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The Effect of the Science Technology Society Model on the Critical Thinking Skills of Fifth-Grade Students at a Madrasah Ibtidaiyah

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Abstract :

Science learning in elementary schools plays an important role in developing students' critical thinking skills. However, students' critical thinking skills are still relatively low. To support the improvement of these skills, the Science Technology Society (STS) Model can be used as an alternative learning approach. This study aims to analyze the effect of implementing the Science Technology Society (STS) Model on the critical thinking skills of fifth-grade students at MIT Menara Baro. This study employed a quantitative approach using a quasi-experimental research design. The design used was a Nonequivalent Pretest Posttest Control Group Design, involving an experimental class and a control class. The research instrument was a critical thinking skills test administered through a pretest and posttest. Data analysis was conducted using normality, homogeneity, and Mann-Whitney tests. The results showed that the mean pretest and posttest scores of the experimental class were 41.25 and 87.50, respectively, while those of the control class were 47.50 and 54.50, respectively. The Mann-Whitney test resulted in an Asymp. Sig. (2-tailed) value of 0.000 ($p < 0.05$). Therefore, it can be concluded that the implementation of the Science Technology Society (STS) Model had a significant effect on the critical thinking skills of fifth-grade students at MIT Menara Baro.