

KAJIAN ETNOSAINS PROSES PEMBUATAN KENDANG BALI KHAS DESA SUMERTA SEBAGAI PENDUKUNG MATERI PEMBELAJARAN IPA SMP

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ABSTRAK

Penelitian ini bertujuan mendeskripsikan dan menjelaskan kajian etnosains proses pembuatan Kendang Bali Khas Desa Sumerta sebagai pendukung materi pembelajaran IPA SMP. Penelitian ini menggunakan pendekatan etnosains dengan jenis penelitian kualitatif deskriptif. Penelitian ini dilakukan di Desa Sumerta, Kecamatan Denpasar Timur, Kota Denpasar, Provinsi Bali. Subjek yang dilibatkan dalam penelitian ini meliputi 3 orang pengerajin Kendang Bali serta 2 orang guru IPA SMP Dwijendra Denpasar yang diperoleh melalui teknik *purposive sampling* dan *snowball sampling*. Teknik pengumpulan data yang digunakan adalah observasi, wawancara, dokumentasi dan angket. Teknik analisis data menggunakan model Miles dan Huberman yaitu kondensasi data, penyajian data dan penarikan kesimpulan. Berdasarkan hasil penelitian, alat yang digunakan dalam proses pembuatan Kendang Bali Khas Desa Sumerta yaitu *mesin serut*, *paet* (pahat), *pangot*, *serut yuyu*, pisau, *mutik*, *serut jangat*, *penghapus*, *encek*. Bahan yang digunakan dalam proses pembuatan Kendang Bali yaitu kayu nangka dan kulit sapi sebagai bahan utama serta bahan tambahan berupa kawat, tanduk sapi, dan bambu. Adapun proses pembuatan Kendang Bali Khas Desa Sumerta antara lain *Ngepelawahin*, *nyerutin pelawah*, *mangotin*, *ngerereh pakelit*, *ngamplas pelawah*, *ngetep kulit*, *ngendemin kulit*, *nyerut kulit*, *ngeringin*, *ngilitin wangkis*, *ngaryanin song jangat*, *nyemuh*, *ngaryanin juluk*, *ngakit jangat*, *masang sompe*, *ngamplas kulit*, *ngeraras swara*. Hasil kajian sains ilmiah dari proses pembuatan Kendang Bali khas Desa Sumerta relevan dan dapat mendukung beberapa materi dalam pembelajaran IPA SMP yaitu klasifikasi makhluk hidup, getaran gelombang dan bunyi, gaya, pesawat sederhana, zat dan perubahannya, kalor, dan sistem koordinasi pada manusia.

Kata Kunci: Etnosains, Kendang Bali, Pembelajaran IPA

ETHNOSCIENCE STUDY OF THE PROCESS OF MAKING TRADITIONAL BALINESE DRUM FROM SUMERTA VILLAGE AS A SUPPORTING MATERIAL FOR SCIENCE LEARNING IN JUNIOR HIGH SCHOOL

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ABSTRACT

This study aims to describe the ethnoscience study of the process of making the traditional Balinese drum (Kendang Bali) from Sumerta Village as supporting material for science learning in junior high school. This study uses an ethnoscience approach with a descriptive qualitative research method. The study was conducted in Sumerta Village, East Denpasar District, Denpasar City, Bali Province. The subjects involved in this study included 3 Balinese drum craftsmen and 2 science teachers from Dwijendra Denpasar Junior High School, selected through purposive sampling and snowball sampling techniques. The data collection techniques used were observation, interviews, documentation, and questionnaires. Data analysis was performed using the Miles and Huberman model, which includes data condensation, data presentation, and drawing conclusions. Based on the research results, the tools used in the process of making the Balinese drum from Sumerta Village include a planer machine, chisel (*paet*), *pangot*, serut yuyu, knife, *mutik*, *jangat* planer, eraser, and *encek*. The materials used in the process include jackfruit wood and cowhide as the main materials, as well as additional materials such as wire, cow horns, and bamboo. The processes involved in making the Balinese drum from Sumerta Village include *Ngepelawahin*, *nyerutin pelawah*, *mangotin*, *ngerereh pakelit*, *ngamplas pelawah*, *ngetep kulit*, *Ngendemin kulit*, *nyerut kulit*, *ngeringin*, *ngilitin wangkis*, *ngaryanin song jangat*, *nyemuh*, *ngaryanin juluk*, *ngakit jangat*, *masang sompe*, *ngamplas kulit*, and *ngeraras swara*. The scientific findings from the process of making the Balinese drum from Sumerta Village are relevant and can support several topics in junior high school science learning, including classification of living organisms, vibrations, waves and sound, force, simple machines, matter and its changes, heat, and the human coordination system.

Keywords: Ethnoscience, Balinese Drums, Science Learning