

## ABSTRAK

Serra Yuni Ari Cahyani, Ni Wayan (2026), *Pengembangan E-book Cerita Bergambar Berkearifan Lokal Bali “Tanaman Obat Keluarga Untuk Meningkatkan Literasi Sains Siswa Kelas IV Sekolah Dasar*. Tesis. Pendidikan Dasar. Program Pascasarjana. Universitas Pendidikan Ganesha.

**Kata kunci:** *e-book*, kearifan lokal Bali, literasi sains, siswa kelas IV sekolah dasar, tanaman obat keluarga.

Penelitian ini bertujuan untuk mengembangkan serta menguji kelayakan, kepraktisan, dan efektivitas media pembelajaran berupa *e-book* cerita bergambar berkearifan lokal Bali “Tanaman Obat Keluarga” dalam meningkatkan literasi sains siswa kelas IV sekolah dasar. Penelitian menggunakan metode penelitian dan pengembangan (*Research and Development*) dengan mengadaptasi model ADDIE yang meliputi tahap analisis, perancangan, pengembangan, implementasi, dan evaluasi. Produk yang dikembangkan berupa *e-book* cerita bergambar yang memadukan alur cerita kontekstual, ilustrasi budaya lokal Bali, refleksi pembelajaran, serta kegiatan eksperimen sederhana yang dirancang untuk mendukung penguatan literasi sains secara aktif dan bermakna. Hasil validasi oleh ahli materi dan ahli media menunjukkan bahwa *e-book* yang dikembangkan memiliki tingkat kelayakan sangat tinggi dengan rata-rata skor persentase sebesar 94,8%, ditinjau dari aspek kesesuaian isi, tampilan grafis, keterbacaan, dan kelayakan teknis, sehingga dinyatakan layak digunakan dalam pembelajaran. Uji kepraktisan menunjukkan bahwa *e-book* sangat praktis digunakan, dengan persentase kepraktisan oleh guru sebesar 95,83% dan oleh siswa sebesar 92,92%, yang menunjukkan kemudahan penggunaan, kemenarikan, serta dukungan terhadap kelancaran proses pembelajaran. Uji efektivitas dilakukan terhadap 30 siswa kelas IV dengan menggunakan desain *pretest–posttest*. Hasil analisis menunjukkan adanya peningkatan rata-rata skor literasi sains siswa dari 65,5 pada *pretest* menjadi 82 pada *posttest*. Hasil uji t menunjukkan perbedaan yang signifikan antara skor *pretest* dan *posttest* ( $p = 0,001$ ). Selain itu, perhitungan *effect size* menggunakan *Cohen’s d* sebesar 2,994 menunjukkan kategori efek sangat besar. Dengan demikian, *e-book* cerita bergambar berkearifan lokal Bali “Tanaman Obat Keluarga” terbukti layak, sangat praktis, dan sangat efektif dalam meningkatkan literasi sains siswa kelas IV sekolah dasar, serta dapat digunakan sebagai alternatif media pembelajaran sains yang kontekstual, interaktif, dan sesuai dengan karakteristik peserta didik.

## ***ABSTRACT***

Serra Yuni Ari Cahyani, Ni Wayan (2026), *Development of a Picture Story E-book Based on Balinese Local Wisdom “Family Medicinal Plants” to Improve Science Literacy of Fourth-Grade Elementary School Students*. Thesis. Elementary Education. Graduate Program. Universitas Pendidikan Ganesha.

**Keywords:** *e-book*, Balinese local wisdom, science literacy, fourth-grade elementary school students, family medicinal plants.

This study aimed to develop and examine the feasibility, practicality, and effectiveness of a learning medium in the form of a picture story e-book based on Balinese local wisdom entitled “*Family Medicinal Plants*” in improving the scientific literacy of fourth-grade elementary school students. The study employed a Research and Development (R&D) method by adapting the ADDIE model, which consists of the stages of analysis, design, development, implementation, and evaluation. The developed product was a picture story e-book that integrates a contextual storyline, Balinese cultural illustrations, learning reflections, and simple experimental activities designed to support the active and meaningful development of students’ scientific literacy. The results of validation by content experts and media experts indicated that the developed e-book demonstrated a very high level of feasibility, with an average percentage score of 94.8%, in terms of content appropriateness, graphical appearance, readability, and technical quality. Therefore, the e-book was considered feasible for use in learning activities. The practicality test showed that the e-book was highly practical, with a practicality percentage of 95.83% from teachers and 92.92% from students, indicating ease of use, high attractiveness, and support for the smooth implementation of the learning process. The effectiveness test was conducted with 30 fourth-grade students using a pretest–posttest design. The results revealed an increase in the average scientific literacy score from 65.5 in the pretest to 82 in the posttest. The t-test results indicated a statistically significant difference between the pretest and posttest scores ( $p = 0.001$ ). Furthermore, the effect size analysis using Cohen’s  $d$  yielded a value of 2.994, which falls into the category of a very large effect. In conclusion, the picture story e-book based on Balinese local wisdom entitled “*Family Medicinal Plants*” is feasible, highly practical, and highly effective in improving the scientific literacy of fourth-grade elementary school students. Thus, it can be used as an alternative learning medium that supports contextual, interactive, and learner-centered science learning at the elementary school level.