ABSTRAK

PENGEMBANGAN ELEKTRONIK LEMBAR KERJA PESERTA DIDIK (E-LKPD) BERBASIS MODEL *SCIENCE, ENVIRONMENT, TECHNOLOGY AND SOCIETY* (SETS) PADA MATERI GELOMBANG BUNYI DAN CAHAYA

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Tujuan penelitian ini adalah untuk (1) Mendeskripsikan tingkat validitas pengembangan Lembar Kerja Peserta Didik Elektronik (E-LKPD) berbasis model Science, Environment, Technology, and Society (SETS) pada materi gelombang bunyi dan cahaya. (2) Mendeskripsikan tingkat kepraktisan pengembangan Lembar Kerja Peserta Didik Elektronik (E-LKPD) berbasis model SETS pada materi gelombang bunyi dan cahaya. Metode penelitian yang digunakan adalah Research and Development (R&D) dengan model pengembangan ADDIE. Populasi penelitian ini yaitu seluruh kelas XI MIPA MAN 3 Tasikmalaya sebanyak 6 kelas dengan jumlah peserta didik 211 orang. Sampel penelitian diambil dengan menggunakan teknik cluster random sampling melalui perhitungan rumus Yamane menghasilkan 4 kelas, yaitu kelas XI MIPA 1, XI MIPA 3, XI MIPA 4 dan X MIPA 6 dengan jumlah keseluruhan 138 peserta didik. Untuk mengukur kelayakan E-LKPD dilakukan validasi meliputi ahli materi, ahli media, dan ahli pembelajaran. Teknik analisis data yang digunakan dalam mengolah hasil validasi adalah indeks Aiken's. Uji kepraktisan E-LKPD dilakukan oleh pendidik dan peserta didik. Hasil penelitian menunjukkan bahwa indeks Aiken's ahli materi, ahli media, dan ahli pembelajaran berturut-turut sebesar 0,87, 0,84, dan 0,90 dengan rata-rata validasi sebesar 0,86 dengan kategori validitas sangat tinggi serta rata-rata kepraktisan oleh peserta didik sebesar 91,65% dan pendidik sebesar 100% dengan kriteria sangat praktis. E-LKPD berbasis model Science, Environment, Technology, and Society (SETS) pada materi gelombang bunyi dan cahaya yang dikembangkan memenuhi kriteria sangat tinggi dan praktis untuk digunakan dalam proses pembelajaran.

Kata kunci: E-LKPD, Gelombang Bunyi dan Cahaya, *Science, Environment, Technology, and Society* (SETS).

ABSTRACT

DEVELOPMENT OF ELECTRONIC STUDENT WORKSHEETS (E-LKPD) BASED ON SCIENCE, ENVIRONMENT, TECHNOLOGY AND SOCIETY (SETS) MODES ON SOUND AND LIGHT WAVE MATERIALS

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The aim of this research is to (1) Describe the level of validity of the development of Electronic Student Worksheets (E-LKPD) based on the Science, Environment, Technology and Society (SETS) model on sound and light waves. (2) Describe the level of practicality of developing Electronic Student Worksheets (E-LKPD) based on the SETS model on sound and light waves. The research method used is Research and Development (R&D) with the ADDIE development model. The population of this study was all 6 classes of class XI MIPA MAN 3 Tasikmalaya with a total of 211 students. The research sample was taken using a cluster random sampling technique using the Yamane formula calculation to produce 4 classes, namely classes XI MIPA 1, XI MIPA 3, XI MIPA 4 and X MIPA 6 with a total of 138 students. To measure the feasibility of E-LKPD, validation was carried out including material experts, media experts and learning experts. The data analysis technique used in processing validation results is the Aiken's index. The E-LKPD practicality test was carried out by educators and students. The results of the research show that the Aiken's indices for material experts, media experts, and learning experts are respectively 0.87, 0.84, and 0.90 with an average validation of 0.86 with a very high validity category and an average of practicality. by students amounting to 91.65% and educators amounting to 100% with very practical criteria. The E-LKPD based on the Science, Environment, Technology, and Society (SETS) model on sound and light wave material which was developed meets very high criteria and is practical for use in the learning process.

Keywords: E-LKPD, Science, Environment, Technology, and Society (SETS), Sound and Light Waves.