

ABSTRACT

IMPROVEMENT OF LEARNING THROUGH APPLICATION OF MULTIMEDIA BASED ON DISCOVERY LEARNING FOR ECOSYSTEM CONCEPT

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This study was conducted based on the discovery of problems in SMA Kartika XIX-1 Bandung. Learning outcomes in each field of study Biology class has an average value below the KKM as much as 80% of students. The purpose of this study is to improve learning outcomes through the implementation of multimedia-based discovery learning on the concept of the ecosystem. The population consisted of class X as much as 4 classes. Samples using purposive sampling techniques, namely X MIA 2 as an experimental class, and X MIA 3 as the control class. This research method was quasi experimental design with pretest and Posttest Control Group. Instruments used in the form of objective test (multiple choice) as many as 20 items. Yield data were analyzed using a pretest and posttest normality test with the chi-squared test of homogeneity by F test, test the hypothesis with t test, and then test the N-Gain to calculate the value of improving student learning outcomes. The average value obtained posttest experimental class is 82.973 higher than the average value of the control class is 73.378. T test results stating that $t_{hitung} > t_{tabel}$ 4,880 greater than 1.996, which means a significant learning outcomes (significant difference) between the experimental class and control class, so that the hypothesis can be accepted. N-Gain value obtained experimental class, namely, 0.701 (high criteria). Values obtained N-Gain control class, namely, 0,531 (middle criteria). The learning process through the implementation of multimedia-based discovery learning on the ecosystem concept can improve student learning outcomes significantly.

Keywords: Multimedia-Based Learning Discoery, Improved Learning Outcomes and Learning Media Application