 72.17 for pre-test and 80.87 for post-test. It means that there is difference result of motivation before and after treatment. The results of (t) -3.034 with a significance value of 0.004 ( $p < 0.05$ ) so that it can be concluded that there is a difference in motivation increase between the control class and the experimental class. There were any difference scores in writing of control class and experiment class. The mean of control class was 84.27 and experiment class was 89.67. The t test was -2.533 with the significance 0.014, it means that there was a difference in writing ability between the control group and the experimental group after being treatment.

The students gave positive perception about using technology-based inquiry learning in writing class. Students' interest in using Google as an additional technology in writing learning is due to the facilitation it provides for both students and teachers in learning as a way for teachers to enhance writing instruction. They are motivated to learn writing through technology that combine with inquiry learning method. From the results above, it can be concluded that implementation technology-based inquiry learning in writing class is effective.