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Eksplorasi Exploration of Ethnomathematics in the Architecture of Traditional Houses of the Komering Tribe for Geometry Learning

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Abstract

This study aims to explore the ethnomathematical elements in the architecture of traditional Komering houses and examine their potential as contextual geometry learning resources in elementary schools. The research employed a qualitative method with an ethnographic approach, using direct observation, in-depth interviews, and visual documentation in Sukajadi Village, East Ogan Komering Ulu Regency, South Sumatra. The findings reveal that Komering traditional houses contain various geometric concepts such as triangles, rectangles, trapezoids, circles, and cuboids, implemented in the roof, walls, stairs, and decorative ornaments. The study concludes that integrating local culture through an ethnomathematical approach can enhance students' understanding of geometric concepts in a more concrete manner. The implication of this research suggests that Komering traditional houses are appropriate as innovative learning media that support the Merdeka Curriculum and preserve local cultural heritage.

Keywords: Cultural heritage, Ethnomathematics, Geometry, Traditional house, Elementary school

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INTRODUCTION

Mathematics is a fundamental science that plays an important role in shaping logical, systematic, and critical thinking patterns. However, in educational practice, mathematics is often perceived as a difficult subject and disconnected from students' real-life experiences (Endramoyo, 2018). This perception creates obstacles in the learning process and reduces students' motivation to learn. Therefore, an approach is needed that can connect mathematical concepts with everyday life contexts, one of which is through the ethnomathematics approach.

Ethnomathematics emerges as a pedagogical alternative that bridges formal mathematics with local cultural values (Putri, 2017). The term ethnomathematics refers to the study of mathematics within the context of specific cultural communities (Budiarto et al., 2022). Through this approach, mathematical concepts are not learned in isolation but are linked to cultural practices of society, such as in carving patterns, building structures, musical instruments, or traditional games. Thus, ethnomathematics plays an important role in making learning more contextual, relevant, and meaningful.

Education and culture are two interrelated entities that cannot be separated. Education serves as a vehicle for the transmission of culture from one generation to the next, while culture provides context and values for the educational process (Syadita & Safitri, 2024). Therefore, the integration of local culture into the curriculum, particularly in mathematics learning, not only enriches the teaching materials but also contributes to the preservation of cultural identity. In the multicultural context of Indonesia, such an approach becomes highly relevant and strategic.

One cultural object rich in mathematical values is traditional house architecture (Islamiati & Purnamansyah, 2024). In various regions of Indonesia, traditional houses possess structures and ornaments that reflect principles of geometry and other mathematical concepts. The traditional house of the Komering tribe in Ogan Komering Ulu, South Sumatra, for instance, serves not only as a dwelling but also contains mathematical concepts such as symmetry, plane and solid

shapes, as well as measurement. Unfortunately, such local cultural potential is still rarely used as a learning resource in mathematics education in schools.

Through this study, the author seeks to explore the elements of ethnomathematics found in the traditional architecture of the Komering tribe and examine how these elements can be used to enhance geometry learning in elementary schools. This research aims not only to describe the structural findings of ethnomathematics but also to promote local wisdom as a contextual learning medium. Through this approach, it is hoped that students will be able to understand mathematical concepts more concretely while also recognizing and appreciating their cultural heritage.

Beberapa tahun terakhir, etnomatematika mulai mendapatkan perhatian dalam ranah pendidikan matematika di Indonesia. Berbagai penelitian telah membuktikan bahwa integrasi budaya lokal dalam pembelajaran matematika mampu meningkatkan pemahaman konsep, minat belajar, serta memperkuat identitas budaya peserta didik. Penelitian oleh Ismail (2025) menunjukkan bahwa rumah gadang Minangkabau mengandung struktur matematika yang kompleks dan dapat digunakan sebagai media pembelajaran geometri. Penelitian lainnya oleh Selpiana. (2024) juga menunjukkan bahwa rumah adat Bugis Saoraja dapat dijadikan sebagai sumber belajar yang valid secara matematis dan budaya.

The South Sumatra region, particularly Ogan Komering Ulu, is known for its distinctive cultural heritage, one of which is the traditional house of the Komering tribe. This stilt house is built traditionally by taking into account the geographical conditions along the Komering River, such as the risk of flooding. The elevated structure of the house, supported by pillars and topped with a pyramidal or triangular roof, reflects mathematical thinking that has been passed down through generations, although it is not explicitly referred to as “mathematics” by the local community.

Exploration results show that the architecture of the Komering traditional house contains various geometric concepts that can be directly linked to learning materials in elementary schools. Elements such as the isosceles triangle in the roof shape, rectangles in the walls and windows, and rectangular prisms in the support pillars are tangible representations of two-dimensional and three-dimensional shapes. Additionally, horizontal, perpendicular, and parallel line patterns are found in the house’s ornaments and structural elements. These findings suggest that the Komering traditional house holds great potential as a concrete and contextual learning medium.

Previous studies have demonstrated the success of integrating ethnomathematics into education through cultural objects such as traditional games, musical instruments, and traditional houses in other regions—such as the Minangkabau's *rumah gadang* or the Javanese *joglo* house. However, exploration of the Komering traditional house remains very limited and has yet to be incorporated as a learning resource in the formal mathematics curriculum. In fact, such local values can be utilized as a form of instructional innovation that not only enriches the content but also strengthens students’ cultural identity.

Nevertheless, most existing research has focused on regions whose cultural heritage is already widely recognized at the national level. The traditional house of the Komering tribe, despite its unique characteristics and rich cultural values, has received little attention in ethnomathematics studies. In fact, the structure of the Komering traditional house contains mathematical representations that are no less rich than those found in other traditional houses. This creates a gap in the academic literature that needs to be addressed through field-based exploratory research.

The uniqueness of the Komering traditional house lies not only in its physical form, which is designed to adapt to the environment, but also in its architectural details that implicitly reflect mathematical principles. For example, room divisions based on odd and even numbers, the repetition of geometric motifs in carvings, and symmetrical pillar structures. These elements have not yet been systematically documented within the context of mathematics education, and this study aims to fill that gap.

This research seeks to reconstruct the architecture of the Komering traditional house as a contextual, authentic, and culturally relevant learning resource for geometry. It serves not only as a form of cultural documentation but also as a pedagogical foundation for designing learning models that integrate local wisdom with the formal curriculum. This aligns with the spirit of the *Merdeka Curriculum*, which emphasizes project-based learning and the incorporation of local contexts.

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METHOD

This study is a qualitative research employing an ethnographic approach, aiming to deeply explore the indigenous culture through observations of behaviors and cultural practices related to the architecture of the Komering traditional house in Ogan Komering Ulu Timur Regency, South Sumatra. The ethnographic approach was chosen as it provides a holistic understanding of cultural values and the traditional application of mathematical elements embedded in the structure of traditional houses (Grasellia et al., 2024). The research was conducted in January in Sukajadi Village, Belitang District, one of the cultural centers of the Komering tribe, where traditional houses are still well-preserved and actively used by the local community.

Data collection was carried out using three main techniques: observation, interviews, and documentation. Direct observation was conducted at the research site to examine the building structure, geometric shapes found in the traditional houses, as well as patterns of ornaments and relevant architectural elements. In-depth interviews were conducted with traditional leaders, the village head, and community members considered to have extensive knowledge about the Komering traditional house and the philosophy behind its construction. Documentation in the form of photographs and sketches was also used to record the physical details of the traditional houses for analysis purposes. Data validity was ensured through source triangulation, time triangulation, and theoretical triangulation to guarantee the accuracy and reliability of the findings. The interview guidelines are presented in the following table.

Table 1. Interview Indicators

No.	Focus Area	Indicators
1	Historical and Cultural Aspects of Traditional Houses	1. History and development of the Komering traditional house
		2. Structure and main components of the house (roof, walls, pillars, floor)
		3. Social and cultural functions of the traditional house in Komering community life
		4. Symbolic meanings and philosophical values of each part of the house
		5. Types and meanings of ornaments used in the traditional house
2	Mathematical Concepts in the Traditional House	1. Types of two-dimensional and three-dimensional shapes found in the house structure
		2. Patterns of symmetry, proportion, and scale in the design of the traditional house
		3. Use of measurement, scale, and ratio in the construction process
		4. Application of geometric concepts in traditional ornaments and carvings
		5. Relevance of mathematical elements to school-level learning contexts

Data analysis was conducted through the stages of data reduction, data presentation, and conclusion drawing, focusing on the identification and interpretation of ethnomathematical elements—particularly geometric concepts such as two-dimensional and three-dimensional shapes, lines, angles, and the measurement of length and angles found in the architecture of traditional houses. This analysis was then linked to geometry learning concepts in the elementary school curriculum to identify their relevance and practical applications in education. Through this method, the study not only reveals the cultural and mathematical values embedded in the Komering traditional house but also provides a strong foundation for developing contextual mathematics learning resources based on local culture.

RESULTS AND DISCUSSION

The traditional house of the Komering tribe is a stilt house (*rumah panggung*). The Komering people live along the banks of the Komering River, and the design of their traditional houses is adapted to the environmental conditions, particularly the risk of flooding. This research was conducted in Sukajadi Village, Belitang District, Ogan Komering Ulu Timur Regency, South Sumatra. Based on the criteria for information selection, the researcher conducted interviews with the village head, community members, and traditional leaders in Sukajadi to obtain accurate data regarding the traditional houses under study.

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Komering traditional houses generally have a symmetrical structure, both in front and side views. This reflects the application of basic geometric concepts such as rectangles, triangles, and mirror symmetry. This is supported by an interview with the Head of Sukajadi Village, who stated:"The roof of the Komering traditional house is triangular in shape; the front and interior parts are shaped like squares and rectangles. The windows and doors are designed and positioned symmetrically on both the right and left sides."

From this statement, it can be concluded that mathematical elements in Komering traditional houses are found in the roof, the front of the house, and the placement of doors and windows. This is further supported by another resident of Sukajadi Village, who said: "The Komering traditional house has a triangular-shaped roof, while the front and interior parts of the house are shaped like squares and rectangles. In this stilt house, the doors and windows are made to be symmetrical between the right and left sides."

The traditional leader of the village explained that the construction of the traditional house follows customs passed down through generations, which are rich in meaning. The shape and size of the house are made balanced because they reflect the value of harmony in life. The triangular roof not only functions as protection from rain but also symbolizes harmony. Additionally, the windows and doors are made symmetrical to create a balanced and harmonious appearance.

Based on these three interviews, it can be concluded that the architecture of the Komering traditional house is not only designed based on practical needs but also contains aesthetic elements and cultural values that can be directly linked to mathematical concepts. Geometric elements such as triangles, squares, rectangles, and mirror symmetry are part of the structure of the Komering traditional house and can be utilized as contextual learning media. Therefore, an ethnomathematics approach based on the Komering traditional house has great potential to help students understand geometric concepts in a more concrete and meaningful way.

The Komering traditional house is known for its stilted form and contains three main rooms. It is made from wood and constructed with a strong and sturdy structure. The application of mathematical concepts in the architecture of the Komering traditional house in Ogan Komering Ulu (OKU) can be seen from various aspects, especially geometric elements.

Geometry, as a branch of mathematics, consists of two-dimensional (plane) and three-dimensional (solid) shapes. Two-dimensional shapes have length and width only, whereas three-dimensional shapes have length, width, and height, and possess volume (Andriliani et al., 2022; Andiyana et al., 2018; Sari, 2012). The goal of teaching geometric concepts is to help students understand the characteristics of geometric shapes encountered in daily life (Wulandari, 2017; Sholihah et al., 2017; Wahyudi & Aulina, 2021). One way to identify mathematical elements contained in the Komering traditional house in OKU, South Sumatra, is through direct study of the building itself.

Based on the observations, interviews, and documentation conducted, various geometric shapes—particularly plane and solid shapes—were found in the Komering traditional house. These mathematical elements can assist teachers in delivering learning materials, especially geometry concepts, as they can be observed in the shapes of the roof, doors, windows, floor, walls, and paintings inside the house.

The traditional Komering houses located along the Komering River feature roofs shaped like isosceles triangles. This isosceles triangle pattern is one of the two-dimensional geometric elements found in these traditional houses. Additionally, the walls and windows exhibit rectangular patterns. Other mathematical elements can be found inside the house, such as pillars shaped like rectangular prisms (blocks), paintings with rectangular shapes, and circles depicted within the paintings.

Based on the explanation above, it can be concluded that the traditional Komering houses in Ogan Komering Ulu, South Sumatra, contain many mathematical elements, particularly geometric elements in the form of two-dimensional and three-dimensional shapes. The application of ethnomathematics in the learning process not only facilitates students' understanding of the material presented by the teacher but also serves as an alternative means to preserve endangered cultural heritage. Below are images of parts of the Komering traditional house that contain concepts of plane and solid geometry as examples.

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Figure 1. Roof of the komering traditional house

The roof shape of the Komering traditional house resembles an isosceles triangle, characterized by two equal-length slanting sides, one base side, two acute angles at the peak, and two obtuse angles at the base. This roof design visually follows the contour of an isosceles triangle, where the structural lines are clear and symmetrical, reflecting the application of basic geometric concepts in the community's culture.

Figure 2. Walls and windows of the komering traditional house

The design of the walls and windows of the Komering traditional house shows the use of rectangles as the basic shape, with distinct vertical and horizontal lines forming a symmetrical structure. The rectangular windows with uniform proportions reflect geometric concepts of balance and order. Meanwhile, the pattern of wooden arrangements on the walls follows the principle of consistent repetition (translation).

Figure 3. Staircase wall of the komering traditional house

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The staircase wall of the Komering traditional house resembles a right-angled triangle, characterized by a 90° angle where the stairs meet the wall, and a slanting side (hypotenuse) connecting the end of the stairs to the top of the structure. This design utilizes basic geometric principles to create construction stability, where the right angle ensures optimal load distribution to the ground. The use of the right-angled triangle in this traditional architecture demonstrates the application of ethnomathematics, as the Komering community integrates practical mathematical concepts such as the Pythagorean theorem.

Figure 4. Pillars of the komering traditional house

The main pillars of the Komering traditional house are shaped like rectangular prisms (blocks), characterized by three-dimensional geometric shapes with length, width, and height, and right angles at every edge intersection. This block shape is chosen because it provides optimal structural strength and stability to evenly support the building's load. In the context of ethnomathematics, the use of rectangular prisms reflects the community's understanding of three-dimensional geometry.

Figure 5. Interior wall of the komering traditional house

Based on Figure 5, the interior wall of the traditional house features square shapes. A square is a two-dimensional geometric figure formed by two pairs of equal and parallel sides. The repeated symmetrical arrangement of squares on the wooden panels and carvings reflects the application of mathematical concepts such as side congruence and angle balance.

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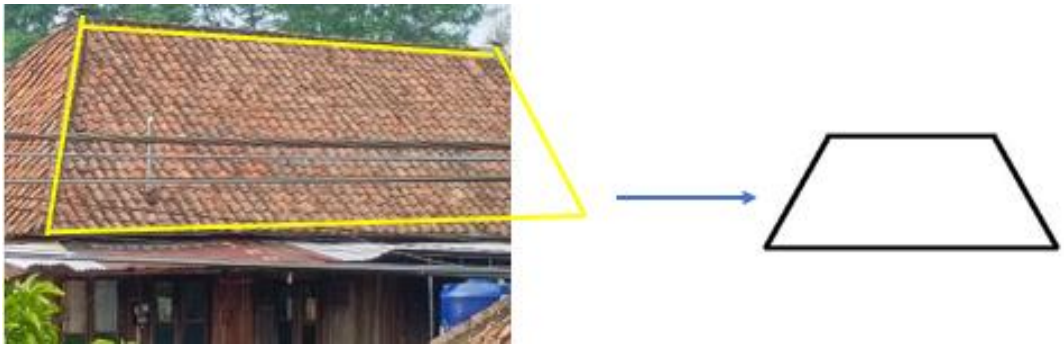

Figure 6. Roof of the komering traditional house

When viewed from the side, the roof of the Komering traditional house resembles a trapezoid. A trapezoid is a two-dimensional geometric shape with four sides, two of which are parallel but not equal in length. This shape also has four angles and can have one pair of parallel sides and one pair of non-parallel sides.

The trapezoid shape is clearly observable in the roof structure, making it a contextual learning medium for elementary school students. By recognizing this roof shape, students can understand the characteristics of a trapezoid, such as the number of sides, angles, and properties of parallel lines, while also strengthening their appreciation for local culture.

Figure 7. Wall ornament of the komering traditional house

Based on Figure 7, the wall ornament of the Komering traditional house prominently features circular shapes in the center. A circle is a two-dimensional geometric figure formed by a set of points equidistant from a single center point. This shape has no angles or straight sides but includes important elements such as radius, diameter, and circumference. By observing this circular wall ornament, students can learn about the shape and properties of circles in a contextual manner.

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Figure 8. Roof of the komering traditional house

Based on Figure 8, the roof of the Komering traditional house resembles a triangular prism. A triangular prism is a three-dimensional geometric shape with two congruent triangular bases and three rectangular lateral faces. The roof shows triangular shapes arranged opposite each other, forming slanted surfaces that meet at the peak.

Ethnomathematics is a branch of knowledge that combines mathematics with local culture (Kumawati et al., 2023). Ethnomathematics can be applied in the learning process at schools, where the use of an ethnomathematics approach as a learning medium can help students better understand the subject matter, especially mathematics (Dewi & Suniasih, 2022). It is known that ethnomathematics is the study of mathematics applied within the context of local culture, including traditional houses.

The ethnomathematics approach is a method used to connect local culture with formal mathematical concepts, aiming to make it easier for students to comprehend learning materials because the media used is closely related to everyday life (Serepinah & Nurhasanah, 2023; Wildan et al., 2024). This ethnomathematics approach can be implemented by identifying geometric shapes found in the traditional houses of the Komering tribe. An example of determining geometric shapes in the traditional Komering house is by showing pictures of the Komering traditional house in OKU (a stilt house) that contains geometric elements such as squares, rectangles, triangles, circles, cuboids, and trapezoids. The displayed images can serve as concrete examples to introduce the concepts of plane and solid shapes to students in the teaching and learning process.

The traditional Komering house has a distinctive architecture compared to modern houses today. Features such as the pyramid-shaped structure and geometric carved ornaments reflect various mathematical concepts that can help students better understand the material taught by teachers, especially in mathematics.

The results of ethnomathematics exploration in the architecture of the Komering traditional house show that this traditional building contains various geometric concepts that are relevant and have great potential to be used as contextual learning resources in elementary schools. Various architectural elements of the Komering traditional house, such as the roof, walls, windows, stairs, pillars, and decorative ornaments, clearly reflect the presence of plane and solid shapes commonly taught in the mathematics curriculum.

Specifically, the roof's shape, resembling an isosceles triangle, and when viewed from the side resembles a trapezoid, provides students with a concrete illustration of the characteristics of sides, angles, and symmetry in plane shapes. From the front view, the roof structure resembling a triangular prism introduces students more concretely to solid shapes. This strengthens spatial learning and understanding of elements of solid geometry such as faces, edges, and vertices.

The rectangular shape of the walls and windows of the traditional house, along with the panels inside displaying squares, illustrates order and symmetry, which align with basic geometric principles. Furthermore, the stairs feature right-angled triangles, which can be used as a medium to explain the concept of right angles and the practical application of the Pythagorean theorem. The pillars of the house, shaped like rectangular prisms, demonstrate the traditional community's understanding of structural strength through three-dimensional geometric forms. Meanwhile, the circular ornaments on the wall decorations reflect geometric shapes that are round and

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symmetrical, enriching the concept of plane shapes with an aesthetic cultural dimension.

These findings show that the Komering community has applied mathematical principles through generations in the design of their traditional houses, even though it is not explicitly referred to as "mathematics." The selection of shapes, sizes, and the arrangement of elements in the traditional house is not only based on practical needs and aesthetics but also reflects an intuitive understanding of geometric concepts. Using the architecture of the Komering traditional house in an educational context as teaching material for mathematics can provide a concrete, contextual, and meaningful approach. Students do not only learn concepts abstractly but also understand their application in everyday life and culture. This approach aligns with the principles of ethnomathematics, which bridges formal mathematics with local cultural realities (Putri, 2017). Besides strengthening the mastery of geometric concepts, the integration of local culture in mathematics learning also plays a role in preserving cultural heritage, fostering pride in regional identity, and developing students' critical and reflective thinking skills (Dari & Jatmiko, 2024; Sufia et al., 2023). Thus, the architecture of the Komering traditional house is not only a cultural object with historical value but can also be reconstructed as an innovative learning medium in basic mathematics education.

Based on the observations, interviews, and documentation conducted, it can be concluded that the ethnomathematics approach is an effective method to deliver material to students using concrete media that are close to their daily lives, making it easier for students to understand the material presented by the teacher.

The application of mathematical concepts in the Komering traditional house can be seen in the architecture of the building, starting from the shape of the roof, walls, supporting wooden beams, to the motifs and decorations of the traditional house, all of which contain many mathematical elements. Local wisdom is one concrete medium that can assist teachers in facilitating the delivery of learning material, so students can easily absorb the information provided by the teacher (Handayani et al., 2023; Suwarti et al., 2020).
The application of ethnomathematics in the learning process not only facilitates teachers in delivering lessons but can also serve as an alternative to preserve existing culture from extinction (Setiani et al., 2023; Nugroho, 2024; Annisa et al., 2020). Traditional houses are not only part of the wealth of this nation, but their architecture and building shapes contain numerous mathematical elements that can help teachers deliver learning material more effectively to students.

CONCLUSION

The architecture of the Komering traditional house contains elements of ethnomathematics, particularly geometric concepts of plane and solid shapes, which can be utilized in elementary school mathematics learning. Shapes such as triangles, squares, trapezoids, and rectangular prisms are evident in the roof, walls, windows, and house ornaments. This integration of local culture not only strengthens students' understanding of mathematical concepts but also helps preserve cultural values that are increasingly marginalized. This approach can be applied, for example, in geometry lessons for grades 4 or 5 through activities that involve observing the shapes on Komering traditional houses. Students can then create cardboard models of the traditional houses while calculating the area, volume, and symmetry of the shapes. Such learning supports the Merdeka Curriculum in a contextual and meaningful way..

BIBLIOGRAPHY

Andiyana, M. A., Maya, R., & Hidayat, W. (2018). Analisis kemampuan berpikir kreatif matematis siswa smp pada materi bangun ruang. *JPMI (Jurnal Pembelajaran Matematika Inovatif)*, *1*(3), 239-248. https://doi.org/10.22460/jpmi.v1i3.p239-248

Andriliani, L., Amaliyah, A., Prikustini, V. P., & Daffah, V. (2022). Analisis pembelajaran matematika pada materi geometri. *Sibatik Journal: Jurnal Ilmiah Bidang Sosial, Ekonomi, Budaya, Teknologi, Dan Pendidikan*, *1*(7), 1169-1178.. https://doi.org/10.31004/cendekia.v8i2.3402

Annisa, C., Fauziah, A., & Erawati, E. (2020). Engklek gen 4.0 (studi etnomatematika: permainan tradisional engklek sebagai

Copyright © 2025, JPMS, p-ISSN: 1410-1866, e-ISSN: 2549-1458

media pembelajaran matematika). *Journal Focus Action of Research Mathematic (Factor M)*, *3*(1), 33-48. https://doi.org/10.30762/factor_m.v3i1.2499

Budiarto, M. T., Masruroh, A., Azizah, A., Munthahana, J., Awwaliya, R., Nikmah, R. A., & Yusrina, S. L. (2022). *Etnomatematika teori, pendekatan, dan penelitiannya*. Zifatama Jawara.

Dari, S. W., & Jatmiko, J. (2024, February). Analisis peran etnomatematika dalam pembelajaran matematika. In *Prosiding Seminar Nasional Kesehatan, Sains dan Pembelajaran* (Vol. 3, No. 1, pp. 269-278). doi: 10.29407/wv109q65.

Dewi, P. D. P., & Suniasih, N. W. (2022). Media video pembelajaran matematika berbasis etnomatematika pada muatan materi pengenalan bangun datar. *Jurnal EDUTECH Undiksha*, *10*(1), 156-166. https://doi.org/10.23887/jeu.v10i1.44775

Endramoyo, W. (2018). *Cakram Matemawiku: Inovasi Cerdas Matematika Dasar*. Indoocomp.

Grasellia, L., Hutagalung, R., Putri, A., Mailani, E., & Saragih, D. I. (2024). Etnomatematika pada ragam kebudayaan di kota tebing tinggi sumatera utara. *Jurnal Pendidikan Ilmiah Transformatif*, *8*(9). https://edu.ojs.co.id/index.php/jpit/article/view/583

Handayani, N. K. T., Gading, I. K., & Widiana, I. W. (2023). Media interaktif berbasis kearifan lokal tri hita karana berbantuan articulate storyline untuk meningkatkan hasil belajar ppkn Siswa. *Jurnal Ilmiah Pendidikan dan Pembelajaran*, *7*(3), 528-536. https://doi.org/10.23887/jipp.v7i3.61599

Islamiati, N., & Purnamansyah, P. (2024). Pembelajaran matematika berbasis etnomatematika: kajian analisis geometri rumah adat" uma lengge". *Jurnal Pendidikan Mipa*, *14*(1), 247-252. https://doi.org/10.37630/jpm.v14i1.1458

Ismail, R. N. (2025). Literatur review: etnomatematika kabupaten agam, lima puluh kota, dan tanah datar. *Camerald: Education Mathematics and Natural Science Adzkia Journal*, *1*(1), 1-9. https://ojs.adzkia.ac.id/index.php/camerald/article/view/285

Kumawati, S., Rahmawati, F., & Fatih'Adna, S. (2023). Pengembangan media pembelajaran interaktif android “si-inka” berbasis etnomatematika untuk meningkatkan kemampuan pemahaman matematis materi bangun ruang sisi datar. *MATH LOCUS: Jurnal Riset dan Inovasi Pendidikan Matematika*, *4*(2), 110-124. https://doi.org/10.31002/mathlocus.v4i2.4225

Nugroho, D. (2024). *Pengembangan e-modul matematika berkonteks etnomatematika dengan menggunakan aplikasi ispring suite 11* (Doctoral dissertation, IAIN Metro).

Putri, L. I. (2017). Eksplorasi etnomatematika kesenian rebana sebagai sumber belajar matematika pada jenjang mi. *Jurnal Ilmiah pendidikan dasar*, *4*(1). http://dx.doi.org/10.30659/pendas.4.1.%25p

Sadita, S. E., & Syafitri, S. (2024). Analisis dan implementasi pendidikan dasar sebagai proses pewarisan budaya. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, *9*(2), 7190-7197. https://doi.org/10.23969/jp.v9i2.15046

Sari, N. L. I. (2012). *Asyiknya Belajar Bangun Ruang dan Sisi Datar*. PT Balai Pustaka (Persero).

Serepinah, M., & Nurhasanah, N. (2023). Kajian etnomatematika berbasis budaya lokal tradisional ditinjau dari perspektif pendidikan multikultural. *Scholaria: Jurnal Pendidikan Dan Kebudayaan*, *13*(2), 148-157. https://doi.org/10.24246/j.js.2023.v13.i2.p148-157

Setiani, D., Rahmawati, E., Lya, S., & Pramesti, D. (2023). Peran etnomatematika dalam pembelajaran matematika di era. 451–461. https://proceeding.uingusdur.ac.id/index.php/santika/article/view/1356

Sholihah, S. Z., & Afriansyah, E. A. (2017). Analisis kesulitan siswa dalam proses pemecahan masalah geometri berdasarkan tahapan berpikir Van Hiele. *Mosharafa: J//urnal Pendidikan Matematika*, *6*(2), 287-298. https://doi.org/10.31980/mosharafa.v6i2.451

Copyright © 2025, JPMS, p-ISSN: 1410-1866, e-ISSN: 2549-1458

Sufia, N. V., Mahmudah, U., Munawaroh, Z., & Fitrotunnida, T. (2023). Kegiatan pendampingan untuk menggali nilai tradisional dalam matematika di kota pekalongan: peningkatan wawasan motif batik melalui etnomatematika. *Tarbi: Jurnal Ilmiah Mahasiswa*, *2*(2), 595-610. https://doi.org/10.33507/tarbi.v2i2.1339

Suwarti, S., Laila, A., & Permana, E. P. (2020). Pengembangan media komik berbasis kearifan lokal untuk menentukan pesan dalam dongeng pada siswa sekolah dasar. *Profesi Pendidikan Dasar*, *7*(2), 140-151. https://journals.ums.ac.id/ppd/article/view/11553

Wahyudi, A. I. H. A., & Aulina, C. N. (2021). Pengaruh media tangram terhadap kemampuan mengenal bentuk geometri anak usia dini. *PAUD Lectura: Jurnal Pendidikan Anak Usia Dini*, *4*(02), 8-16. https://doi.org/10.31849/paud-lectura.v4i02.6216

Wildan, D. A., Suningsih, S., Ardianto, D., & Arifin, M. Z. (2024). Efektivitas penggunaan etnomatematika terhadap peningkatan pemahaman matematis siswa sekolah dasar. *Jurnal Pendidikan Dasar Flobamorata*, *5*(3), 456-463. https://e-journal.unmuhkupang.ac.id/index.php/jpdf/article/view/1462/850

Wulandari, C. (2017). Menanamkan konsep bentuk geometri (bangun datar). *Jurnal Pengabdian Masyarakat Ipteks*, *3*(1). https://doi.org/10.32528/pengabdian_iptek.v3i1.992

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