

ABSTRACT

Aris Julianto, ID 4172121017 (2017). The Development Newton's Law Handout Based On Android Integrated STEM (Science, Technology, Engineering, Mathematics)

This study aims to develop a Newton's law handout in high school that meets covering feasibility aspect, language aspect, presentation aspect, and graphics aspect. This type of research is research development or Research and Development (R&D), with 4-D model. The population of this study were all students of SMA Negeri 2 Percut Sei Tuan with the subject of all students of class XI IPA1 SMA Negeri 2 Percut Sei Tuan. The testing phase for Newton's law handouts was carried out by means of product validation by three experts, namely content experts, material experts, and teachers. The results showed that the value of product validity in the very valid category was an average percentage of 92.61% with a description of validator 1 87.73%, validator 2 98.14%, and validator 3 91.97%. While the response value in the category was very good/practical. The n-gain result obtained is 0.6, this indicates that there is an increase in learning outcomes in the medium category. Students give a positive response to the product being developed. Aspects of Ease of Understanding obtained a percentage of 78% (Good), Aspects of Learning Independence 83.75% (Good), Aspects of Learning Activeness 92.50% (Very Good), Aspects of Interest in Handout 86.25% (Very Good), Aspects of Presentation of Handout 93.30% (Very Good), Aspect The Use of Handout 81% (Good), and also the whole response to the handout developed as much 86.43% (Very Good). Teacher also give very positive response with percentage of 100%. Based on the results obtained, it can be concluded that the STEM integrated Newton's law handout is very valid and very good so that it can be used in the learning process

Keywords: *Handout, Newton's law, Android, Feasibility, STEM*

