

PENGEMBANGAN LKPD ELEKTRONIK IPA BERBASIS INKUIRI TERBIMBING UNTUK SISWA SMP PADA MATERI CAHAYA DAN ALAT OPTIK

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ABSTRAK

Penelitian ini bertujuan untuk mendeskripsikan dan menjelaskan karakteristik, kavalidan, kepraktisan, dan keterbacaan LKPD elektronik berbasis inkuiri terbimbing untuk siswa SMP pada materi cahaya dan alat optik. Jenis penelitian ini adalah penelitian pengembangan (*Research and Development*) dengan model pengembangan ADDIE yang meliputi 5 tahapan pengembangan yaitu (1) analisis (*analyze*), (2) perancangan (*design*), (3) pengembangan (*development*), (4) implementasi (*implementations*), dan (5) evaluasi (*evaluation*). Penelitian pengembangan ini hanya dilakukan sampai tahap *develop* dikarenakan waktu penelitian hanya sampai satu semester. Subjek penelitian melibatkan dua orang ahli pendidikan IPA untuk uji kevalidan, dua orang guru IPA untuk uji kepraktisan, dan 10 orang peserta didik kelas VIII di SMP Negeri 6 Singaraja untuk uji keterbacaan. Jenis data yang diperoleh berupa data kuantitatif dan data kualitatif. Data hasil penelitian yang diperoleh dianalisis secara deskriptif. Karakteristik LKPD elektronik yang dikembangkan, yaitu (1) memiliki lima judul kegiatan praktikum, (2) menggunakan langkah-langkah model pembelajaran inkuiri terbimbing (3) berisikan petunjuk penggunaan LKPD, (4) Setiap sub materi terdiri atas fitur judul, indikator, tujuan, fenomena, merumuskan masalah hingga menarik kesimpulan. Hasil pengembangan LKPD elektronik diperoleh hasil uji validasi oleh ahli rata-rata 4,3 dengan kriteria sangat valid. Hasil uji kepraktisan oleh guru IPA rata-rata skor 3,9 dengan kriteria praktis. Hasil uji keterbacaan oleh 10 orang peserta didik rata-rata 4,6 dengan kriteria sangat terbaca. Berdasarkan temuan hasil penelitian LKPD elektronik berbasis inkuiri terbimbing untuk siswa SMP pada materi cahaya dan alat optik dapat diuji ke tahap berikutnya yaitu tahap implementasi dan evaluasi produk.

Kata kunci: LKPD elektronik IPA, Inkuiri Terbimbing, Cahaya dan Alat Optik.

DEVELOPMENT OF ELECTRONICS LKPD IPA BASED ON GUIDED INQUIRY FOR JUNIOR HIGH SCHOOL STUDENTS ON LIGHT MATERIALS AND OPTICAL APPLIANCES

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ABSTRACT

This research aims to describe and explain the characteristics, validity, practicality, and legibility of guided inquiry-based electronic worksheets for junior high school students on light and optical instruments. This type of research is research and development with the ADDIE development model which includes 5 stages of development, namely (1) analysis (analyze), (2) design (design), (3) development (development), (4) implementation (implementations), and (5) evaluation. This development research is only carried out until the development stage because the research time is only up to one semester. The research subjects involved two science education experts for the validity test, two science teachers for the practicality test, and 10 students of class VIII at SMP Negeri 6 Singaraja for the readability test. Types of data obtained in the form of quantitative data and qualitative data. The research data obtained were analyzed descriptively. The characteristics of the developed electronic LKPD are (1) it has five titles of practicum activities, (2) uses the steps of a guided inquiry learning model (3) contains instructions for using LKPD, (4) each sub-material consists of features of titles, indicators, objectives, phenomena, formulating problems to draw conclusions. The results of the development of electronic LKPD obtained validation test results by experts at an average of 4.3 with very valid criteria. The results of the practicality test by science teachers have an average score of 3.9 with practical criteria. The results of the readability test by 10 students averaged 4.6 with very legible criteria. Based on the findings of the research findings, guided inquiry-based electronic LKPD for junior high school students on light materials and optical instruments can be tested to the next stage, namely the implementation and product evaluation stages.

Keywords: Science electronic LKPD, Guided Inquiry, Light and Optical Instruments.