ABSTRACT

Elmi Yanto Adhar Samudra. 2021. "Development of LKPD interactive model of demand-based learning with the support of contextual learning and integrated functional literacy learning in high school physics learning in class X". Thesis. Master Program in Physics Education, Faculty of Mathematics and Natural Science, Universitas Negeri Padang.

Physics learning activities in schools have not been optimally seen in the low competence of students. One contributing factor is the lack of LKPD which facilitates the learning activities of active and independent learners. LKPD should be able to reach all learning styles of students by using learning models, approaches, literacy activities and technology utilization. One LKPD that can be developed with technology is interactive LKPD. The purpose of this study in general is to produce an interactive LKPD inquiry based learning model with an integrated contextual teaching and learning approach to functional literacy in high school physics learning in class X with valid, practical, and effective criteria.

This type of research is research and development (Research and Development) with the ADDIE development model (Analysis, Design, Development, Implementation, and Evaluation). The research instruments used included a preliminary study questionnaire, a validity questionnaire, a practicality questionnaire, an attitude observation sheet, a written test, and a skills assessment sheet. The data analysis technique uses descriptive percentages for preliminary study analysis and practicality tests. Validity analysis uses the Aiken's V formula and the effectiveness test uses N-Gain analysis on knowledge competence. The product was validated by experts and tested on a number of high school students in 15 Padang.

The results obtained by interactive LKPD inquiry based learning models with contextual teaching and learning integrated functional literacy approaches are in the valid category with an average value of 0.87. The practicality test of the use of Interactive LKPD by educators is 92.71% and students get an average value of 92.30% in the very practical category. The use of interactive LKPD is in the effective criteria, this can be seen in the increase in knowledge competencies with the acquisition of N-Gain value of 0.65 in the medium category. Achieving excellent attitude competencies and good skills competencies. The research findings show that interactive LKPD can improve the competence of high school students in class X. Therefore, interactive LKPD is feasible to be implemented in Physics learning activities in schools.

Keywords : Interactive worksheet, Inquiry Based Learning, Contextual Teaching and Learning, functional literacy

ABSTRAK

Elmi Yanto Adhar Samudra. 2021. "Pengembangan LKPD interaktif model *Inquiry Based Learning* dengan Pendekatan *Contextual Teaching And Learning* terintegrasi literasi fungsional pada Pembelajaran Fisika SMA Kelas X". Tesis. Program Studi Magister Pendidikan Fisika Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Negeri Padang.

Kegiatan pembelajaran Fisika di sekolah belum optimal terlihat pada rendahnya kompetensi peserta didik. Salah satu faktor penyebabnya adalah kurang tersedianya LKPD yang memfasilitasi kegiatan belajar peserta didik aktif dan mandiri. LKPD hendaknya dapat menjangkau seluruh gaya belajar peserta didik dengan menggunakan model pembelajaran, pendekatan, kegiatan literasi dan pemanfaatan teknologi. Salah satu LKPD yang bisa dikembangkan dengan teknologi berupa LKPD interaktif. Tujuan penelitian ini secara umum untuk menghasilkan LKPD interaktif model *inquiry based learning* dengan pendekatan *contextual teaching and learning* terintegrasi literasi fungsional pada pembelajaran Fisika SMA kelas X dengan kriteria valid, praktis, dan efektif.

Jenis penelitian ini adalah penelitian dan pengembangan (*Research and Development*) dengan model pengembangan ADDIE (*Analysis, Design, Development, Implementation, and Evaluation*). Instrumen penelitian yang digunakan meliputi angket studi pendahuluan, angket validitas, angket praktikalitas, lembar observasi sikap, tes tertulis, dan lembar penilaian keterampilan. Teknik analisis data menggunakan deskriptif persentase untuk analisis studi pendahuluan dan uji praktikalitas. Analisis validitas menggunakan rumus Aiken's V dan uji efektivitas menggunakan analisis N-Gain pada kompetensi pengetahuan. Produk divalidasi oleh tenaga ahli dan diujicobakan ke sejumlah peserta didik SMA Negeri 15 Padang.

Hasil penelitian diperoleh LKPD interaktif model *inquiry based learning* dengan pendekatan *contextual teaching and learning* terintegrasi literasi fungsional berada pada kategori valid dengan nilai rata-rata 0,87. Uji praktikalitas penggunaan LKPD Interaktif oleh pendidik 92,71 % dan peserta didik memperoleh nilai rata-rata 92,30% berada pada kategori sangat praktis. Penggunaan LKPD interaktif berada pada kriteria efektif, hal ini terlihat pada peningkatan kompetensi pengetahuan dengan perolehan nilai N-Gain sebesar 0,65 berada pada kategori sedang. Pencapaian kompetensi sikap sangat baik dan kompetensi keterampilan baik. Temuan penelitian menunjukkan bahwa LKPD interaktif dapat meningkatkan kompetensi peserta didik SMA kelas X. Oleh karena itu, LKPD interaktif layak diimplementasikan dalam kegiatan pembelajaran Fisika disekolah.

Kata Kunci: LKPD Interaktif, *Inquiry Based Learning*, *Contextual Teaching and Learning,* literasi fungsional