

Ida Fitriyani. 2026. *Pengembangan Ensiklopedia Digital Ipas Materi Energi Alternatif Pada Siswa Kelas V Sdn Tanjung Jati 2*. Skripsi, Program Studi Pendidikan Guru Sekolah Dasar, Fakultas Ilmu Keguruan dan Ilmu Pendidikan, Universitas Trunojo Madura. Dya Qurotul A'yun, S.Pd., M.Pd.

ABSTRAK

Penelitian pengembangan yang menghasilkan produk ensiklopedia digital IPAS materi energi alternatif ini dilatarbelakangi oleh belum optimalnya penggunaan teknologi pembelajaran di SDN Tanjung Jati 2 Bangkalan, di mana 63% siswa kurang memahami materi IPAS dan 79% merasa bosan saat mempelajari materi energi. Kondisi ini mendorong perlunya inovasi bahan ajar yang interaktif dan berbasis digital. Penelitian ini bertujuan untuk menghasilkan ensiklopedia digital yang valid, praktis, dan efektif bagi siswa kelas V SDN Tanjung Jati 2 Bangkalan. Penelitian menggunakan metode Research and Development (R&D) dengan model pengembangan ADDIE (Analysis, Design, Development, Implementation, Evaluation). Produk dikembangkan menggunakan platform Canva dan disajikan dalam format flipbook online melalui Simplebook. Subjek uji coba terdiri dari 5 siswa (kelompok kecil) dan 14 siswa (kelompok besar) kelas V SDN Tanjung Jati 2. Hasil validasi gabungan dari tiga ahli (ahli media digital, ahli desain pembelajaran, dan ahli materi) memperoleh persentase 90,65% dengan kategori "sangat valid". Kepraktisan produk pada uji coba kelompok besar ditunjukkan oleh observasi aktivitas guru sebesar 95% dan aktivitas siswa sebesar 92,5%, keduanya berkategori "sangat praktis". Keefektifan produk pada kelompok besar menunjukkan respon guru 100%, respon siswa 97,14%, dan ketuntasan belajar klasikal 100%. Ensiklopedia digital IPAS materi energi alternatif dinyatakan valid, praktis, dan efektif digunakan sebagai bahan ajar bagi siswa kelas V sekolah dasar.

Kata Kunci: ensiklopedia digital, energi alternatif, IPAS, bahan ajar, model ADDIE

Ida Fitriyani. 2026. Development of the Ipas Digital Encyclopedia on Alternative Energy Material for Fifth Grade Students of SDN Tanjung Jati 2. Thesis, Elementary School Teacher Education Study Program, Faculty of Teacher Training and Education, Trunojoyo University Madura. Dya Qurotul A'yun, S.Pd., M.Pd.

ABSTRACT

The development research that produced the digital encyclopedia of science and natural sciences on alternative energy was motivated by the suboptimal use of learning technology at SDN Tanjung Jati 2 Bangkalan, where 63% of students did not understand the science and natural sciences material and 79% felt bored when studying energy material. This condition encourages the need for innovation in interactive and digital-based teaching materials. This study aims to produce a valid, practical, and effective digital encyclopedia for fifth-grade students of SDN Tanjung Jati 2 Bangkalan. The study used the Research and Development (R&D) method with the ADDIE (Analysis, Design, Development, Implementation, Evaluation) development model. The product was developed using the Canva platform and presented in an online flipbook format through Simplebook. The trial subjects consisted of 5 students (small group) and 14 students (large group) of fifth-grade SDN Tanjung Jati 2. The combined validation results from three experts (media experts, learning design experts, and material experts) obtained a percentage of 90.65% with the "very valid" category. The product's practicality in large-group trials was demonstrated by observations of teacher activity at 95% and student activity at 92.5%, both categorized as "very practical." The product's effectiveness in large groups demonstrated a 100% teacher response, 97.14% student response, and 100% classical learning completion. The digital science encyclopedia on alternative energy was declared valid, practical, and effective as a teaching material for fifth-grade elementary school students.

Keywords: digital encyclopedia, alternative energy, science, teaching materials, ADDIE model