

ABSTRAK

Arthaningsih, Ni Kadek Juni (2026). *Pengembangan Media Pembelajaran Digital Bermuatan Etnobotani untuk Meningkatkan Literasi Sains Siswa Kelas IV SD*. Tesis, Pendidikan Dasar, Program Pascasarjana, Universitas Pendidikan Ganesha.

Tesis ini telah disetujui dan diperiksa oleh Pembimbing I: Dr. I Made Citra Wibawa, S.Pd., M.Pd. dan Pembimbing II: Prof. Dr. Ida Bagus Putu Arnyana, M.Si.

Penelitian pengembangan ini bertujuan menghasilkan media pembelajaran digital bermuatan etnobotani yang valid, praktis, dan efektif untuk meningkatkan literasi sains siswa kelas IV SD. Penelitian dan pengembangan media pembelajaran digital bermuatan etnobotani pada penelitian ini menggunakan model *Analysis, Design, Development, Implementation, Evaluation* (ADDIE). Objek penelitian pengembangan terdiri dari rancang bangun, validitas, kepraktisan, dan efektivitas media pembelajaran digital bermuatan etnobotani untuk meningkatkan literasi sains siswa kelas IV sekolah dasar pada mata pelajaran IPAS materi fotosintesis pada tumbuhan. Subjek dari penelitian ini adalah produk pengembangan berupa media pembelajaran digital bermuatan etnobotani. Data validitas didapatkan melalui uji validitas produk ditinjau dari aspek isi/materi, bahasa, dan media pembelajaran. Uji kepraktisan produk melibatkan 10 orang siswa kelas V dan 6 orang guru. Uji efektivitas melalui tes literasi sains terhadap 33 orang siswa yang merupakan siswa sebagai kelompok eksperimen dan 30 orang siswa sebagai kelompok kontrol. Hasil uji *independent samples t-test* menunjukkan nilai *sig. (2-tailed)* sebesar 0,001, lebih kecil dari taraf signifikansi 0,05 yang berarti terdapat perbedaan yang signifikan peningkatan literasi sains antara kelompok siswa yang menggunakan media pembelajaran digital bermuatan etnobotani dan kelompok siswa yang tidak menggunakan media pembelajaran digital bermuatan etnobotani. Pengaruh media pembelajaran digital bermuatan etnobotani selanjutnya diuji effect size dengan Cohen's d menunjukkan nilai sebesar 1,185 termasuk dalam kategori efek sangat besar. Berdasarkan hasil penelitian dan pengembangan dapat disimpulkan (1) rancang bangun media pembelajaran digital ini memuat berbagai fitur meliputi petunjuk penggunaan, CP dan TP, peta konsep, materi, kuis dan evaluasi, daftar rujukan, dan profil pengembang; (2) media pembelajaran digital bermuatan etnobotani valid yang dikaji dari aspek media, isi, dan bahasa; (3) media pembelajaran digital bermuatan etnobotani praktis berdasarkan respon siswa dan guru; (4) media pembelajaran digital bermuatan etnobotani efektif untuk meningkatkan literasi sains siswa kelas IV.SD.

Kata-kata kunci: etnobotani, literasi sains, media pembelajaran digital

ABSTRACT

Arthaningsih, Ni Kadek Juni (2026). *Development of Ethnobotany-Based Digital Learning Media to Enhance Science Literacy of Fourth-Grade Elementary School Students*. Thesis, Elementary Education, Postgraduate Program, Ganesha University of Education

This thesis has been approved and examined by Advisor I: Dr. I Made Citra Wibawa, S.Pd., M.Pd. and Advisor II: Prof. Dr. Ida Bagus Putu Arnyana, M.Si.

This research and development study aimed to produce ethnobotany-based digital learning media that are valid, practical, and effective in enhancing the scientific literacy of fourth-grade elementary school students. The development of the ethnobotany-based digital learning media in this study employed the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) model. The object of the development research consisted of the design, validity, practicality, and effectiveness of the ethnobotany-based digital learning media in improving the scientific literacy of fourth-grade elementary school students in the IPAS subject, particularly on the topic of photosynthesis in plants. The subject of this study was the developed product in the form of ethnobotany-based digital learning media. Validity data were obtained through product validity testing reviewed from the aspects of content/material, language, and learning media. The practicality test of the product involved 10 fifth-grade students and 6 teachers. The effectiveness test was conducted through a scientific literacy test involving 33 students as the experimental group and 30 students as the control group. The results of the independent samples t-test showed a sig. (2-tailed) value of 0,001, which was lower than the significance level of 0,05, indicating a significant difference in the improvement of scientific literacy between students who used the ethnobotany-based digital learning media and those who did not use the ethnobotany-based digital learning media. Furthermore, the effect of the ethnobotany-based digital learning media was examined using effect size analysis with Cohen's d, which showed a value of 1,185, categorized as a very large effect. Based on the results of the research and development, it could be concluded that: (1) the design of the digital learning media included various features such as usage instructions, learning outcomes and learning objectives, concept maps, learning materials, quizzes and evaluations, reference lists, and developer profiles; (2) the ethnobotany-based digital media were valid based on media, content, and language aspects; (3) the ethnobotany-based digital media were practical based on student and teacher responses; and (4) the ethnobotany-based digital media were effective in enhancing the scientific literacy of fourth-grade elementary school students.

Keywords: ethnobotany, science literacy, digital learning media