

**DEVELOPMENT OF E-MODULES BASED ON ETHNOSCIENCE  
APPROACH IN LEARNING SCIENCE AND SCIENCE MATERIAL FOR  
GRADE IV STUDENTS OF ELEMENTARY SCHOOL NO. 1 BAHA  
BADUNG SCHOOL YEAR 2023/2024**

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**ABSTRACT**

This study aims to determine the design, feasibility, and effectiveness of E-module learning media based on an ethnoscience approach, especially in learning science and science material for material changes in the form of substances for grade IV elementary school students. The research subject for the development of E-modules based on an ethnoscience approach involves 28 grade IV students at SD No. 1 Baha. This research uses the ADDIE development model. The data collection method uses interview and questionnaire methods. Data analysis techniques use quantitative descriptive analysis techniques and inferential statistics. The results of this research are in the form of E-module products based on an ethnoscience approach with very good product qualifications and are effectively used in the learning process of science and science, material changes in the form of substances. Based on the results of the assessment according to the content/subject matter experts obtained a score of 90.3% with excellent qualifications, instructional design experts obtained a score of 97.5% with good qualifications, learning media experts obtained a score of 95.4% with excellent qualifications, individual trials involving three grade IV students obtained a score of 91.7% with excellent qualifications, and small group tests involving nine grade IV students obtained a score of 93.3% with excellent qualifications. Based on the effectiveness test involving 28 grade IV students, the result was 14.94 and the price with a significant level of 5% was 2.00 so that this means that it was  $>$  so  $t_{hitung} > t_{tabel}$   $H_0$  it was rejected and accepted, namely  $H_1$  there was a significant difference in learning outcomes between before and after using E-module products based on an ethnoscience approach. Based on this, it can be concluded that E-modules based on the ethnoscience approach are feasible and effective to be used in learning science and science, material on changes in the form of substances for grade IV students of SD No. 1 Baha.

Keywords: Development, Learning Media, E-modules, Ethnoscience

**PENGEMBANGAN E-MODUL BERBASIS PENDEKATAN ETNOSAINS  
PADA PEMBELAJARAN IPAS MATERI PERUBAHAN WUJUD ZAT  
SISWA KELAS IV SD NO. 1 BAHA BADUNG  
TAHUN AJARAN 2023/2024**

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Jurusan Pendidikan Dasar

**ABSTRAK**

Penelitian ini bertujuan untuk mengetahui rancang bangun, kelayakan, serta efektifitas dari media pembelajaran E-modul berbasis pendekatan etnosains khususnya pada pembelajaran IPAS materi perubahan wujud zat siswa kelas IV SD. Subjek penelitian pengembangan E-modul berbasis pendekatan etnosains ini melibatkan 28 siswa kelas IV di SD No. 1 Baha. Penelitian ini menggunakan model pengembangan ADDIE. Metode pengumpulan data menggunakan metode wawancara dan angket. Teknik analisis data menggunakan Teknik analisis deskriptif kuantitatif dan statistik inferensial. Hasil penelitian ini berupa produk E-modul berbasis pendekatan etnosains dengan kualifikasi produk sangat baik serta efektif digunakan dalam proses pembelajaran IPAS materi perubahan wujud zat. Berdasarkan hasil penilaian menurut ahli isi/materi pelajaran memperoleh skor 90,3% dengan kualifikasi sangat baik, ahli desain instruksional memperoleh skor 97,5% dengan kualifikasi baik, ahli media pembelajaran memperoleh skor 95,4% dengan kualifikasi sangat baik, uji coba perorangan yang melibatkan tiga siswa kelas IV memperoleh skor 91,7% dengan kualifikasi sangat baik, dan uji kelompok kecil yang melibatkan sembilan siswa kelas IV memperoleh skor 93,3% dengan kualifikasi sangat baik. Berdasarkan uji efektivitas yang melibatkan 28 siswa kelas IV memperoleh hasil  $t_{hitung}$  sebesar 14,94 dan harga  $t_{tabel}$  dengan taraf signifikan 5% sebesar 2,00 sehingga Hal ini berarti  $t_{hitung} > t_{tabel}$  sehingga  $H_0$  ditolak dan  $H_1$  diterima yaitu terdapat perbedaan hasil belajar yang signifikan antara sebelum dan sesudah menggunakan produk E-modul berbasis pendekatan etnosains. Berdasarkan hal tersebut maka dapat disimpulkan bahwa E-modul berbasis pendekatan etnosains layak dan efektif digunakan pada pembelajaran IPAS materi perubahan wujud zat siswa kelas IV SD No. 1 Baha.

Kata Kunci: Pengembangan, Media Pembelajaran, E-modul, Etnosains