

ABSTRAK

Gregoriant Angelo Bere. 2021. Eksplorasi Etnomatematika Pada Perayaan Ekaristi Dalam Gereja Katolik. Skripsi. Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan Matematika, Universitas Sanata Dharma.

Tujuan dari penelitian ini untuk mengetahui makna tata perayaan ekaristi dan simbol-simbol yang digunakan, untuk mengetahui aktivitas fundamental matematika menurut Bishop, dan konsep matematika yang ada dalam Perayaan ekaristi.

Jenis penelitian ini adalah penelitian deskriptif kualitatif. Subjek penelitian adalah seorang pastor diosesan dan seorang pastor Skolapios. Metode pengumpulan data yang digunakan adalah observasi, wawancara, dan dokumentasi, di mana peneliti menjadi instrumen utama.

Hasil penelitian menunjukkan bahwa perayaan ekaristi merupakan hal penting bagi kehidupan rohani umat katolik, karena dalam perayaan ekaristi Yesus hadir melalui Sabda dan komuni sehingga ekaristi menjadi puncak dan sumber dari segala praktik liturgi. Sedangkan simbol yang digunakan dalam perayaan ekaristi sebagai sarana dan ungkapan iman kepada Tuhan, melalui tata gerak, dan peralatan yang digunakan. Kemudian aktivitas fundamental matematika menurut Bishop dalam perayaan ekaristi diantaranya: a) *counting* meliputi tindakan pendupaan tiga kali, dua kali, dan satu kali, dan penyebutan angka b) *measuring* meliputi ukuran peralatan misa dan kadar alkohol anggur misa, c) *locating* meliputi penempatan salib dan posisi tempat duduk umat, d) *designing* meliputi bentuk geometris dari peralatan misa, e) *playing* meliputi ketentuan saat-saat untuk duduk, berlutut atau berdiri, f) *explaining* meliputi sistem penentuan tahun liturgi. Konsep matematis yang ditemukan meliputi: teori bilangan, operasi bilangan bulat, bangun datar, bangun ruang, persamaan kuadrat, geometri analitik, dan kedudukan garis.

Kata Kunci: perayaan ekaristi, aktivitas fundamental matematika, konsep matematis

ABSTRACT

Gregoriant Angelo Bere. 2021. *Ethnomathematical Exploration of the Eucharistic Celebration in the Catholic Church. Essay. Mathematics Education Study Program, Department of Mathematics and Natural Sciences Education, Faculty of Teacher Training and Mathematics Education, Sanata Dharma University.*

The purpose of this study was to determine the meaning of the Eucharistic celebration and the symbols used, to find out the fundamental mathematical activities according to Bishop, and the mathematical concepts in the Eucharistic Celebration.

This type of research is descriptive qualitative research. The research subjects were a diocesan priest and a Piarist priest. Data collection methods used are observation, interviews, and documentation, where the researcher is the main instrument.

The results showed that the celebration of the Eucharist is important for the spiritual life of Catholics because in the celebration of the Eucharist Jesus is present through the Word and Communion so that the Eucharist becomes the culmination and source of all liturgical practices. While the symbols used in the celebration of the Eucharist are as a means and expression of faith in God, through the movement and equipment used. Then the fundamental mathematical activities according to Bishop in the celebration of the Eucharist include: a) counting includes the act of incense three times, twice, and once, and the mentioning of numbers b) measuring includes the size of the mass equipment and the alcohol content of the mass wine, c) locating includes placing the cross and the seating position of the people, d) designing includes the geometric shape of the mass equipment, e) playing includes the provision of times to sit, kneel or stand, f) explaining includes the system for determining the liturgical year. Mathematical concepts found include number theory, integer operations, flat shapes, geometric shapes, quadratic equations, analytic geometry, and line positions.

Keywords: *eucharistic celebration, mathematical fundamental activities, mathematical concepts*