

**PENGEMBANGAN LEMBAR KERJA PESERTA DIDIK DENGAN  
*SETTING REACT* PADA MATERI GELOMBANG BUNYI UNTUK  
MENINGKATKAN PRESTASI BELAJAR KELAS  
XI SMAN 1 SUKASADA**

Oleh

**Putri Marlina Simanjuntak, NIM. 2013021008**

**Jurusan Fisika dan Pengajaran IPA**

**ABSTRAK**

Penelitian ini bertujuan menganalisis validitas, kepraktisan, dan keefektifan LKPD dengan *setting REACT* pada materi gelombang bunyi. Jenis penelitian yang digunakan adalah R & D (*research and development*) dengan metode deskriptif kualitatif dan kuantitatif. Menerapkan model pengembangan Four-D (4D) dengan tahapan *define* (pendefinisian), *design* (perancangan), *development* (pengembangan), dan *dissemination* (penyebaran). Pengujian validitas LKPD diuji oleh dua orang ahli pendidikan Fisika. Pengujian kepraktisan diuji oleh peserta didik kelas XI MIPA SMAN 1 Sukasada. Pengujian keefektifan dilakukan dengan memberikan pre-test dan post-test kepada peserta didik. Instrumen yang digunakan untuk mengumpulkan data meliputi lembar validasi LKPD, lembar angket respon guru dan peserta didik untuk uji kepraktisan, dan lembar soal dan penilaian pre-test dan post-test. Data-data yang diperoleh dianalisis secara deskriptif. Hasil penelitian menunjukkan bahwa LKPD dengan *setting REACT* memiliki persentase validitas media 80.00% berkategori sangat valid, dan presentase validitas materi 76.00% berkategori valid. Persentase kepraktisan yang didapatkan untuk indikator sangat praktis senilai 13.33% sedangkan indikator praktis senilai 35.00%. Tingkat keefektifan dilihat dari rerata skor *pretest* yang diperoleh siswa sebesar 27,00%, sedangkan rerata skor *posttest* meningkat menjadi 87,00%, sehingga LKPD dengan *setting REACT* efektif dipergunakan dalam pembelajaran fisika. Berdasarkan hasil uji validitas, kepraktisan, dan keefektifan LKPD dengan *Setting REACT* pada materi Gelombang Bunyi Kelas XI di SMA Negeri 1 Sukasada efektif dipergunakan dalam mata pelajaran Fisika. Produk ini memperoleh respons secara positif dari siswa yang diamati keikutsertaannya selama kegiatan belajar.

**Kata Kunci:** LKPD, *Setting REACT*, Gelombang Bunyi, Fisika.

**DEVELOPMENT OF STUDENT WORKSHEETS WITH REACT  
SETTINGS ON SOUND WAVE MATERIAL TO IMPROVE CLASS  
LEARNING ACHIEVEMENT  
XI SMAN 1 SUKASADA**

By

**Putri Marlina Simanjuntak, Id. 2013021008**

**Department of Physics and Science Teaching**

**ABSTRACT**

This research aims to analyze the validity, practicality and effectiveness of LKPD with the REACT setting on sound wave material. The type of research used is R & D (research and development) with qualitative and quantitative descriptive methods. Applying the Four-D (4D) development model with the stages of define, design, development and dissemination. Testing the validity of the LKPD was tested by two physics education experts. Practicality testing was tested by class XI MIPA students at SMAN 1 Sukasada. Effectiveness testing is carried out by giving pre-tests and post-tests to students. The instruments used to collect data include LKPD validation sheets, teacher and student response questionnaire sheets for practicality tests, and pre-test and post-test question and assessment sheets. The data obtained were analyzed descriptively. The research results showed that the LKPD with the REACT setting had a media validity percentage of 80.00% in the very valid category, and a material validity percentage of 76.00% in the valid category. The percentage of practicality obtained with very practical indicator is worth 13.33%, while those with practical indicator are worth 35.00%. The level of effectiveness seen from the average pretest score obtained by students was 27.00%, while the average posttest score increased to 87.00%, so that LKPD with the REACT setting was effectively used in physics learning. Based on the results of the validity, practicality and effectiveness test, the LKPD with the REACT setting on Class XI Sound Wave material at SMA Negeri 1 Sukasada is effectively used in Physics subjects. This product received a positive response from students whose participation was observed during learning activities.

**Keywords:** *LKPD, REACT Settings, Sound Waves, Physics.*