

ABSTRAK

Lisa Listiani. (2023). *Eksplorasi Etnomatematika pada Situs Gambirowati Sebagai Bahan Pembuatan Handout Materi Garis dan Sudut Fase D*. Skripsi. Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan Matematika, Universitas Sanata Dharma Yogyakarta.

Tujuan penelitian ini: (1) mendeskripsikan sejarah dan filosofi, (2) mendeskripsikan aktivitas fundamental matematis, (3) mengetahui adanya konsep Materi Garis dan Sudut pada aktivitas fundamental matematis Situs Gambirowati, (4) mengetahui implementasi hasil eksplorasi etnomatematika dalam rancangan *handout*. Merupakan penelitian kualitatif etnografi. Subjek penelitian ini yakni dua narasumber yang merupakan pegawai Balai Pelestarian Kebudayaan Wilayah X Yogyakarta. Objek pada penelitian ini yakni sejarah dan filosofi Situs Gambirowati, aktivitas fundamental matematis, Materi Garis dan Sudut serta bahan ajar *Handout*. Metode pengumpulan data observasi, wawancara dan dokumentasi dengan teknik analisis data menggunakan teori Miles dan Huberman (1984). Hasil yang diperoleh pada penelitian ini: 1) Situs Gambirowati merupakan pesanggrahan yang di bangun oleh Sri Sultan Hamengku Buwono ke II dan memiliki filosofi sebagai tempat yang damai, sunyi dan menenangkan; 2) enam aktivitas fundamental matematis, *counting*: jumlah pengunjung selama tiga bulan terakhir, banyaknya bangunan situs, jumlah tangga serta anak tangga, banyaknya panel relief dan pilar pada dinding kedua teras, *locating*: penempatan letak Situs Gambirowati; penentuan arah hadap, penentuan arah bentangan, *measuring*: panjang, lebar, tinggi, luas kompleks situs, serta durasi jam buka situs per hari, *designing*: bentuk bangunan, sudut yang terbentuk pada bangunan situs ini, *playing*: aturan yang harus ditaati pengunjung, aktivitas di situs zaman dahulu dan saat ini, aturan penyusunan batu, langkah pemugaran, serta langkah perawatan, *explaining*: fasilitas, dan keunikan Situs Gambirowati; 3) adanya keterkaitan aktivitas fundamental matematis dengan Materi Garis dan Sudut pada aktivitas *designing*; (4) implementasi hasil eksplorasi etnomatematika pada Situs Gambirowati berupa bahan ajar *Handout* Materi Garis dan Sudut yang penyusunannya berdasarkan CP (Capaian Pembelajaran) Fase D pada Kurikulum Merdeka.

Kata kunci: Etnomatematika, Situs Gambirowati, Materi Garis dan Sudut, *Handout*

ABSTRACT

Lisa Listiani. (2023). *Ethnomatematics Exploration at the Gambirowati Site as a Material for Making Handouts on Lines and Angles Material Phase D. Thesis. Mathematics Education Study Program, Department of Mathematics Education and Natural Sciences, Faculty of Teacher Training and Mathematics Education, Sanata Dharma University, Yogyakarta.*

The aims of this study: (1) to describe history and philosophy, (2) to describe fundamental mathematical activities, (3) to find out the concept of Material Lines and Angles in the fundamental mathematical activities of the Gambirowati Site, (4) to find out the implementation of the results of ethnomatematics exploration in handout designs. This is an ethnographic qualitative research. The subjects of this study were two informants who were employees of the Yogyakarta Region X Cultural Preservation Center. The objects in this study are the history and philosophy of the Gambirowati site, fundamental mathematical activities, line and angle materials and teaching materials for handouts. Methods of collecting observation data, interviews and documentation with data analysis techniques using the theory of Miles and Huberman (1984). The results obtained in this study: 1) The Gambirowati site is a guest house built by Sri Sultan Hamengku Buwono II and has a philosophy of being a place of peace, quiet and calming; 2) six fundamental mathematical activities, counting: the number of visitors over the past three months, the number of site buildings, the number of stairs and steps, the number of relief panels and pillars on the walls of the two terraces, locating: the location of the Gambirowati Site; determining the direction of facing, determining the stretch direction, measuring: length, width, height, area of the site complex, as well as the duration of the site's opening hours per day, designing: the shape of the building, the angles formed on the building of this site, playing: the rules that visitors must obey, activities on ancient and current sites, rules for laying stones, restoration steps, and maintenance steps, explaining: facilities, and the uniqueness of the Gambirowati Site; 3) there is a connection between the fundamental mathematical activity and the Material of Lines and Angles in the designing activity; (4) implementation of the results of ethnomatematics exploration at the Gambirowati Site in the form of teaching materials Handout Material on Lines and Angles whose preparation is based on CP (Learning Outcomes) Phase D on the Independent Curriculum.

Keywords: *Ethnomatematics, Gambirowati Site, Material Lines and Angles, Handout*