ABSTRACT

Grace Dita Maria Naibaho, NIM 4183121055 (2018). The Effect of POE2WE Model Assisted by Android Lab Virtual PhET to Improve Student's Concept on the Equilibrium of Rigid Body.

This research objectives to: (1) Knowing the effect of the POE2WE model assisted by android lab virtual PhET on students concept in the equilibrium of rigid body material.; (2) Knowing the level of understanding of students concepts on the equilibrium of rigid body material using the POE2WE model assisted by android lab virtual PhET. The subjects in this research were students at SMA Negeri 2 Medan consisted of two classes, XI MIPA 7 for experiment class and XI MIPA 8 for control class as the comparison. Type of research was quasi experiment to know effect of model for subject. The data collection instruments used in this research were consisted of conceptual test with essay form that have validated by three experts . The data analysis techniques used in this study are quantitative. The results of this study are: (1) There was effect of the POE2WE learning model assisted by android lab virtual PhET to student's concept on equilibrium of rigid body; (2) Increasing students' understanding of the concept of rigid body equilibrium using the POE2WE learning model assisted by android lab virtual PhET is in the medium category with the n-Gain test of 58.6% with a difference in pretest and posttest values of 42.53. So based on these results, the POE2WE model assisted by android lab virtual PhET can improve student's concept.

Keywords: POE2WE model, android lab virtual PhET, student's concept