

ABSTRAK

Wina Wahini, Ni Luh Nyoman (2026), Pengembangan Buku Cerita Bergambar Digital Bermuatan Kearifan Lokal Makanan Tradisional Bali untuk Meningkatkan Literasi Sains Siswa Kelas IV SD. Program Pascasarjana. Universitas Pendidikan Ganesha.

Kata Kunci: Buku Cerita Bergambar Digital, Kearifan Lokal Bali, Makanan Tradisional Bali, Literasi Sains, Sekolah Dasar.

Instrumen pembelajaran dikembangkan menggunakan pendekatan Research and Development dengan kerangka kerja ADDIE, mencakup lima tahapan sistematis: analisis kebutuhan, perancangan desain, produksi media, penerapan di lapangan, dan evaluasi berkelanjutan. Subjek uji cobanya melibatkan 30 peserta didik kelas IV SD Negeri 9 Padangsambian. Proses validasi dilakukan oleh dua pakar media pembelajaran dan dua pakar konten bidang studi, sementara aspek kepraktisan dinilai oleh tiga pendidik serta sepuluh peserta didik dalam kelompok kecil. Temuan validasi menunjukkan perolehan skor rata-rata 93,25%, dengan kontribusi validasi pakar media sebesar 93,5% dan pakar konten sebesar 93%, keduanya masuk dalam kategori sangat valid. Penilaian kepraktisan oleh guru menghasilkan rata-rata 96,75%, sedangkan evaluasi oleh peserta didik kelompok kecil mencapai 92,75%, keduanya memenuhi kriteria sangat praktis. Untuk menguji efektivitas, diterapkan desain *one group pretest–posttest*. Hasil pengujian normalitas mengonfirmasi bahwa data pretest dan posttest berdistribusi normal, dan uji homogenitas membuktikan kesamaan varians antar data. Uji *paired sample t-test* menghasilkan nilai signifikansi 0,001 ($p < 0,05$), mengindikasikan terdapat perbedaan yang signifikan antara nilai *pretest* dan *posttest*. Rata-rata nilai literasi sains peserta didik mengalami peningkatan dari 78,17 menjadi 89,00. Besaran *effect size (Cohen's d)* sebesar 1,889 mengonfirmasi bahwa dampak pemanfaatan buku cerita bergambar digital ini termasuk dalam kategori tinggi. Berdasarkan serangkaian pengujian tersebut, dapat disimpulkan bahwa buku cerita bergambar digital yang memuat kearifan lokal makanan tradisional Bali telah memenuhi kriteria kevalidan, kepraktisan, dan keefektivan tinggi, sehingga layak digunakan sebagai media pembelajaran untuk meningkatkan literasi sains peserta didik kelas IV sekolah dasar.

ABSTRACT

Wina Wahini, Ni Luh Nyoman (2026). Development of a Digital Picture Storybook Incorporating Local Wisdom of Balinese Traditional Foods to Improve Scientific Literacy of Fourth Grade Elementary School Students. Thesis. Elementary Education. Postgraduate Program. Universitas Pendidikan Ganesha.

Keywords: Digital Picture Storybook, Balinese Local Wisdom, Balinese Traditional Foods, Scientific Literacy, Elementary School.

The learning instrument was developed using a Research and Development approach with the ADDIE framework, encompassing five systematic stages: needs analysis, design, media production, field implementation, and ongoing evaluation. The trial subjects involved 30 fourth-grade students of Padangsembian 9 State Elementary School. The validation process was conducted by two media learning experts and two subject matter experts, while the practicality aspect was assessed by three educators and ten students in a small group. Validation findings revealed an average score of 93.25%, with media expert validation contributing 93.5% and subject matter expert validation contributing 93%, both falling into the highly valid category. Practicality assessment by teachers yielded an average of 96.75%, while evaluation by small group students reached 92.75%, both meeting the highly practical criteria. To test effectiveness, a one group pretest-posttest design was applied. Normality test results confirmed that pretest and posttest data were normally distributed, and the homogeneity test demonstrated data variance equality. The paired sample t-test yielded a significance value of 0.001 ($p < 0.05$), indicating a significant difference between pretest and posttest scores. The average science literacy score of students increased from 78.17 to 89.00. The effect size (Cohen's d) of 1.889 confirmed that the impact of using digital picture story books falls into the high category. Based on a series of tests, it can be concluded that digital picture story books incorporating local wisdom of traditional Balinese food have met high validity, practicality, and effectiveness criteria, making them suitable as learning media to improve science literacy of fourth-grade elementary school students.