

ABSTRAK

Aurelia Fransiska Papo. 2021. Eksplorasi Etnomatematika Pada Tari Woleka dan Gasa Di Kabupaten Sumba Barat Daya. Skripsi. Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan Matematika, Universitas Sanata Dharma.

Matematika merupakan bagian dari kebudayaan manusia dan matematika dalam setiap kebudayaan berharga dan bermanfaat bagi tujuan khusus kebudayaannya. Matematika memiliki peran yang sangat penting dalam kemajuan kehidupan manusia sehari-hari, terutama dalam pengembangan bidang ilmu pengetahuan lainnya. Etnomatematika merupakan kajian tentang penerapan matematika yang digunakan dalam suatu budaya tertentu. Penelitian ini bertujuan untuk 1) mendeskripsikan sejarah dan filosofi Tari Woleka dan Gasa Suku Sumba Barat Daya, 2) mengetahui aktivitas fundamental matematis menurut Bishop yang terdapat pada Tari Woleka dan Gasa, 3) mengetahui topik matematika pada Tari Woleka dan Gasa suku Sumba Barat Daya dalam materi matematika, 4) Membuat soal-soal matematika Sekolah Menengah Pertama yang memuat aktivitas fundamental Bishop pada Tari Woleka dan Gasa. Jenis penelitian ini adalah kualitatif dengan sumber data diperoleh dari hasil observasi, wawancara dan dokumentasi. Hasil penelitian menunjukkan bahwa 1) Tari Woleka dan Gasa merupakan tarian tradisional suku Wewewa di Sumba Barat Daya yang telah diwariskan sejak zaman nenek moyang dan berfungsi sebagai tarian ritual dalam upacara sakral kematian serta penyambutan tamu kehormatan, yang mengandung nilai-nilai spiritual, penghormatan kepada leluhur, serta penguatan solidaritas dan kebersamaan masyarakat. 2) Aktivitas fundamental matematis yang ada pada tari woleka dan gasa adalah sebagai berikut: (1) *counting* yang meliputi jumlah penari, gerakan, kostum, dan alat music, (2) *measuring* yang meliputi ukuran sudut gerakan, jarak antar penari, durasi gerakan, waktu pembuatan kostum, dan permainan alat music, (3) *designing* yang meliputi motif kostum, dan desain alat music, (4) *locating* yang meliputi penempatan posisi penari, anggota tubuh, kostum, dan alat music, (5) *playing* yang meliputi aturan-aturan dalam menari, penggunaan kostum, dan memainkan alat music, (6) *explaining* yang meliputi makna simbolik penari, gerakan, kostum, dan alat musik penggiring. 3) Selain itu, ditemukan berbagai topik matematika yang relevan untuk pembelajaran matematika SMP, meliputi bilangan, lingkaran, perbandingan senilai, garis dan sudut, transformasi geometri (refleksi), bangun ruang sisi lengkung (tabung), pola bilangan (barisan aritmetika), serta rasio dan proporsi, yang selanjutnya 4) diimplementasikan dalam bentuk permasalahan kontekstual pada materi matematika kelas VII, VIII, dan IX.

Kata kunci: Etnomatematika, aktivitas fundamental matematis, Tari Woleka dan Gasa

ABSTRACT

Aurelia Fransiska Papo. 2021. *Ethnomathematics Exploration In Woleka And Gasa Dance In West Sumba Daya Regency. Thesis. Mathematics Education Study Program, Department of Mathematics and Natural Sciences Education, Faculty of Teacher Training and Mathematics Education, Sanata Dharma University.*

Mathematics is an integral part of human culture, and in every culture, mathematics is valuable and useful for its specific purposes. Mathematics plays a crucial role in the advancement of everyday human life, particularly in the development of other scientific fields. Ethnomathematics is the study of the application of mathematics used in a particular culture. This study aims to 1) describe the history and philosophy of the Woleka and Gasa Dance of the Southwest Sumba Tribe, 2) find out the fundamental mathematical activities according to Bishop contained in the Woleka and Gasa Dance, 3) find out the mathematical topics in the Woleka and Gasa Dance of the Southwest Sumba Tribe in mathematical material, 4) Create junior high school mathematics problems that contain Bishop's fundamental activities in the Woleka and Gasa Dance. This type of research is qualitative with data sources obtained from the results of observation, interviews and documentation. The results of the study show that 1) Woleka and Gasa Dance are traditional dances of the Wewewa tribe in Southwest Sumba which have been passed down since the time of their ancestors and function as ritual dances in sacred death ceremonies and welcoming honored guests, which contain spiritual values, respect for ancestors, and strengthening solidarity and togetherness of the community. 2) The fundamental mathematical activities in the Woleka and Gasa dances are as follows: (1) counting which includes the number of dancers, movements, costumes, and musical instruments, (2) measuring which includes the angle of movement, distance between dancers, duration of movement, costume making time, and playing musical instruments, (3) designing which includes costume motifs, and musical instrument designs, (4) locating which includes the placement of dancers' positions, body parts, costumes, and musical instruments, (5) playing which includes the rules in dancing, wearing costumes, and playing musical instruments, (6) explaining which includes the symbolic meaning of dancers, movements, costumes, and accompanying musical instruments. 3) In addition, various mathematical topics were found that were relevant to junior high school mathematics learning, including numbers, circles, equivalent comparisons, lines and angles, geometric transformations (reflections), curved-sided geometric shapes (cylinders), number patterns (arithmetic sequences), and ratios and proportions, which were then 4) implemented in the form of contextual problems in mathematics material for grades VII, VIII, and IX.

Keywords: Ethnomathematics, fundamental mathematical activities, Woleka and Gasa Dance