JURNAL GEMARIMATIKA
(Media for Innovation and Development in Mathematics Learning)
Volume 01 Number 01, April 2026

INTEGRATION OF SASAK LOCAL WISDOM VALUES INTO MATHEMATICS LEARNING TO IMPROVE STUDENTS' MATHEMATICAL UNDERSTANDING

Moh. Supratman[1], Fatimatus Solihah[2], L.Indar Anggara Putra[3], Ida Setiawati[4], Nurhayati[5]
[1,2,3,4,&5]Mathematics Education Study Program, Universitas Qamarul Huda Badaruddin Bagu

Co-author: 18supratman@gmail.com

Abstract
This study aims to examine how Sasak local wisdom values can be integrated into mathematics learning to improve students' mathematical understanding. The study employed a Systematic Literature Review (SLR). The data consisted of articles retrieved using the Publish or Perish (POP) application through Google Scholar with the keyword "Ethnomathematics." The selected articles were published in SINTA-accredited journals between 2015 and 2022. The findings lead to the following conclusions: (1) ethnomathematics is a learning approach that integrates culture and mathematics; (2) the Sasak people possess a variety of distinctive cultural elements that can be used as media or learning materials in mathematics, including traditional buildings, traditional arts, traditional foods, handicrafts, and household tools; and (3) mathematical understanding is a fundamental competency in mathematics learning that includes the ability to comprehend material, recall mathematical formulas and concepts and apply them to simple or similar cases, assess the validity of a statement, and apply formulas and theorems in problem solving.

Keywords: *Sasak Culture, Ethnomathematics, Mathematical Understanding*

1. INTRODUCTION

The functions and objectives of national education are formulated in Article 3 of Law Number 20 of 2003 and further elaborated in Article 17 paragraph (3) of Government Regulation Number 17 of 2010. These provisions state that national education functions to develop capabilities and shape the character and civilization of a dignified nation in order to enhance the intellectual life of the nation. It aims to establish a foundation for developing students' potential so that they become individuals who: (a) have faith in and devotion to Almighty God; (b) possess noble character and a dignified personality; (c) are knowledgeable, competent, critical, creative, and innovative; (d) are healthy, independent, and self-confident; and (e) are tolerant, socially sensitive, democratic, and responsible.

Education is essentially a process through which culture develops within society; therefore, education cannot be separated from cultural traditions and values. Local communities have an obligation to return to their identity by exploring and interpreting the noble cultural values that exist as resources of local wisdom. This effort is necessary to capture the substantive meaning of local wisdom, in which communities must cultivate awareness, honesty, and a range of noble cultural values to be socialized and developed into principles of a dignified life (Urip Tisngati, 2015). Learning that explores local culture can encourage students to love their region and nation (Sutarto et al., 2019). Accordingly, education must uphold the cultivation of cultural values as values that should be developed and

maintained. Learning activities are expected to integrate the local wisdom values of the nation's culture. These values are holistic and can therefore be applied across all subjects, including mathematics.

Integrating mathematical concepts with everyday activities can make mathematics more effective to learn because it demonstrates its relevance and connection to students' lives. Mumu and Aninam (as cited in Uskono, 2020) state that mathematics instruction should be presented through conceptual problems that are close to, or at least familiar to, students in order to support the effectiveness of learning. One approach that can increase the relevance of mathematics learning for students is to use a cultural approach to mathematics, commonly known as ethnomathematics.

Ethnomathematics can be understood simply as the mathematical concepts, ideas, and practices embedded in cultural products (Fajriyah, 2018). The effective use of an ethnomathematical approach in mathematics instruction can help students understand the material being taught (Haji et al., 2022). This occurs because students learn through real-world contexts that are close and familiar to their daily lives. As an innovation in mathematics learning, ethnomathematics aims to foster students' appreciation of mathematics, increase their motivation, and enhance their creativity in solving mathematical tasks (Marsigit & Mauluah, 2019).

To support this, several paradigm shifts are needed in mathematics education to accommodate continuous changes in the demographics of students in mathematics classrooms. Several scholars have developed culturally relevant pedagogical theories that examine teaching and learning within a critical paradigm and through explicit connections between students' cultures and school subject matter (D'Ambrosio, 1990; Gay, 2000; Rosa & Orey, 2003). According to Torres-Velasquez and Lobo (2004), this perspective is an important component of culturally relevant education because it proposes that teachers contextualize mathematics learning by connecting mathematical content with students' cultures and real-life experiences.

One culture that can be explored to identify its ethnomathematical content is the culture of the Sasak people. As the largest ethnic group inhabiting the island of Lombok, the Sasak possess a range of cultural products resulting from a blend of Javanese and Balinese cultures, together with the influence of Islamic values, which gives them distinctive characteristics. These cultural products include traditional buildings or houses, food, arts, tools or handicrafts, woven fabrics or motifs, and various other forms of cultural wealth (Wahyudin, 2018).

The integration of culture in Indonesia, particularly Sasak culture, into mathematics learning has been documented by several researchers. Sutarto et al. (2021) explored geometric transformations in Sasak woven textiles; Diana Zulfa et al. (2023) explored ethnomathematics in traditional Sasak snacks from a geometric perspective; and Alditia (2023) developed an ethnomathematics module based on Sasak local wisdom for solid geometry. Therefore, this study aims to determine how Sasak local wisdom values can be integrated into mathematics learning to improve students' mathematical understanding.

2. RESEARCH METHOD

This study employed a Systematic Literature Review (SLR). A systematic literature review identifies, evaluates, and interprets findings on a research topic to answer previously established research questions (Aliyah & Mulawarman, 2020). Using this method, the researchers reviewed and identified journal articles in a structured manner, following predetermined steps at each stage (Triandini, 2019). To collect the article data, the Publish or Perish (POP) application was used to search Google Scholar with the keyword "Ethnomathematics." The collected articles were published in SINTA-accredited journals between 2015 and 2022.

The steps in conducting the study using the literature review method were as follows: (1) developing a plan and determining the focus of the topic to be studied; (2) reading various literature sources related to the topic under discussion; (3) selecting relevant instructional materials from various sources; (4) processing the review data and using it as a guide for language use and writing; and (5) reporting the data obtained from the study as reference material (Marisana et al., 2023).

3. RESULTS AND DISCUSSION

a) Description of Research Data Sources

The data used in this study consisted of articles identified using the Publish or Perish (POP) application through Google Scholar with the keyword "Ethnomathematics." The search results are presented below.

Table 1. Article Search Results

Source	Search Results	Screening Results
Google Scholar (Indexed in SINTA 4, 3, and 2)	20	11
Total	20	11

The screened findings from articles on ethnomathematics for improving students' mathematical thinking skills are presented in the following table.

Table 2. Articles Identified in the Search

Title and Author	Research Method	Research Findings
Ethnomathematical Exploration of the Sasak Gendang Beleq Musical Instrument. ***Dwi Novitasari et al. (2022)***	Qualitative ethnographic model	The mathematical concepts found in the gendang beleq musical instrument include two-dimensional geometry (circles, triangles, and pentagons), three-dimensional geometry (truncated cones), transformation geometry (translation and dilation), and arithmetic sequences; geometric concepts were the most dominant.
The Measurement Traditions of the Sasak Community and Their Potential Integration into Mathematics Learning. ***Nurhardiani et al. (2019)***	Qualitative	The study revealed that the Sasak community has recognized and practiced a number of basic mathematical principles that underlie its ways of thinking and acting in measurement activities.

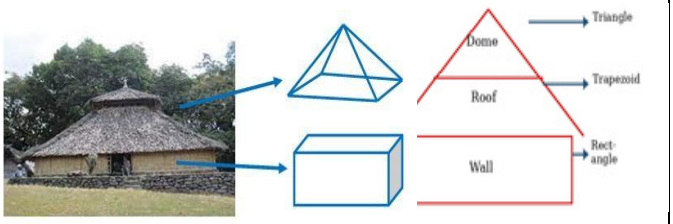
Title and Author	Research Method	Research Findings
Ethnomathematics in the Sasak Bale Lumbung. *Any T.F. & M. Syafii (2022)*	Qualitative ethnographic model	The carpenters (craftspeople) who build bale lumbung use mathematics when preparing materials, including calculating the volume of materials needed. During production, they also use mathematical calculations to achieve optimal results.
Geometric Concepts in Traditional Sasak Handicrafts for Elementary-School Mathematics Learning. Asri Fauzi & Heri Setiawan (2020)	Qualitative ethnographic model	The study identified mathematical concepts, particularly geometry, in the motifs of traditional Sasak sesekan woven crafts. These include plane figures such as squares, rectangles, kites, parallelograms, triangles, and rhombuses, as well as concepts of angles and similarity.
Exploring Ethnomathematics in Traditional Sasak Snacks from a Geometric Perspective. Diana Zulfa et al. (2023)	Qualitative descriptive method	Ethnomathematical elements were found in several traditional Sasak snacks in the form of geometric concepts, such as solid-geometry concepts in cerorot, abuq, and kue lekong. In addition, composite-solid concepts were found in lupis and poteng jaje tujak.
Analysis of Sasak Ethnomathematics in the Development of Mathematics Learning Media. Ari Irawan et al. (2023)	Research and Development (R&D)	The ethnomathematical analysis of community bale buildings, rice granaries, houses, dance arts, musical instruments, and woven fabrics revealed many mathematical elements in the form of plane geometry.
Ethnomathematics in the Dengklaq Game as a Medium for Mathematics Learning. Asri Fauzi et al. (2019)	Qualitative ethnographic model	The dengklaq game contains mathematical elements including plane geometry (squares, rectangles, triangles, trapezoids, and semicircles), relationships between angles (vertical, supplementary, and alternate angles), cube nets, reflection, mathematical logic (implication), and probability (permutations).

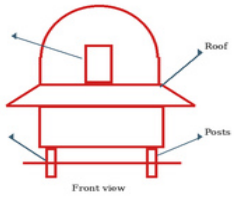
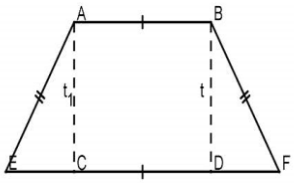
Title and Author	Research Method	Research Findings
Developing Logical Thinking Ability through an Ethnomathematical Approach. Sukma Mawaddah (2017)	Library research	Ethnomathematics is an approach that can be implemented to develop students' logical thinking skills. Through ethnomathematics, students are taught flexibly and openly using natural ways of thinking that are consistent with their respective cultures.
Improving Critical Thinking Skills in Ethnomathematics-Based Geometry Learning. Suhartini & Adhetia M. (2017)	Library research	Students' critical thinking skills can be improved by using ethnomathematics-based geometry materials in the learning process.
The Effectiveness of Ethnomathematics in Improving Mathematical Understanding. Sarwoedi et al. (2018)	Experimental	Ethnomathematics influences students' mathematical understanding, particularly their ability to identify; translate and interpret the meaning of symbols; understand and apply mathematical ideas; and make explorations (estimates).
Analysis of the Role of Ethnomathematics in Mathematics Learning. Joko Soebagyo et al. (2021)	Literature review	Ethnomathematics is effective in improving students' mathematical abilities.

b) Description of Findings

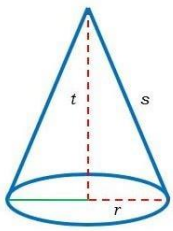
1. **Exploration of Sasak Cultural Diversity**

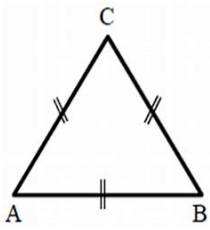
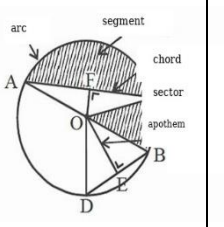
a. Traditional Sasak Buildings

1	**Bayan Beleq Ancient Mosque**   **Mathematical Concepts** The mathematical elements of the Bayan Beleq Ancient Mosque include a roof resembling a trapezoid and triangle and walls shaped like rectangles. Inside the mosque are four pillars and one bedug drum shaped like a cylinder.

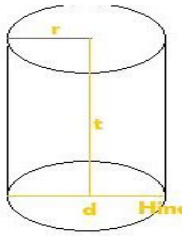
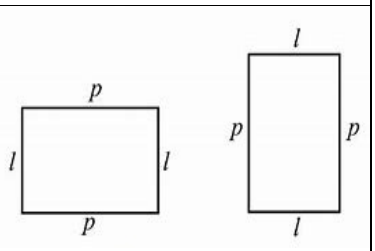
2	**Bale Lumbung**    **Mathematical Concepts** The main roof of the bale lumbung is shaped like a semi-ellipse, while the roof that extends to the sides is trapezoidal. The door used to load harvested crops is rectangular. The seating platform beneath the granary is square, and the four wooden supporting posts are cylindrical.
3	**Bale Jajar**    **Mathematical Concepts** Like the other buildings, the bale jajar roof consists of trapezoidal and triangular shapes. It has two rectangular doors and rectangular windows. The front facade is composed of several squares and rectangles.

b. Traditional Sasak Foods

1	**Jaje Cerorot**    **Mathematical Concepts** The wrapper of jaje cerorot resembles a cone. Its preparation uses a cone-shaped mold and therefore applies the concept of the volume of a solid.

2	**Jaje Lupis**     **Mathematical Concepts** In general, lupis is commonly found in two forms: triangular or elongated and rounded, then sliced into circular pieces.

c. Traditional Sasak Arts

1	**Gendang Beleq**    **Mathematical Concepts** The mathematical element found in gendang beleq is solid geometry in the form of a cylinder. The drum has a diameter of 50 cm and a length of 150 cm. The gendang beleq ensemble includes various instruments with geometric forms such as circles, cylinders, half-cones, and rectangular prisms.
2	**Peresean**    **Mathematical Concepts** The mathematical elements in peresean are found in the shield, or ende, which has square and rectangular forms.

1. **Implementation of Sasak Local Wisdom Values to Improve Students' Mathematical Understanding**

Mathematical understanding is a highly important mathematical ability that students must possess when learning mathematics. It provides an essential foundation for thinking when solving mathematical problems as well as real-life problems (Santrock, 2008). Wiharno (as cited in Ompusunggu, 2014) similarly states that mathematical understanding is a strength that must be emphasized throughout the mathematics learning process, particularly to acquire meaningful mathematical knowledge.

The importance of mathematical understanding is also reflected in the Agency for Standards, Curriculum, and Educational Assessment (Kemendikbudristek, 2022), which states that mathematics learning aims to help students develop the following:

1. Understand mathematical learning materials in the form of facts, concepts, principles, operations, and mathematical relations, and apply them flexibly, accurately, efficiently, and appropriately in mathematical problem solving (mathematical understanding and procedural fluency).
2. Use reasoning about patterns and properties, perform mathematical manipulations to make generalizations, construct proofs, or explain mathematical ideas and statements (mathematical reasoning and proof).
3. Solve problems by understanding the problem, constructing a mathematical model, solving the model, or interpreting the solution obtained (mathematical problem solving).
4. Communicate ideas using symbols, tables, diagrams, or other media to clarify a situation or problem, and represent a situation in mathematical symbols or models (mathematical communication and representation).
5. Connect mathematical facts, concepts, principles, operations, and relations within a field of study, across fields of study, across disciplines, and with everyday life (mathematical connections).
6. Develop an appreciation of the usefulness of mathematics in life, including curiosity, attention, and interest in learning mathematics, as well as creativity, patience, independence, perseverance, openness, resilience, tenacity, and confidence in solving problems (mathematical disposition).

Regulation of the Director General of Primary and Secondary Education Number 506/C/Kep/PP/2004 specifies the following indicators of mathematical conceptual understanding: (1) restating a concept; (2) classifying particular objects according to their properties; (3) providing examples and non-examples of a concept; (4) presenting a concept in various forms of mathematical representation; (5) developing necessary or sufficient conditions for a concept; (6) using, applying, and selecting particular procedures or operations; and (7) applying concepts or algorithms in problem solving.

Meanwhile, the 2013 Curriculum identifies the following indicators of conceptual understanding: (1) restating a concept that has been learned; (2) classifying objects according to whether they satisfy the requirements that define the concept; (3) identifying the properties of operations or concepts; (4) applying concepts logically; (5) presenting concepts in various forms of mathematical representation; (6) connecting different concepts within and beyond mathematics; and (7) developing necessary and/or sufficient conditions for a concept.

Students' mathematical understanding can be improved through ethnomathematics-based learning. Brandt and Chernoff (2015) explain that ethnomathematics-based learning is highly

relevant to constructivist theory and can help students improve their understanding of mathematics by enabling them to connect mathematics lessons with their experiences and prior knowledge. Ethnomathematics is important in mathematics learning because it helps students recognize the relationship between mathematics and everyday activities. School mathematics also plays an important role in developing students' mathematical thinking processes (Ma'ruf et al., 2019).

Ethnomathematics can potentially be applied in learning in five ways: (1) it should be designed within an appropriate and meaningful context; (2) it should be presented as specific cultural content that differs from general mathematical concepts; (3) an ethnomathematics curriculum should be based on the idea that ethnomathematics represents a stage in the development of mathematical thinking applied in education; (4) the implementation of an ethnomathematics curriculum can become part of mathematical ideas; and (5) an ethnomathematics curriculum integrates mathematical concepts and practices into students' cultures (Sirate, 2012).

The Sasak people possess rich cultural diversity with distinctive qualities compared with other ethnic groups or regions. Forms of local wisdom or cultural products of the Sasak people include the following:

1. *Traditional buildings. The Sasak community has various types of traditional buildings used as residences or for religious and social purposes. Types of traditional Sasak buildings include bale jajar, bale beleq, bale kodong, berugak, sekenem, and gunung rata (Mulyadi, 2004). These traditional buildings are still preserved and can easily be found in customary villages on Lombok, such as Segenter Traditional Village in Bayan District and Sade Village in Pujut District, Central Lombok (Wir'aeni, 2017).*
2. *Traditional arts. The Sasak people also have a variety of traditional arts, including traditional music such as gendang beleq, genggong, and gambus, the peresean game, and several other forms (Mulyadi, 2004). These traditional arts are generally performed as entertainment during certain customary activities, while some are used as part of customary processions or rituals.*
3. *Traditional foods. The Sasak community has various traditional food preparations, including main dishes, side dishes, and traditional snacks. Examples include jaje ore, jaje opak-opak, jaje renggi, cerorot, and others (Sumayani et al., 2020).*
4. *Handicrafts and household tools. The Sasak people produce many handicrafts and tools used to support daily activities. These crafts are generally made from wood, bamboo, and clay. Distinctive Sasak handicrafts and tools include gandek, kecapil, peraras, gaben, besek, ceraken, tipah, and various others.*

Ethnomathematics learning can be implemented through the following processes:

1. Understanding Local Culture: understanding the cultural aspects that shape how a particular community views, understands, and uses mathematical concepts in everyday life.
2. Research and Data Collection: conducting research to gather information about mathematical practices in a particular culture through interviews, observations, or documentary studies.
3. Analysis and Interpretation: analyzing the collected data to understand mathematical patterns, concepts, and practices within a particular cultural context. This may involve identifying how mathematics is manifested in traditions, arts, or daily activities.

4. Integration into Learning: integrating the knowledge obtained into the mathematics curriculum or learning process. This may involve teaching mathematical concepts using examples and practices relevant to a particular culture.
5. Collaboration and Discussion: encouraging collaboration among educators, cultural observers, and local community members to deepen understanding of the use of mathematics within their cultural context.
6. Development of Appropriate Teaching Methods: creating teaching methods that enable students to learn mathematics by drawing on their understanding of local culture.
7. Evaluation and Adjustment: continuously evaluating the learning approach and adjusting methods and curricula based on feedback from the learning experiences that have been undertaken.

4. CONCLUSION

Based on the preceding discussion of the integration of Sasak local wisdom values to improve students' mathematical understanding, the following conclusions can be drawn:

1. Ethnomathematics is a learning approach that integrates culture and mathematics. Therefore, incorporating ethnomathematics into mathematics learning can make it easier for students to understand the mathematical concepts being studied because ethnomathematics bridges school mathematics and students' culture-based everyday world. Ethnomathematics can also foster appreciation for culture and help prevent the erosion of local wisdom values.
2. The Sasak people possess a variety of distinctive cultural elements that can be used as media or learning materials in mathematics, including traditional buildings, traditional arts, traditional foods, handicrafts, and household tools.
3. Mathematical understanding is a fundamental competency in learning mathematics. It includes the ability to comprehend material, recall mathematical formulas and concepts and apply them to simple or similar cases, assess the validity of a statement, and apply formulas and theorems in problem solving.

5. REFERENCES

Ani T.F & M.Syafii, (2022). Etnomatematika Pada Bale Lumbung Sasak. Mosharafa: Jurnal Pendidikan. Mosharafa (brin.go.id)

Alditia, L. M., Witono, H., Nurmawanti, I. (2023). Pengembangan Modul Etnomatematika Kearifan Lokal Suku Sasak Materi Volume Bangun Ruang Kelas V. Histogram : Jurnal Pendidikan Matematika, 7(1), 216-234.

Asri Fauzi & Heri Setiawan, (2020). Konsep Geometri Pada Kerajinan Tradisional Sasak Dalam Pembelajaran Matematika di SD. DIDAKTIS: Jurnal Pendidikan dan Ilmu Pengetahuan. Vol 20, No 2. https://doi.org/10.30651/didaktis.v20i2.4690

Ari Irawan, et al., (2023). Analisis Etnomatematika Suku Sasak Dalam Pengembangan Media Pembelajaran Matematika. Sebatik Vol. 27No. 1. DOI:10.46984/sebatik.v27i1.2095

Agustini, N. K. A., Leton, S. I., & Fernandez, A. J. (2019). Studi Etnomatematika Pada Budaya Masyarakat Larantuka. Asimtot : Jurnal Kependidikan Matematika. https://doi.org/10.30822/asimtot.v1i1.95.

Darmayasa, J.B.,Wahyudin,W., &Mulyana, T. (2018). Ethnomathematics: The use of multiple linier regression y = b1 X1 + b2 X2 + e in traditional house construction Saka Roras in Songan Village. In Journal of Physics: Conference Series. https://doi.org/10.1088/1742-6596/948/1/012076

Diana Zulfa, et al., (2023). Eksplorasi Etnomatematika pada Jajanan Tradisional Suku Sasak dalam Perspektif Geometri. View of Eksplorasi Etnomatematika pada Jajanan Tradisional Suku Sasak dalam Perspektif Geometri (uingusdur.ac.id)

Dwi Novitasari, et al., (2022). Eksplorasi Etnomatematika dalam Alat Musik Gendang Beleq

Suku Sasak. Jurnal Inovasi Pendidikan Matematika. Vol 5, No 1. DOI: https://doi.org/10.31851/indiktika.v5i1.7970

D'Ambrosio, U. (1985). Ethnomathematics and its place in the history and pedagogy of mathematics. For the Learning of Mathematics, 5(1), 44-48.

D'Ambrosio, U. (2007). Political Issues in Mathematics Education. The Montana Mathematics Enthusiast. Monograph 3, 51-56

Dalimunthe, R. R., Sasongko, D. F., & Rofiki, I. (2022). Etnomatematika pada kue tradisional Asahan sebagai sumber belajar matematika. Galois: Jurnal Penelitian Pendidikan Matematika 1 (1),17–26. http://urj.uin-malang.ac.id/index.php/gjppm

Fajriyah, E. (2018). Peran etnomatematika terkait konsep matematika dalam mendukung literasi. PRISMA, Prosiding Seminar Nasional Matematika, 1, 114- 119.

Haji, S., et al. (2022). Basic Concepts and Values of Mathematics in Bengkulu Traditional Musical Instruments as Media and Resources for Learning Mathematics. JTAM (Jurnal Teori Dan Aplikasi Matematika), 6(4), 1096-1111.

Joko S, et al. (2021). Analisis Peran Etnomatematika dalam Pembelajaran Matematika. ANARGYA: Jurnal Ilmiah Pendidikan Matematika. http://jurnal.umk.ac.id/index.php/anargya

Ma'ruf, A. H., Syafii, M., & Kusuma, A. P. (2019). Pengaruh Model Pembelajaran Mind Mapping Berbasis HOTS terhadap Motivasi dan Hasil Belajar Siswa. Mosharafa: Jurnal Pendidikan Matematika, 8(3), 503–514.

Mulyadi, L., & Nugroho, A. M. (2004). Fenomena Masjid Kuno Bayan Lombok Nusa Tenggara Barat. Prosiding Aplikasi Arsitektur Islam dan Binaan, 1-10. Malang: Institut Teknologi Nasional.

Nur Hardiani & Susilahudin R, (2019). Etnomatematika Tradisi Pengukuran Masyarakat Suku Sasak Dan Potensi Pengintegrasiannya Dalam Pembelajaran Matematika. Aksioma Jurnal. Vol 8, No 1. DOI: https://doi.org/10.24127/ajpm.v8i1.1814

Putri, L. I. (2017). Etnomatematika, Kesenian Tradisional Rebana, Pembelajaran Matematika. Jurnal Ilmiah "Pendidikan Dasar," IV(1), 21–31.

Sirate, F. (2012). Implementasi etnomatematika dalam pembelajaran matematika pada jenjang pendidikan sekolah dasar. Lentera Pendidikan, 15(1), 41-54

Sumayani, S., Zaenuri, Z., & Junaedi, I. (2020). Eksplorasi Etnomatematika Budaya Suku Sasak Kajian Makanan Tradisional. PRISMA, Prosiding Seminar Nasional Matematika, 3, 521-526.

Sukma Mawadah, (2017). Mengembangkan Kemampuan Berpikir Logis Dengan Pendekatan Etnomatematika. Prosiding Seminar Nasional Pendidik dan Pengembang Pendidikan Indonesia (mandalanursa.org)

Suhartini & adhetia M, (2017). Meningkatkan kemampuan berpikir kritis pada pembelajaran geometri berbasis etnomatematika. DOI: 10.31629/jg.v2i2.198

Ulum, B., Budiarto, M. T., & Ekawati, R. (2018). Etnomatematika Pasuruan : Eksplorasi Geometri Untuk Sekolah Dasar Pada Motif Batik Pasedahan Suropati. Jurnal Review Pendidikan Dasar: Jurnal Kajian Pendidikan Dan Hasil Penelitian, 4(2).

Urip Tisngati, (2015). Pembelajaran Matematika Berbasis Kearifan Lokal Menggunakan Model AKIK. Prosiding Seminar Nasional Pendidikan FKIP Universitas Muhammadiyah Ponorogo, 2015. p. 160

Uskono, I. V., et al. (2020). Pendekatan Pendidikan Matematika Realistik Berbasis Etnomatematika dan Prestasi Belajar Siswa. Journal of Honai Math, 3(2), 145-156.

Wahyudin, D. (2018). Identitas Orang Sasak: Studi epistemologis terhadap mekanisme produksi pengetahuan masyarakat suku Sasak. Jurnal Penelitian Keislaman, 14(1), 52-63