ABSTRACT

Keywords : Models of Learning , Quantum Teaching , Lecture Methods , Cognitive Learning Outcomes

Education is the main capital in the face of an increasingly complex world development in the era of globalization. Therefore, to equip the next generation to be able to be the generation responsible for themselves and the country needed a quality education that is effective and efficient education. Active learning method which seems to be a lack of alternatives to the problems of learning outcomes. One is to apply the learning model of Quantum Teaching at math. Therefore, the formulation of the problem in this study were: (1) What level of cognitive learning outcomes in the group that uses the model of Quantum Teaching ? (2) What level of cognitive learning outcomes in those who use the lecture method ? (3) Are there differences in learning outcomes between the groups using the cognitive model of Quantum Teaching with groups who use the lecture method in math ?

This study used a descriptive quantitative approach. Subjects numbered 34 fifth grade students were divided into groups using a model of Quantum Teaching and groups who use the lecture method. Each group numbered 17 students. Data collection instruments used were the cognitive achievement test math ,documentation and treatment materials (RPP) with 18 meetings. Testing this hypothesis using independent sample t - test. Independent samples t-test was done by comparing the average values of the two groups who assisted with 20:00 SPSS for windows.

Based on the results of post-test group using the data acquired Quantum Teaching There are 4 students (23.5 %) had a high learning outcomes, 9 students (53 %) had moderate learning outcomes and 4 students (23.5 %) had learning outcomes lower. While the post-test results in the group using conventional methods of data obtained from 16 students found that 4 students (25 %) had a high learning outcomes, 10 students (62.5 %) had moderate learning outcomes and 2 students (12.5 %) has a low learning outcomes. Output t-test were performed using SPSS 20.0 is known values $F = 0.152$ with a significance of 0.700. Based on the data statistical criteria of significance is said homogeneous if $F > 0.05$. Therefore the next table which is seen on the field equal variances assumed that demonstrate the value of $t_{hit} = -1.016$, $df = 31$, with significance $= 0.318$, $t_{hit} < t_{tab}$ ($-1.016 < 2.039$) and significance $0.318 > 0.05$. That means that H0 is accepted and Ha is rejected, in other words there is no difference between the average value of cognitive learning outcomes in the group that implements the model of Quantum Teaching with groups who use the lecture method.