

**PENGEMBANGAN MEDIA ACCORDION BOOK PADA MUATAN IPA
TOPIK MENGENAL PERUBAHAN BENTUK ENERGI UNTUK
MENINGKATKAN HASIL BELAJAR SISWA KELAS IV SEKOLAH
DASAR**

Oleh

I Gusti Agung Indra Jaya, NIM 2011031226

Jurusan Pendidikan Dasar

ABSTRAK

Penelitian ini mempunyai empat tujuan, yaitu: (1) menghasilkan *Accordion Book* muatan IPA topik mengenal perubahan bentuk energi kelas IV SD, (2) menganalisis kelayakan *Accordion Book* muatan IPA topik mengenal perubahan bentuk energi kelas IV SD, (3) menganalisis kepraktisan *Accordion Book* muatan IPA topik mengenal perubahan bentuk energi kelas IV SD, dan (4) menganalisis efektivitas *Accordion Book* muatan IPA topik mengenal perubahan bentuk energi dalam meningkatkan hasil belajar siswa kelas IV SD. Studi ini memakai model ADDIE, dengan tahapannya yaitu (1) analisis, (2) perancangan, (3) pengembangan, (4) implementasi, dan (5) evaluasi. Subjek dalam studi ini adalah *Accordion Book* muatan IPA topik mengenal perubahan bentuk energi, sedangkan validitas, media, materi, kepraktisan dan efektivitas *Accordion Book* merupakan objek penelitian pengembangan. Metode pengumpulan data yaitu dengan *rating scale* dan tes. Instrumen yang dipakai untuk mengumpulkan data yaitu lembar *rating scale*, dan lembar tes. Hasil penelitian menunjukkan bahwa: (1) indeks validitas sebesar 0,95 berkualifikasi validitas tinggi untuk *Accordion Book* muatan IPA topik mengenal perubahan bentuk energi, (2) indeks validitas sebesar 0,94 berkualifikasi validitas tinggi untuk materi pada *Accordion Book* muatan IPA topik mengenal perubahan bentuk energi, (3) tingkat respon guru sebesar 3,8 berkualifikasi sangat baik terhadap *Accordion Book* muatan IPA topik mengenal perubahan bentuk energi, (4) respon siswa sebesar 3,84 berkualifikasi sangat baik terhadap *Accordion Book* muatan IPA topik mengenal perubahan bentuk energi, dan (5) nilai signifikansi (2-tailed) pada uji-t berkorelasi mendapatkan skor sebesar $0,000 < 0,05$, sehingga *Accordion Book* muatan IPA topik mengenal perubahan bentuk energi efektif untuk meningkatkan hasil belajar siswa kelas IV SD.

Kata Kunci: *accordion book*, hasil belajar, pengembangan, perubahan bentuk energi.

**DEVELOPMENT OF ACCORDION BOOK MEDIA ON SCIENCE
CONTENT TOPIC RECOGNIZING ENERGY FORM CHANGES TO
IMPROVE LEARNING OUTCOMES OF GRADE IV ELEMENTARY
SCHOOL STUDENTS**

By

I Gusti Agung Indra Jaya, NIM 2011031226

Department of Elementary Education

ABSTRACT

One of the challenges in science education, especially in the topic of energy transformation, is the difficulty students face in understanding abstract concepts that are often hard to grasp without appropriate media. This study aims to develop and evaluate the effectiveness of the Accordion Book learning media for this topic for grade IV elementary school students. This research uses the ADDIE development model (Analysis, Design, Development, Implementation, and Evaluation) to produce an innovative and engaging media. Data collection was carried out through validation by media and subject experts, practicality assessment by teachers and students, and effectiveness testing using pre-test and post-test. Data analysis was conducted using Aiken V for validity, average formula for practicality, and paired t-test for effectiveness. The results show that the Accordion Book media has high validity, with an Aiken V score of 0.95 for media experts and 0.94 for subject experts. The practicality of the media is also very good, with an average score of 3.8 from teachers and 3.84 from students. Effectiveness testing reveals a significant difference between the students' pre-test and post-test scores ($p < 0.05$). In conclusion, the use of the Accordion Book significantly improves students' learning outcomes on the topic of energy transformation. This media has proven effective in presenting the material in a visual and contextual manner, motivating students to be more active, and enhancing their understanding of abstract concepts. This study concludes that the Accordion Book can be an innovative and effective alternative learning media, and it can be applied to other science topics.

Keywords: accordion book, learning outcomes, development, energy form changes.

