

ABSTRACT

THE DEVELOPMENT OF PHYSICS EXPERIMENTAL PROPS IN THE INTERFERENCE OF LIGHT' MATTER

By

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Learning is an activity that involves a person in an effort to acquire knowledge, skills, and positive values by utilizing the media as a source for learning. The use of instructional media is one very important component in learning and can be viewed as an alternative effective strategy in helping the achievement of learning objectives. In an effort to meet the shortage of learning resources for teachers and students, especially students' difficulties in understanding the concept of interference of light, has developed instructional media in the form of light interference props for student learning becomes easier, effective, and attractive by applying the method of demonstration and experimental methods.

Development of light interference experimental props adapting instructional media development model of development according to the procedure Rayanda Asyhar as a reference. Referring to the model of development which include: analysis of needs and characteristics of students, formulating learning goals, the formulation of grains of material, preparation of evaluation instruments, script

writing specifications in the form of media product development, initial product, expert validation by experts and teachers of physics, the test try field trials consisting of one-on-one and small groups, and the final product in the form of light interference props that come with student worksheets and books.

Expert test results show that experimental props that have been developed in accordance with the theory and fit for use as a medium of learning. Field test results demonstrate effective teaching aids and worksheets used as a medium of learning either independently or in groups. Testing phase one on one and small group, carried out against 8 students and 30 students in grade XII IPA SMAN 1 Kotagajah Year 2011/2012 as the user indicates the quality of light interference props: very attractive, very easy to use, and very useful.

Key words: research development, experimental props, and interference of light.