ABSTRACT

Rahmi Agustia Widestra. 2020. Development of Interactive IBL Model Student Worksheets Through 21st Century Scientific Literacy Integrated Process Skills Approach to Improve Student Competence Grade XI in Physics Learning. Thesis. Master Study Program of Physics Education, Faculty of Mathematics and Natural Science, Universitas Negeri Padang.

The participants in the learning process are still not optimal and active in learning activities. One factor of the cause is that the available student worksheets are still in print and do not contain model steps and learning approaches that lead to student activities yet. In addition, the ability of students to understand the concepts, context and content of science is still not well implemented. This research aims to produce an interactive student worksheet model of inquiry based learning with the approach of process skills integrated scientific literacy in class XI physics learning with valid, practical and effective criteria.

This type of research is development research using ADDIE model with the establishment of analysis, design, development, implementation, and evaluation Research instrumens 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 the analysis stage showed the need for development of student worksheets Interactive development results showed student worksheets was on valid criteria with a value of 0.87; The practicality value is very high based on student and teacher responses with an average value of 84.76% and 96.45% respectively. The result of the implementation shows the achievement of students ' knowledge competence is 81.00%; Attitude and skill competency achievement is very good. Thus, it can be concluded interactive inquiry based learning model student worksheets through 21st century scientific literacy integrated process skills approach to improve students competence grade XI in physics learning the criteria valid, practical and effective.

Keywords: *Students Worksheet, Inquiry Based Learning Model, Process Skills Approach, Scientific Literacy*

ABSTRAK

Rahmi Agustia Widestra. 2020. Pengembangan LKPD Interaktif Model IBL melalui Pendekatan Keterampilan Proses Terintegrasi Literasi Saintifik Abad 21 untuk Meningkatkan Kompetensi Peserta Didik pada Pembelajaran Fisika Kelas XI. Tesis. Program Studi Magister Pendidikan Fisika Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Negeri Padang.

Peserta ddik dalam proses pembelajaran masih belum optimal dan aktif dalam kegiatan pembelajaran. Salah satu faktor penyebabnya adalah Lembar Kerja Peserta Didik (LKPD) yang tersedia masih berupa cetak dan belum memuat langkah-langkah model dan pendekatan pembelajaran yang mengarah pada kegiatan peserta didik. Selain itu kemampuan peserta didik dalam memahami konsep, konteks dan konten sains masih belum diterapkan dengan baik. Penelitian ini bertujuan untuk menghasilkan LKPD interaktif model IBL melalui pendekatan keterampilan proses keterampilan proses terintegrasi literasi saintifik pada pembelajaran fisika kelas XI dengan kriteria valid, praktis dan efektif.

Jenis penelitian ini adalah penelitian pengembangan menggunakan model ADDIE dengan terdiridaritahap analysis, *design*, development, implementation, evaluation. 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 tahap *analysis* menunjukkan perlunya pengembangan LKPD interaktif Hasil development menunjukkan LKPD berada pada kriteria valid dengan nilai 0,87; nilai kepraktisan sangat tinggi berdasarkan respon peserta didik dan guru dengan nilai rata-rata masing-masing 84,76% dan 96,45%. Hasil *implementation* memperlihatkan pencapaian kompetensi pengetahuan peserta didik adalah 81,00%; pencapaian kompetensi sikap dan keterampilan adalah sangat baik. Dengan demikian, dapat disimpulkan bahwa LKPD interaktif model IBL melalui pendekatan keterampilan proses terintegrasi literasi saintifik untuk pembelajaran Fisika SMA kelas XI memenuhi kriteria valid, praktis dan efektif.

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