

**KAJIAN ETNOSAINS KESENIAN *JEGOG* MEBARUNG KHAS
JEMBRANA SEBAGAI SUMBER BELAJAR IPA SECARA *CONTEXTUAL
TEACHING AND LEARNING***

Oleh

Ni Wayan Dian Widiani, NIM 2213071002

Jurusan Fisika dan Pengajaran IPA

ABSTRAK

Penelitian ini bertujuan untuk menjelaskan kajian etnosains kesenian Jegog Mebarung khas Jembrana sebagai sumber belajar IPA secara *Contextual Teaching and Learning* (CTL). Penelitian ini menggunakan pendekatan etnosains dengan jenis penelitian kualitatif deskriptif. Penelitian dilaksanakan di Desa Sangkaragung, Kecamatan Jembrana, Kabupaten Jembrana, Bali. Subjek yang dilibatkan meliputi 3 orang seniman Jegog Mebarung serta 3 orang guru IPA SMP 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 kajian etnosains, pengetahuan tradisional masyarakat seniman Jegog Mebarung berhasil direkonstruksi menjadi konsep-konsep ilmiah yang mencakup tiga bidang IPA. Dalam bidang fisika, ditemukan konsep getaran dan gelombang bunyi, resonansi dan frekuensi, hubungan gaya dan energi dalam teknik permainan, serta prinsip biomekanika postur tubuh pemain. Dalam bidang kimia, ditemukan konsep perubahan kimia serta kalor dan penguapan yang teridentifikasi melalui proses pengeringan dan pengawetan bambu. Dalam bidang biologi, ditemukan konsep struktur jaringan tumbuhan bambu, interaksi makhluk hidup dengan lingkungan, serta sistem koordinasi indra pendengaran pada manusia. Hasil kajian tersebut menunjukkan relevansi dengan Capaian Pembelajaran IPA SMP pada Kurikulum Merdeka dan dikonfirmasi oleh guru IPA bahwa konsep-konsep tersebut dapat dimanfaatkan sebagai sumber belajar IPA yang kontekstual, integratif, dan bermakna melalui pendekatan CTL.

Kata Kunci: Etnosains, Jegog Mebarung, Sumber Belajar IPA, CTL

AN ETHNOSCIENCE STUDY OF THE JEGOG MEBARUNG TRADITIONAL ART OF JEMBRANA AS A SCIENCE LEARNING RESOURCE THROUGH CONTEXTUAL TEACHING AND LEARNING

By

Ni Wayan Dian Widiani, NIM 2213071002

Department of Physics and Science Education

ABSTRACT

This study aims to explain the ethnoscience study of the Jegog Mebarung traditional art of Jembrana as a science learning resource through *Contextual Teaching and Learning* (CTL). This research employed an ethnoscience approach with a qualitative descriptive design, conducted in Sangkaragung Village, Jembrana District, Jembrana Regency, Bali. Research subjects consisted of 3 Jegog Mebarung artists and 3 junior high school science teachers, selected through *purposive sampling* and *snowball sampling* techniques. Data were collected through observation, interviews, documentation, and questionnaires, and analyzed using the Miles and Huberman model comprising data condensation, data display, and conclusion drawing. Based on the ethnoscience study, the traditional knowledge of Jegog Mebarung artists was successfully reconstructed into scientific concepts across three science domains. In physics, the concepts identified include vibration and sound waves, resonance and frequency, the relationship between force and energy in playing techniques, and the biomechanical principles of the player's body posture. In chemistry, the concepts include chemical change as well as heat and evaporation, identified through the drying and preservation processes of bamboo. In biology, the concepts involve the tissue structure of bamboo plants, the interaction of living organisms with their environment, and the human auditory system. These findings align with the Science Learning Outcomes of junior high school under the Merdeka Curriculum, and science teachers confirmed that these concepts can serve as a contextual, integrative, and meaningful science learning resource through the CTL approach.

Keywords: Ethnoscience, Jegog Mebarung, Science Learning Resource, CTL