

ABSTRACT

Lasma Enita Siahaan, ID 4182121010 (2022). The Development of Physics E-Modules Assisted By Flip PDF Corporate On Mechanical Wave Material Based On Problem Based Learning In Senior High School.

This research aims to; (1) Knowing the level of validity of e-module physics learning based on problem based learning using flip pdf corporate on mechanical wave material, (2) Knowing the level of practicality of e-module physics learning based on problem based learning using flip pdf corporate on wave mechanics material, (3) To know the effectiveness level of e-module physics learning based on problem based learning using flip pdf corporate on mechanical wave material. This study uses research and development methods (R & D). The development model in this study uses the 4D model learning device development method which is limited to the 3D stage with Define, Design, and Development steps. The data collection instruments used in this study consisted of a material expert and media expert validation questionnaire, a teacher response questionnaire, a student response questionnaire and a test instrument. The type of data obtained from the results of the study is qualitative data which is analyzed using quantitative data in the form of numerical data and is interpreted with guidelines for the assessment category criteria to determine product quality. The results of this study are; (1)e-module physics learning based on problem based learning assisted by the flip pdf corporate on mechanical wave material the results obtained get very valid criteria with the results of the validation of the average score from the assessment of material experts 97.90%, and media experts 92.86%, (2)e-module physics learning based on problem based learning assisted by the flip pdf corporate on mechanical wave material the results obtained get very practical criteria with the results of the average score for small group trials 85%, for large group trials 96,85% and for teacher response tests 90%. (3)e-module physics learning based on problem based learning assisted by the flip pdf corporate on mechanical wave material the results obtained get a medium level of effectiveness with an average N-gain score of 0.68.

Keywords: *Development, E-module, Flip PDF Corporate, Mechanical Wave, Problem Based Learning.*