

BIOGRAPHY

Fatimah Asri Jambak was born in Bah Jambi on August 22nd 1998. The father named Ramli and mother named Nurmayeni. The author is the second child of two siblings. In 2004, the author began her formal education at SD Negeri 091567 Bah Jambi and graduated in 2010. In 2010, the author continued her education in SMP Swasta Sultan Agung and graduated in 2013. In 2013, the author continued her education at SMA Negeri 2 Pematang Siantar and graduated in 2016. In 2016, the author was accepted into Bilingual Chemistry Study Program, Department of Chemistry, Faculty of Mathematics and Natural Sciences, State University of Medan.



THE DEVELOPMENT OF INNOVATIVE E-BOOK ON REACTION RATE MATERIAL TO INCREASE STUDENT MOTIVATION AND LEARNING OUTCOMES

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ABSTRACT

The objective of this research is to know the student motivation and learning outcomes that using school textbook and innovative e-book. The population in this research is all of the student class XI MIA in Mas Al-Ikhlash Bah Jambi. The sample of this research are chosen by random sampling as 2 two class, that is control class and experiment class. Control class treated with school textbook in school. Experiment class treated with innovative e-book. Each class has 36 students. The instruments that used in this research are test and non test instrument. Test instrument form is multiple choice which consist of 20 valid question and reliable with reliability 0.774. Non test instrument form that used is questionnaire that have been validated to measure the student motivation. Based on the result, it known that the result of pretest and posttest in control and experiment class are normal distributed and homogen. Hypothesis testing with real level 0.05 to student motivation obtained $t_{count} > t_{table}$, that is $14.887 > 1.9967$ it means H_0 accepted. So that the student learning outcomes obtained $7.03 > 1.9967$ it means H_0 accepted.

Keywords: *Innovative e-book, Student Motivation, Learning Outcomes, Reaction Rate.*