

## ABSTRACT

Melia Vivi Ningrum. 2019. Development of Student Worksheet Using Inquiry Based Learning Model with Science Process Skill Approach for Physics Learning of High School in 11th Grade Semester 1. Thesis. Master Study Program of Physics Education, Faculty of Mathematics and Natural Science, Universitas Negeri Padang.

The achievement of student competence of Physics learning in 11th grade is not optimal. One of the contributing factors is the student worksheet that is available does not contain the model steps and learning approaches that lead to the activities of students. This research aims to produce student worksheet using inquiry based learning model with science process skills approach for Physics learning of high school in 11th grade semester 1 with the criteria as are valid, practical and effective.

The type of this research is development research using Plomp model with three phases namely preliminary research, development or prototyping phase, and assessment phase. Research instruments include questionnaire of preliminary research, validity questionnaire, practicality questionnaire, attitude observation sheet, written test, and skill assessment sheet. Technique of analyzing data for validity is Aiken's V formula, for practicality and effectiveness are descriptive percentages.

The results of preliminary research indicate the need to development the student worksheet. The results of development show that student worksheet is in valid criteria with a value of 0.88; very practical based on the responses of students and teachers with an average score of 86.88% and 95.87%. The assessment phase results show that achievement of students knowledge competence is 87.50%, students attitude and skill competence are very good. Thus, it can be concluded that the student worksheet using inquiry based learning model with science process skill approach for Physics learning of high school in 11th grade semester 1 fulfilling the criteria valid, practical and effective.

**Keywords:** Students Worksheet, Inquiry Based Learning Model, Science Process Skills Approach.

## ABSTRAK

Melia Vivi Ningrum. 2019. Pengembangan LKPD Menggunakan Model *Inquiry Based Learning* dengan Pendekatan Keterampilan Proses Sains untuk Pembelajaran Fisika SMA Kelas XI Semester 1. Tesis. Program Studi Magister Pendidikan Fisika Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Negeri Padang.

Pencapaian kompetensi peserta didik kelas XI dalam pembelajaran Fisika belum optimal. Salah satu faktor penyebabnya adalah Lembar Kerja Peserta Didik (LKPD) yang tersedia belum memuat langkah-langkah model dan pendekatan pembelajaran yang mengarah pada kegiatan peserta didik. Penelitian ini bertujuan untuk menghasilkan LKPD menggunakan model *inquiry based learning* dengan pendekatan keterampilan proses sains untuk pembelajaran Fisika SMA kelas XI semester 1 dengan kriteria valid, praktis dan efektif.

Jenis penelitian ini adalah penelitian pengembangan menggunakan model Plomp dengan tiga fase yaitu *preliminary research, development or prototyping phase, and assessment phase*. Instrumen penelitian meliputi angket studi pendahuluan, angket validitas, angket praktikalitas, lembar observasi sikap, tes tertulis, dan lembar penilaian keterampilan. Teknik analisis data untuk validitas menggunakan rumus Aiken's V, untuk praktikalitas dan efektivitas menggunakan deskriptif persentase.

Hasil *preliminary research* menunjukkan perlunya pengembangan LKPD. Hasil *development* menunjukkan LKPD berada pada kriteria valid dengan nilai 0,88; sangat praktis berdasarkan respon peserta didik dan guru dengan nilai rata-rata masing-masing 86,88% dan 95,87%. Hasil *assessment phase* memperlihatkan pencapaian kompetensi pengetahuan peserta didik adalah 87,50%; pencapaian kompetensi sikap dan keterampilan adalah sangat baik. Dengan demikian, dapat disimpulkan bahwa LKPD menggunakan model *inquiry based learning* dengan pendekatan keterampilan proses sains untuk pembelajaran Fisika SMA kelas XI semester 1 memenuhi kriteria valid, praktis dan efektif.

**Kata Kunci:** Lembar Kerja Peserta Didik (LKPD), Model *Inquiry Based Learning*, Pendekatan Keterampilan Proses Sains.