ABSTRAK

PENGEMBANGAN LEMBAR KERJA PESERTA DIDIK BERBASIS *PROBLEM BASED LEARNING* UNTUK MENINGKATKAN KEMAMPUAN PEMECAHAN MASALAH PADA MUATAN IPA PESERTA DIDIK KELAS IV

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Penelitian ini bertujuan untuk menghasilkan Lembar Kerja Peserta Didik (LKPD) berbasis *Problem Based Learning* (PBL) pada materi Mengubah Bentuk Energi yang valid, praktis, dan efektif guna meningkatkan kemampuan pemecahan masalah peserta didik kelas IV sekolah dasar. Jenis penelitian ini adalah *Research and Development* (R&D) menggunakan kerangka model ADDIE (*Analysis, Design, Development, Implementation*, dan *Evaluation*). Penelitian melibatkan 34 peserta didik kelas IV di UPT SDN 02 Bumi Agung yang dipilih melalui teknik sampel jenuh. Hasil uji validasi ahli menunjukkan bahwa produk yang dikembangkan sangat valid, dengan perolehan nilai dari ahli media sebesar 91%, ahli materi 91,5%, dan ahli bahasa 94,5%. Uji kepraktisan juga menunjukkan kriteria sangat praktis, dibuktikan dari angket respon pendidik sebesar 92,04% dan peserta didik sebesar 88%. Selanjutnya, efektivitas produk dibuktikan dengan peningkatan rata-rata hasil belajar, dari nilai *pretest* 55,91 menjadi *posttest* 84,58. Hal ini diperkuat oleh nilai *N-Gain* sebesar 0,66 (kategori sedang) dan uji *independent sample t-test* dengan signifikansi 0,00 (< 0,05). Kesimpulannya, pengembangan LKPD berbasis PBL ini terbukti secara empiris valid, praktis, dan efektif meningkatkan kemampuan pemecahan masalah pada muatan IPA.

Kata Kunci: LKPD, *Problem Based Learning* (PBL), Kemampuan Pemecahan Masalah, IPA.

ABSTRACT

DEVELOPING STUDENT WORKSHEETS BASED ON PROBLEM-BASED LEARNING TO IMPROVE PROBLEM-SOLVING ABILITIES IN NATURAL SCIENCE CONTENT OF GRADE IV STUDENTS

By

JEMI ADI SASTRA

This study aims to develop and produce Student Worksheets (LKPD) based on Problem-Based Learning (PBL) that are valid, practical, and effective in improving the problem-solving abilities of fourth-grade students in Natural Science (IPA) content. The development specifically focuses on contextual problem-solving related to the topic of Changing Energy Forms. This research follows the Research and Development (R&D) method using the ADDIE model, which includes the stages of analysis, design, development, implementation, and evaluation. The research sample utilized a total sampling technique involving all 34 fourth-grade students at UPT SDN 02 Bumi Agung. The results demonstrate that the developed PBL-based LKPD is highly suitable for use. The validity of the product was confirmed through expert validation, with average scores of 91% from media experts, 91.5% from material experts, and 94.5% from language experts, all falling within the "very valid" category. In terms of practicality, the product was categorized as "very practical" based on teacher response questionnaires reaching 92.04% and student response questionnaires at 88%. Furthermore, the LKPD proved effective in enhancing students' problem-solving skills, as evidenced by the increase in the average learning outcome from a pretest score of 55,91 to a posttest score of 84,58. This effectiveness is further supported by an N-Gain score of 0.66 in the "medium" category and a independent sample t-test result with a significance value of 0.00, indicating a significant difference before and after using the LKPD. In conclusion, the developed PBL-based LKPD is empirically proven to be valid, practical, and effective in improving the Natural Science problem-solving abilities of students.

Keywords**:** *LKPD, Problem-Based Learning (PBL), Problem-Solving Ability, Natural Science.*