ABSTRACT

Liza Resnita. 2019. Development of LKPD Using Inquiry Based Learning Model with Scientific Approach to Improve Class X High School Physics Competence. Thesis. Physics Education Magister Faculty of Mathematics and Natural Sciences, Padang State University.

Students' Physics Competencies aren't still optimal. One of the causes is using the teaching materials in forming of Student's Worksheets (LKPD) that has not yet suitable with the structure of a good LKPD, not yet containing the use of the inquiry based learning model and scientific approach. The purpose of this study was to describe the characteristics and produces LKPD Using the inquiry based learning model with a scientific approach to improve physics in class 10th competencies with valid, practical, and effective criterias.

This type of research is design research using the Plomp model which consists of the preliminary research stage, development or prototyping phase, and assessment phase. The instrument of this study consist of self's evaluation sheets, validation, practice sheets both are the students and teachers, attitude's observation sheets, multiple choice tests and performance assessment sheets. The data analysis technique uses descriptive percentages.

Research on the stage of preliminary research obtained that needs analysis, the analysis of learners, and analysis of the material is required to be a reference to development of LKPD uses the inquiry based learning model with scientific approach. The results of the study at the design stage were obtained by LKPD designed using an inquiry based learning model with a scientific approach. The results of the development phase of the LKPD meet the valid criteria of 0.94. The results of the implementation phase of the LKPD meeting the very practical criteria of the teacher's responses in the questionnaire were 91.05% and students 78.39% with practical criteria. The evaluation phase of the LKPD was found the effective criteria with an 85.81% attitude value, 85.46% knowledge, and 85.69% skills. Based on the results of the study, it can be concluded that the LKPD uses the inquiry based learning model with an effective scientific approach to improve high school physics class X competencies in the form of attitudes, knowledge, and skills.

Keywords: Student Worksheets, Inquiry Based Learning, Approach Scientific

ABSTRAK

Liza Resnita. 2019. Pengembangan LKPD Menggunakan Model *Inquiry Based Learning* dengan Pendekatan Saintifik untuk Meningkatkan Kompetensi Fisika SMA Kelas X. Tesis. Program Studi Magister Pendidikan Fisika Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Negeri Padang.

Kompetensi Fisika peserta didik masih belum optimal. Salah satu penyebabnya yaitu penggunaan bahan ajar berupa Lembar Kerja Peserta Didik (LKPD) yang belum sesuai dengan struktur LKPD yang baik, belum memuat penggunaan model *inquiry based learning* dan pendekatan saintifik. Tujuan penelitian ini adalah untuk mendeskripsikan karakteristik dan menghasilkan LKPD menggunakan model *inquiry based learning* dengan pendekatan saintifik untuk meningkatkan kompetensi Fisika SMA kelas X dengan kriteria valid, praktis, dan efektif.

Jenis penelitian ini adalah *design research* dengan menggunakan model Plomp yang terdiri dari tahap *preliminary research, development or prototyping phase, and assessment phase.* Instrumen penelitian ini terdiri dari lembar *self evaluation*, validasi, lembar praktikalitas peserta didik dan guru, lembar observasi sikap, tes pilihan ganda dan lembar penilaian unjuk kerja. Teknik analisis data menggunakan deskriptif persentase.

Hasil penelitian pada tahap penelitian pendahuluan diperoleh bahwa analisis kebutuhan, analisis peserta didik dan analisis materi diperlukan untuk menjadi acuan pengembangan LKPD menggunakan model *inquiry based learning* dengan pendekatan saintifik. Hasil penelitian pada tahap desain diperoleh LKPD dirancang menggunakan model *inquiry based learning* dengan pendekatan saintifik. Hasil tahap pengembangan LKPD memenuhi kriteria valid 0,94. Hasil tahap implementasi LKPD memenuhi kriteria sangat praktis dari angket respon guru adalah 91,05% dan peserta didik 78,39% dengan kriteria praktis. Tahap evaluasi LKPD memenuhi kriteria efektif dengan nilai sikap 85,81%, pengetahuan 85,46%, dan keterampilan 85,69%. Berdasarkan hasil penelitian dapat disimpulkan LKPD menggunakan model *inquiry based learning* dengan pendekatan saintifik efektif untuk meningkatkan kompetensi Fisika SMA kelas X berupa sikap, pengetahuan, dan keterampilan.

Kata Kunci : Lembar Kerja Peserta Didik, *Inquiry Based Learning,* Pendekatan Saintifik