

THE EFFECTIVENESS OF MULTIMEDIA ON THE KINEMATICS OF RECTILINEAR MOTIONS CONCEPT ON STUDENT RESULTS IN SENIOR HIGH SCHOOL

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In general, the process of teaching and learning Physics in senior high schools in Indonesia is still using lecture methods without use the media instructional. As a result, many students still have not able to accomplish the minimum standard of proficiency (KKM). One way to improve students learning outcomes is by using interactive media that can be used independently by students. Therefore, this study used interactive multimedia (i.e. Physics instructional media) to examines the effect on student learning outcomes. The aim of this study is to determine the efficacy of learning achievement on the concept of uniform rectilinear motion (GLB) in senior high school (SMA) Negeri 1 Semparuk. This research is Quasi Experimental Research with design pattern of Nonequivalent Control Group Design. Samples were selected by using purposive sampling technique, XF class as experiment class and class XA as control class. In order to collect the data, this study used measurement technique (i.e. a conceptual test). Based on data analysis, using U-Mann Whitney's non-parametric test, this study shows that there are differences in student learning outcomes. Effect size obtained for student learning outcomes is 1.8 which is included in high criteria, influencing 46.41% on student learning outcomes. This study demonstrates that the multimedia used has a high impact on the students' learning outcomes. So that, it can be used to help the Physics learning process in high schools especially in the GLB concept.

Keywords: Multimedia, Learning Outcomes, Uniform Rectilinear Motion