

# PENGEMBANGAN MODEL PEMBELAJARAN IPA BERMUATAN KEARIFAN LOKAL BALI UNTUK MENINGKATKAN KARAKTER DAN LITERASI SAINS SISWA

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## ABSTRAK

Penelitian ini secara umum bertujuan menghasilkan model pembelajaran IPA bermuatan kearifan lokal Bali (KLB) yang valid, praktis, dan efektif untuk meningkatkan karakter dan literasi sains siswa. Penelitian ini menggunakan metode pengembangan ADDIE yang terdiri dari tahapan *analyze, design, development, implementation, evaluation*. Subjek pengujian efektivitas dilakukan pada siswa kelas VIII SMP di Kabupaten Buleleng yang jumlahnya sebanyak 158 siswa, yaitu di SMPN 1 Singaraja sebanyak 58 siswa, SMPN 2 Singaraja sebanyak 50 siswa, dan SMPN 4 Sawan sebanyak 50 siswa. Dari ketiga sekolah tersebut dibagi menjadi dua kelompok yaitu satu kelompok eksperimen sebanyak 88 siswa, dan satu kelompok kontrol sebanyak 70 siswa. Instrumen pengumpulan data karakter menggunakan kuesioner dan data literasi sains menggunakan tes literasi sains. Kedua instrumen tersebut telah memenuhi katagori valid dan reliabel. Metode analisis data untuk memperoleh hasil pengujian efektivitas dilakukan dengan analisis MANOVA dengan taraf signifikansi sebesar 5%. Hasil penelitian menunjukkan (1) Rancangan model pembelajaran IPA bermuatan kearifan lokal Bali dengan tahapan menyajikan fenomena kearifan lokal Bali (*starting of phenomena*), mengorganisasikan pebelajar (*student organizing*, melakukan penyelidikan berbasis persepektif secara kelompok (*perspective-investigation*), mempresentasikan hasil percobaan (*presenting*), mengaitkan, menganalisis dan mengevaluasi fenomena KLB (*evaluation*); (2) Model pembelajaran IPA bermuatan kearifan lokal Bali secara keseluruhan dinyatakan valid; (3) Model pembelajaran IPA bermuatan kearifan lokal Bali dinyatakan praktis; (4) Model pembelajaran IPA bermuatan kearifan lokal Bali lebih efektif dalam meningkatkan karakter siswa dibandingkan model pembelajaran konvensional; (5) Model pembelajaran IPA bermuatan kearifan lokal Bali lebih efektif dalam meningkatkan literasi sains siswa dibandingkan model pembelajaran konvensional; (6) Model pembelajaran IPA bermuatan kearifan lokal Bali lebih efektif secara simultan meningkatkan karakter dan literasi sains siswa dibandingkan model pembelajaran konvensional

### Kata Kunci:

model pembelajaran IPA bermuatan kearifan lokal Bali, karakter, literasi sains.

# **DEVELOPMENT OF SCIENCE LEARNING MODEL WITH BALI LOCAL WISDOM TO IMPROVE STUDENTS CHARACTER AND SCIENTIFIC LITERACY**

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## **ABSTRACT**

*This research aims to produce a science learning model containing Balinese local wisdom (BLW) that is valid, practical, and effective to improve students character and scientific literacy. This study uses the ADDIE development method which consists of analyze, design, development, implementation, evaluation stages. The subject of the effectiveness test was carried out on class VIII SMP in Buleleng Regency, which amounted to 158 students, namely at SMPN 1 Singaraja as many as 58 students, SMPN 2 Singaraja as many as 50 students, and SMPN 4 Sawan as many as 50 students. The three schools were divided into two groups, one experimental group with 88 students, and one control group with 70 students. The instrument for collecting character data was using a questionnaire and scientific literacy data using a scientific literacy test. Both instruments have met the valid and reliable categories. The data analysis method to obtain the results of the effectiveness test was carried out by MANOVA analysis with a significance level of 5%. The results showed (1) the design of a science learning model containing Balinese local wisdom with the stages of presenting the phenomenon of local Balinese wisdom (starting of phenomena), organizing students (student organizing, conducting perspective-based investigations in groups (perspective-investigation), presenting experimental results (presenting), linking, analyzing and evaluating the BLW phenomenon (evaluation); (2) The science learning model containing Balinese local wisdom as a whole is declared valid; (3) The science learning model containing Balinese local wisdom is declared practical; (4) The science learning model containing local wisdom Bali is more effective in improving students' character than conventional learning models; (5) Science learning model containing Balinese local wisdom is more effective in improving students' scientific literacy than conventional learning models; (6) Science learning model containing Balinese local wisdom is more effective simultaneously improve students' character and scientific literacy compared to conventional learning models*

**Keywords:**

*the science learning model contains Balinese local wisdom, character, scientific literacy.*