

## **ABSTRAK.**

**Mulyartini, Ni Wayan 2025.** *Pengembangan bahan ajar steam berbasis kearifan lokal bali untuk menstimulasi kreativitas dan kemampuan sains pada anak usia dini gugus 1 kecamatan gianyar.* Tesis, Pendidikan Anak Usia Dini, Program Pascasarjana, Universitas Pendidikan Ganesha.

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Rendahnya kreativitas dan kemampuan sains anak usia dini mendorong perlunya kebutuhan bahan ajar yang relevan bagi perkembangan mereka. Penelitian ini bertujuan untuk mengembangkan bahan ajar STEAM berbasis kearifan lokal Bali untuk menstimulasi kreativitas dan kemampuan sains anak usia dini. Metode yang digunakan adalah research and development dengan model ADDIE, melalui lima tahapan: analisis, desain, pengembangan, implementasi, dan evaluasi. Subjek penelitian terdiri dari guru PAUD dan anak usia 4–5 tahun di TK Gugus I Gianyar. Validitas bahan ajar diuji oleh para ahli media, ahli materi, dan ahli bahasa Kepraktisan dinilai oleh guru, sedangkan efektivitas diuji melalui desain eksperimen semu. Hasil uji validitas dan uji kepraktisan menyatakan bahwa produk bahan ajar yang dikembangkan telah sangat valid dan sangat praktis untuk pembelajaran anak usia dini. Hasil analisis MANOVA menunjukkan adanya perbedaan yang signifikan dalam peningkatan kreativitas dan kemampuan sains anak antara kelompok eksperimen dan kelompok kontrol. Integrasi pendekatan STEAM dan kearifan lokal Bali memberikan pengalaman belajar yang kontekstual, bermakna, dan menyeluruh bagi anak. Dengan demikian, dapat disimpulkan bahwa bahan ajar ini layak, praktis dan efektif digunakan sebagai media pembelajaran inovatif dalam mengembangkan kreativitas dan kemampuan sains anak usia dini TK Gugus I Kecamatan Gianyar. Produk bahan ajar dikembangkan dan diuji coba hanya di Gugus 1 Kecamatan Gianyar, sehingga hasilnya belum tentu *generalisable* atau dapat diterapkan secara efektif di luar wilayah ini.

**Kata Kunci :** STEAM, kearifan lokal Bali, kreativitas, kemampuan sains, anak usia dini.

## ***ABSTRACT.***

***Mulyartini, Ni Wayan 2025. Development of steam teaching materials based on Bali's local wisdom to stimulate creativity and scientific abilities in early childhood group 1 Gianyar district. Thesis, Early Childhood Education, Graduate Program, Ganeshha Educational University.***

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*The low levels of creativity and scientific ability among early childhood learners highlight the urgent need for relevant instructional materials to support their development. This study aims to develop STEAM-based teaching materials integrated with Balinese local wisdom to stimulate creativity and scientific skills in early childhood. The research employed a research and development approach using the ADDIE model, consisting of five phases: analysis, design, development, implementation, and evaluation. The study involved early childhood education (ECE) teachers and children aged 4–5 years from TK Gugus I Gianyar. The validity of the teaching materials was assessed by media experts, content experts, and language experts. Practicality was evaluated by teachers, while effectiveness was tested through a quasi-experimental design. The validity and practicality assessments indicated that the developed teaching materials were highly valid and highly practical for early childhood learning. MANOVA analysis results revealed significant differences in the improvement of creativity and scientific abilities between the experimental and control groups. The integration of the STEAM approach with Balinese local wisdom provided a contextual, meaningful, and holistic learning experience for children. Therefore, it can be concluded that the teaching materials are feasible, practical, and effective as innovative learning media for developing creativity and scientific skills in early childhood at TK Gugus I Gianyar. The teaching material products were developed and tested only in Cluster 1, Gianyar District, so the results are not necessarily generalizable or can be applied effectively outside this area.*

**Keywords :** *STEAM, Balinese local wisdom, creativity, scientific ability, early childhood education.*