ABSTRAK

Julia Isani. 2025. **PENGEMBANGAN LEMBAR KERJA PESERTA DIDIK ELEKTRONIK (E-LKPD) BERBASIS *GUIDED DISCOVERY LEARNING* BERBANTUAN MIT APP INVENTOR PADA MATERI USAHA DAN ENERGI**

Penelitian ini dilatarbelakangi adanya keterbatasan dalam pembelajaran fisika yaitu kurang memadainya sarana dan prasarana, bahan ajar hanya berbasis cetak sehingga pembelajaran monoton, kurang menarik, kesulitan peserta didik dalam memahami konsep materi usaha dan energi. Hal ini diakibatkan keterbatasan dalam kegiatan praktikum dan belum tersedianya bahan ajar yang sesuai dengan kebutuhan peserta didik. Salah satu solusi untuk mengatasi permasalahan tersebut yaitu dengan mengembangkan Lembar Kerja Peserta Didik Elektronik berbasis *Guided Discovery Learning* yang valid dan praktis. Penelitian ini menggunakan metode *Research and Development* dengan model pengembangan ADDIE yaitu *Analysis, Design, Development, Implementation,* dan *Evaluation.* Untuk meninjau ukuran kelayakan produk E-LKPD maka dilakukan validasi yang dilakukan oleh pakar yang mencakup ahli materi, ahli media dan ahli pembelajaran dengan mengiai lembar validasi produk. Subjek Penelitian ini yaitu peserta didik kelas X SMA Negeri 7 Tasikmalaya. Setelah dinyatakan valid maka dilakukan uji kepraktisan dengan menggunakan angket respon peserta didik. Teknik analisis data yang dilakukan pada penelitian ini yaitu menggunakan indeks Aiken's V. Hasil penelitian menunjukkan bahwa indeks Aiken's V ahli materi, media dan ahli pembelajaran berturut-turut 0,86, 0,86, 0,83 dengan kategori sangat valid. Persentase kepraktisan produk sebesar 86,46% dengan kategori sangat praktis. Lembar kerja peserta didik elektronik berbasis model *guided discovery learning* berbantuan MIT App Inventor pada materi usaha dan energi yang dikembangkan memenuhi kategori valid dan praktis untuk digunakan dalam kegiatan pembelajaran.

Kata kunci: E-LKPD, *Guided Discovery Learning*, MIT App Inventor, Usaha dan Energi.

ABSTRACT

Julia Isani. 2025. DEVELOPMENT OF ELECTRONIC STUDENT WORKSHEETS (E-WORKSHEET)) BASED ON GUIDED DISCOVERY LEARNING ASSISTED BY MIT APP INVENTOR ON WORK AND ENERGY

This research is motivated by the limitations in physics learning, namely inadequate facilities and infrastructure, teaching materials are only printed so that learning is monotonous, less interesting, students have difficulty in understanding the concept of work and energy materials. This is due to limitations in practical activities and the unavailability of teaching materials that are in accordance with the needs of students. One solution to overcome these problems is to develop a valid and practical Electronic Student Worksheet based on Guided Discovery Learning. This study uses the Research and Development method with the ADDIE development model, namely Analysis, Design, Development, Implementation, and Evaluation. To review the feasibility of the E-LKPD product, validation was carried out by experts including material experts, media experts and learning experts by reviewing the product validation sheet. The subjects of this study were students of class X of SMA Negeri 7 Tasikmalaya. After being declared valid, a practicality test was carried out using a student response questionnaire. The data analysis technique used in this study was using the Aiken's V index. The results showed that the Aiken's V index of material experts, media and learning experts were respectively 0.86, 0.86, 0.83 with a very valid category. The percentage of product practicality was 86.46% with a very practical category. The electronic student worksheet based on the guided discovery learning model assisted by MIT App Inventor on the material of work and energy that was developed met the valid and practical categories for use in learning activities.

Keywords: E-LKPD, Guided Discovery Learning, MIT App Inventor, Work dan Energy.