ABSTRACT

This research was motivated by findings which show that the results of the field study biology students is relatively low, it is one of them caused by the lack of implementation of the model or approach to learning strategies developed by teachers. This research conducted with aim in knowing differences in learning outcomes of students who use multimedia Problem-based Learning with methods lectures in improving student learning outcomes in cell concepts. The method used in this study was Quasi Experimental. The population of this research is all class XI student of SMAN 17 Bandung with a sample as much of two classes that were determined by method purposive sampling that is class XI Mipa 7 dan XI Mipa 6. The data was obtained by the pretest and posttest. Instruments in this study is an objective test of 20 multiple-choice questions. The data was then analyzed using test normality the form Chi-square ($X^2$), test homogenity the form test variant or test F, and testing using the test t. Based on the results of data analysis posstest hypotheses using t-test value of $t = 2.76$ and tables ($0.01 = 2.67$ at significant level of 1% or $\alpha = 0.01$ indicates $t_{hitung} > t_{table}$, which means the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected. This shows that there are significant differences between the value of multimedia Problem-based learning with lecture. According to the study it can be concluded that by using multimedia Problem-based learning on cell concepts can improve student learning outcomes.

Keywords: Multimedia, Problem-based Learning, Method Lecture, Learning Outcome.