

Annisa Hariyati. 2026. *Pengembangan LKPD Project Based Learning Berbasis STEAM Pada Pembelajaran IPAS Materi Energi Listrik Kelas V UPTD SDN Kesek 1*. Skripsi, Program Studi Pendidikan Guru Sekolah Dasar, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Trunodjoyo Madura. Ade Cyntia Pritasari.

ABSTRAK

Penelitian ini dilatarbelakangi oleh kurangnya bahan ajar yang dapat memfasilitasi proses pembelajaran, memperdalam pemahaman konsep, serta melatih keaktifan peserta didik. Oleh karena itu, penelitian ini bertujuan untuk mengembangkan LKPD *Project Based Learning* berbasis STEAM yang valid, menarik, dan efektif. Metode penelitian yang digunakan adalah penelitian dan pengembangan dengan model ADDIE yang terdiri dari beberapa tahapan yaitu *Analyze, Design, Develop, Implement, dan Evaluate*. Penelitian dan pengembangan dilakukan dengan mengembangkan produk, memvalidasi produk, serta mengujicobakan produk untuk mengetahui kevalidan, kemenarikan, dan keefektifan dari produk pengembangan. Kevalidan produk pengembangan memperoleh hasil: 1) validasi bahan ajar sebesar 88% (sangat valid), 2) validasi materi sebesar 89% (sangat valid), dan 3) validasi desain pembelajaran sebesar 90% (sangat valid). Kemenarikan produk pengembangan memperoleh hasil: 1) angket respon guru sebesar 88% (sangat menarik), 2) angket respon peserta didik sebesar 87% (sangat menarik). Keefektifan produk pengembangan memperoleh hasil: 1) observasi aktivitas guru sebesar 100% (baik), 2) observasi aktivitas peserta didik sebesar 96% (baik), dan 3) hasil tes belajar kognitif peserta didik sebesar 100% (tuntas). Berdasarkan hal tersebut maka LKPD *Project Based Learning* Berbasis STEAM pada pembelajaran IPAS materi energi listrik kelas V UPTD SDN Kesek 1 dapat dinyatakan valid, menarik, dan efektif untuk digunakan dalam proses pembelajaran.

Kata Kunci: Energi Listrik, Pengembangan LKPD, *Project Based Learning*, STEAM.

Annisa Hariyati. 2026. *The Development of STEAM Project Based Learning Student Worksheet in Science and Social Studies Instruction on Electrical Energy Materials for Grade V at UPTD SDN Kesel 1*. Undergraduate Thesis, Primary School Teacher Education Study Program, Faculty of Teacher Training and Education, University of Trunodjoyo Madura. Advisor: Ade Cyntia Pritasari.

ABSTRACT

This research is motivated by the lack of teaching materials that can facilitate the learning process, deepen conceptual understanding, and foster student active engagement. Therefore, this study aims to develop a valid, appealing, and effective STEAM based Project Based Learning Student Worksheet (LKPD). The research method employed is Research and Development (R&D) using the ADDIE model, which consists of several phases: Analyze, Design, Develop, Implement, and Evaluate. The research and development process was conducted by developing the product, validating the product, and field-testing the product to determine its validity, appeal, and effectiveness. The validity of the developed product yielded the following results: 1) teaching material validation at 88% (highly valid), 2) content validation at 89% (highly valid), and 3) instructional design validation at 90% (highly valid). The appeal of the developed product achieved the following results: 1) teacher response questionnaire at 88% (highly appealing), and 2) student response questionnaire at 87% (highly appealing). The effectiveness of the developed product showed the following results: 1) teacher activity observation at 100% (excellent), 2) student activity observation at 96% (excellent), and 3) students' cognitive learning test results at 100% (completed/mastered). Based on these findings, the STEAM-Based Project-Based Learning LKPD for Science and Social Studies instruction on electrical energy materials for Grade V at UPTD SDN Kesek 1 can be declared valid, appealing, and effective for use in the learning process.

Keywords: *Electrical Energy, LKPD Development, Project Based Learning, STEAM.*