

## **ABSTRACT**

*Merliana Tamara. 2018. Effectiveness of Multimedia Based Learning To Increase The Students' Learning Outcomes In The Virus Topic. Preceptor I Dr. Hj. Mia Nurkanti, M.Kes., and Preceptor II Dr. H. Uus Toharudin, M.Pd.*

This research was conducted to determine the effectiveness of multimedia-based learning media in improving student learning outcomes in the material concept of viruses. The research method used is Quasi Experiment using the Pretest-Posttest Control Group Design research design. The subjects of this study were determined by purposive sampling technique, namely the students of class X MIA A as an experimental class and X MIA B as a control class in SMA Angkasa Bandung in the even semester of 2018-2019 school year. The results of the cognitive aspects of the experimental class obtained an average pretest score of 32.50 and an average posttest score of 80.17 from the results of the N-Gain test. The score was found to be 0.71 in the high category. Whereas in the control class obtained the average pretest score of 26.68 and the average posttest score of 71.61 from the results of the N-Gain test found a score of 0.61 with the medium category. Then, the results of the affective aspects of the experimental class get an average score of 77,8 with good categories and psychomotor aspects get an average score of 85 with a very good category. Whereas, the affective aspects in the control class get an average score of 73 with a good categories and psychomotor aspects. The average score score is 78,8 with a good categories. Meanwhile, the results of the questionnaire from the positive response were 80,17 % and the control class found a positive response of 73%. Animated-based multimedia is much better than conventional learning methods, and it can be concluded that animation-based multimedia learning media can significantly improve student learning outcomes on the concept of viruses.

**Keywords:** students' learning outcomes, Multimedia Based Learning, material concept of viruses