

## ABSTRAK

Penelitian ini bertujuan untuk mengeksplorasi dan membangun konjektur (teori substantif) berkaitan dengan *ethnomathematics* dan literasi matematika masyarakat *Bali Mula*. Penelitian ini merupakan penelitian kualitatif dengan desain *Multisites Studies*. Adapun metode yang digunakan adalah metode Etnografi dengan pendekatan induksi analitis yang dimodifikasi. Pengumpulan data dilakukan melalui berbagai cara dengan subjek penelitian yaitu anak-anak, pemuda, para orang tua, tokoh masyarakat (*Bendesa desa Pekraman*), arsitek tradisional Bali (*undagi*), *tukang banten*, ahli *Wariga*, siswa SMP, dan guru matematika yang merupakan warga masyarakat *Bali Mula* di Kawasan *Batur Global Geopark*. Setelah dilakukan pengamatan, pengamatan berperanserta, wawancara, wawancara mendalam, dan analisis dokumentasi selama sepuluh bulan diperoleh temuan-temuan penelitian diantaranya: 1) Terdapat delapan *ethnomathematics* yang berhasil dieksplorasi; 2) kedelapan *ethnomathematics* tersebut dipelajari dengan cara magang, otodidak, formal, dan meniru; 3) materi matematika SMP yang berpadanan dengan *ethnomathematics* masyarakat *Bali Mula* yaitu operasi bilangan bulat, relasi dan fungsi, garis dan sudut, pecahan, bangun datar, bangun ruang, Kelipatan Persekutuan Terkecil, dan deret aritmetika; 4) Terdapat dua jenjang literasi matematik siswa *Bali Mula* untuk konteks *ethnomathematics* yaitu jenjang *Sadar* dan *Melek*; dan 5) Alternatif model pembelajaran matematika yang dapat digunakan dalam pembelajaran matematika dengan konteks *ethnomathematics* dan menyoroti literasi matematik yaitu: Model pembelajaran Ekspositori, *Contextual Teaching and Learning with Ethnomathematics Context (CTL-wE)*, dan *Ethnomathematics Based Learning (EBL)*.

**Kata Kunci:** *Ethnomathematics, Literasi Matematik, Etnografi, Bali Mula*

## ABSTRACT

This research aimed to explore and develop theories related to ethnomathematics and math literacy of the *Bali Mula* community. This research is a qualitative research with multisites studies design. The method used is the method of ethnography with modified induction analytical approach. The data were collected with various methods from children, youth, parents, community leaders (*Bendesa*), traditional Balinese architects (*undagi*), *tukang banten*, *Wariga* experts, junior high school students, and junior high school mathematics teachers who are Balinese in the area of Batur Global Geopark. After observation, participant observation, interviews, in-depth interviews, and documentary analysis for ten months, the research findings were found: 1) There were eight ethnomathematics that were successfully explored; 2) these eight ethnomathematics are learned by apprenticeship, self-taught, formal, and imitative; 3) mathematical material of junior high school which corresponds to the ethnomathematics of the *Bali Mula* people i.e integer operations, relations and functions, lines and angles, fractions, shape, Least Common Multiples, and arithmetic series; 4) There are two levels of mathematical literacy of *Bali Mula* students for ethnomathematics context i.e Level of consciousness and literate; and 5) Alternative mathematical learning models that can be used in mathematics learning with the ethnomathematics context and targeting the mathematical literacy are: Expository learning model, Contextual Teaching and Learning with Ethnomathematics Context (CTL-wE), and Ethnomathematics Based Learning (EBL).

**Kata Kunci:** *Ethnomathematics, Mathematical Literacy, Ethnography, Bali Mula*