THE EFFECT OF CONTEXTUAL TEACHING AND LEARNING (CTL) APPROACH TO STUDENTS' MATHEMATICS ACHIEVEMENT AND LEARNING STYLE IN SMA KALAM KUDUS MEDAN

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ABSTRACT

The type of this study is a quasy-experiment study. The objectives of this study are to find out: (1) the students' mathematic achievement by using contextual learning approach is higher than by using conventional learning approach, (2) the students' mathematics achievement of student who have visual learning style is higher than student who have auditory learning style, (3) the interaction between learning approach and learning style to the effect to the students' mathematics achievement.

The population of this study is all students in SMA Kalam Kudus Medan with total of 342 students. The sampling technique applied was cluster random sampling. The control class that is chosen is X-3 consisted of 34 students, meanwhile the experiment class that is chosen is X-1 consisted of 34 students. The instrument used to measure the students' mathematics achievement was a multiple-choice test. The instrument used to measure the students' learning style was questionnaire. The normality test used was Lilliefor's test and the homogeneity test by using Fisher test and Bartlett test. The data analysis technique was Two-Way Analysis of Variance at the level of significance $\alpha = 5\%$ followed by Post-Hoc Test named Scheffe Test.

The study result showed that: (1) the students' mathematics achievement taught by contextual approach is higher than the students' mathematics achievement taught by conventional approach, where $F_{calculation}$ (7.656) > Ft_{able} (4.00) and Sig. (0.008) < 0.05, (2) the students' mathematics achievement who have visual learning style is higher than the students' mathematics achievement who have auditory learning style, where $F_{calculation}$ (5.833) > Ft_{able} (4.00) and Sig. (0.019) < 0.05, (3) there is interaction between learning approach and learning style to the students' mathematics achievement which showed by $F_{calculation}$ (10.547) > Ft_{able} (4.00) and Sig. (0.002) < 0.05.

Based on the data analysis result of multiple comparisons by Scheffe Test, it can be concluded that the students with visual learning style should be best taught by contextual approach while the students with auditory learning style should be best taught by conventional approach.

Keywords: Contextual, Conventional, Visual, Auditory, Mathematics Achievement