

## Trends and Implications of Ethnomathematics Studies: A Bibliometric Analysis

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**Abstract:** Learning that utilizes the environment as a learning resource combines and integrates culture or local wisdom, which is the best choice and indicates the quality of 21st-century learning. However, more information is still available in the literature to explain trends and applications of ethnomathematics so that the implications can be considered later. This bibliometric study specifically presents research trends in the field of ethnomathematics. This goal was achieved by analyzing 182 of 500 appropriate data identified from online databases using the publish or perish (PoP) application. The analysis results show that research related to ethnomathematics is progressing and is almost evenly distributed throughout Indonesia. The trend of using ethnomatics in the classroom also involves using various methods and media, identifying regional culture and traditional houses, and community activities related to ethnomathematics. However, few consider advanced media, such as augmented reality. Virtual reality hasn't been touched yet. The effectiveness of ethnomathematics is also associated with various mathematical abilities, but there is still little research on metacognition. This gap is valuable information for downstream research.

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**Keywords:** Ethnomathematics; Bibliometric Analysis, Mathematical ability.

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### A. INTRODUCTION

Global research recommends the importance of integrating ethnomathematics as part of a didactic framework in mathematics learning (Deda et al., 2024; Tamur et al., 2017; Tamur, Wijaya, et al., 2023). Integrating ethnomathematics into the classroom is important to bring students closer to their cultural heritage as an invaluable wealth that can be passed on to the next generation (Faiziyah, 2021; Nurjanah et al., 2021; Supriadi, 2019). Incorporating ethnomathematics as an important element of local wisdom into teaching and educational settings will increase student interest, motivation and learning outcomes (Lakapu et al., 2023; Rahayu, 2018; Setiawan, 2021), as well as preserving the nation's culture (Espanola & Ouano, 2024; Sunzuma, 2019; Suryawan et al., 2023; Umbara et al., 2021). Recognizing these advantages, since its emergence until now, classroom arrangements taking into account the integration of ethnomathematics have been carried out by many countries.

The integration of ethnomathematics into mathematics classes is also associated with combining models, media and other learning methods. Until now, many studies have focused on examining the potential of ethnomathematics integration (e.g., Darmayasa, 2018; Fouze & Amit, 2019; Knijnik & Wanderer, 2015; Marleny, 2020; Rosa, 2015). and also testing its effectiveness on students' academic abilities (e.g., Brandt & Chernoff, 2015; Farokhah et al., 2017; Haryanto, 2019; Knijnik, 2012; Mahpudin & Sunanto, 2019; Prahmana & D'Ambrosio, 2020; Ramadhani et al., 2023; Sudirman et al., 2020; Widada, 2019). Other related studies also highlight the development of media and learning that integrates ethnomathematics (e.g., Cervantes-Barraza & Araujo, 2023; Hidayat, 2020; Kurniasari et al., 2018; Muhtadi et al., 2017; Nurjanah, 2021; Nurjanah et al., 2021; Radiusman, 2021; Vitoria, 2020). These various studies have contributed to the development of knowledge for teachers and practitioners.

The variety of studies related to ethnomathematics topics in the current literature is very high. Many studies have previously been conducted that focus on filling gaps. These gaps include the need to conduct a comprehensive review study of the application of ethnomathematics in mathematics learning. To fill this gap, several meta-analyses and bibliometric studies have been carried out, as well as systematic reviews of literature related to the topic of ethnomathematics (e.g., Deda et al., 2024; Kyeremeh et al., 2023; Tamur, Juandi, & Adem, 2020; Tamur, Kurnila, Jehadus, & Ndiung, 2021; Tamur, Kurnila, Jehadus, Nurjaman, et al., 2021; Tamur, Wijaya, et al., 2023). However, until now, there have not been many reviews that provide global trends and insights that have implications for future practice.

This research focuses on filling previous gaps by expanding the population or data search database. The results of this research will provide useful information for lecturers, teachers, students and mathematics learning practitioners, researchers and curriculum developers as a consideration in applying ethnomathematics in the future. Thus, this research aims to describe trends in ethnomathematics studies and consider their implications. This study also provides an overview of important topics or themes that have been researched but still escape attention. Based on this aim, the focus of this research is to answer two core problem formulations: First, what are the trends and implications from year to year in the implementation of ethnomathematics studies and what important themes often emerge and are still rarely researched? These two core questions provide answers that can be considered important implications for the future when applying ethnomathematics.

## **B. METHOD**

Bibliometric analysis is used to answer research questions. Bibliometric analysis is related to statistical and mathematical procedures, which can also describe themes and characteristics of research data or articles (Donthu et al., 2021). This research uses the PoP application to collect data from online databases. The database chosen was Goggle Scholar because of its wide coverage (Hallinger & Chatpinyakoop, 2019). Figure 1 shows searching for articles from the Google Scholar database using PoP.

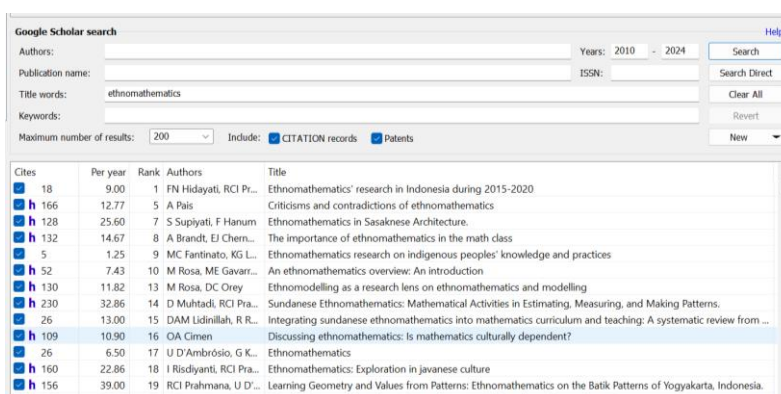


Figure 1. PoP Application

Based on the search process, 278 articles were obtained that were related to the ethnomathematics theme. Articles that meet the analysis requirements contain ICT-based ethnomathematics themes between 2010 and 2023. Regarding the inclusion requirements, 128 studies meet the analysis requirements. These articles are then collected and analyzed using the VosViewer application. This application specifically helps map networks between themes so that they can be interpreted according to research objectives and problems.

### C. RESULTS AND DISCUSSION

This research was carried out with two main objectives: to obtain an overview of global trends in ethnomathematics studies to then consider the implications for the future, and to identify important topics that are often written about or studied but still escape attention. Figure 2 includes an analysis of trends in ethnomathematics studies in 2010 and 2024.

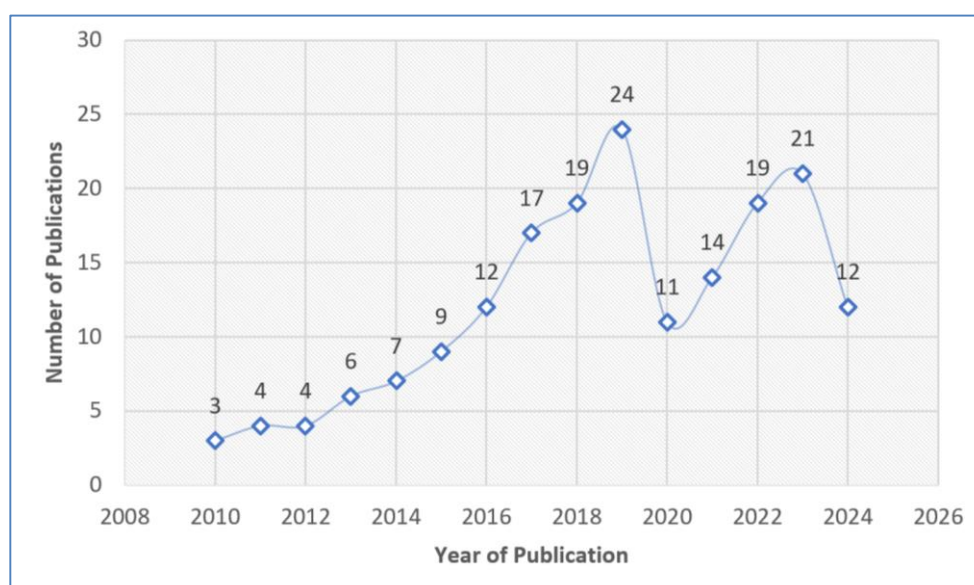


Figure 2. Number of publications between 2010-2024 (N = 182)



9 consists of 5 items, namely experience, mathematics activities, philosophy, mathematics learning, and school.

The research results show that the number of publications between 2010-2019 is very significant. This is in line with the results of bibliometric analysis from previous studies, which showed an increasing trend until 2019 (Deda et al., 2024; Tamur, Jedia, et al., 2022; Tamur, Men, et al., 2022; Tamur, Nurjaman, et al., 2023; Tamur, Wijaya, et al., 2023). Furthermore, the downward trend from 2019 to 2021 was mediated by the impact of COVID-19, as seen from the results of previous research in 2019 (Tamura, Jedia, et al., 2022). This makes perfect sense because, during COVID-19, little research was carried out due to social restriction policies (Tamura, Jehadus, Negara, Siagian, Marzuki, et al., 2021; Tamur, Ndiung, et al., 2023).

As shown in Figure 2 above, the trend in the application of ICT-based ethnomathematics will continue to increase in the following year. This is in line with educational policies and measures of learning quality, namely making the environment and technological media a learning resource (Hermita et al., 2021; Juandi et al., 2022, 2023; Nurjanah et al., 2020; Paloloang et al., 2020; Pereira et al., 2022; Tamur, Juandi, & Kusumah, 2020; Tamur, Kusumah, Juandi, Wijaya, Nurjaman, et al., 2021; Tamur, Mbela, Kurnila, Mandur, Ramda, et al., 2021; Tamur, Fedi, Sennen, Marzuki, Nurjaman, et al., 2021; Tamur, Gahung, et al., 2022; Tamur, Juandi, et al., 2023; Tamur & Juandi, 2020; Wijaya et al., 2022). The use of technology helps students to understand concepts, supports their mathematical literacy, and helps them understand mathematics meaningfully (Tamura et al., 2018; Tamur, Mbela, Kurnila, Mandur, Ramda, et al., 2021; Tamur, Pantaleon, et al., 2023).

Finally, when Figure 3 is looked at closely, it can be seen that there are important topics linked by ethnomathematics to students' mathematical abilities. Interestingly, the abilities measured in previous primary studies were related to students' mathematical literacy. It is clear that the application of ethnomathematics can support student literacy because the context used can stimulate student understanding (Balamurugan, 2015; Brandt & Chernoff, 2015; Paiva, 2021; Rudhito, 2020; Sunzuma & Maharaj, 2020). However, this research is still limited because the number of articles reviewed is still small. This cannot be separated from the consequences of closed access which still applies to several databases. Further efforts need to be made to produce trends that can provide added value regarding the practice of ethnomathematics in the future.

#### **D. CONCLUSION**

First, this research produces information about learning trends supported by an ethnomathematics framework. The trend is increasing and is being used as an indicator of the quality of learning. Second, a wide range of important topics have been studied, providing ethnomathematics with unique features. Then it also explains topics that are rarely researched, such as how the application of ethnomathematics framed by augmented and virtual reality media will become a research priority in the future. Apart from that, metacognitive themes are still rarely seen in mapping. Further studies regarding metacognition and problem solving abilities need to be prioritized

to measure the effectiveness of ethnomathematics with ICT support, including augmented and virtual reality.

## REFERENCES

- Balamurugan, M. (2015). Ethnomathematics; An Approach For Learning Mathematics From Multikultural Perspective. *International Journal Of Modern Research And Reviews*, 3(6), 716–720.
- Brandt, A., & Chernoff, E. (2015). The Importance of Ethnomathematics in the Math Class. *Ohio Journal of School Mathematics*, 71, 31–36.
- Cervantes-Barraza, J. A., & Araujo, A. A. (2023). Design of interactive mathematical tasks that make up the reasoning and the Ethnomathematics program. *Journal on Mathematics Education*, 14(3), 469–482. <https://doi.org/10.22342/jme.v14i3.pp469-482>
- Darmayasa, J. B. (2018). Ethnomathematics: The use of multiple linear regression  $y = b_1 X_1 + b_2 X_2 + e$  in traditional house construction Saka Roras in Songan Village. In *Journal of Physics: Conference Series* (Vol. 948, Issue 1). <https://doi.org/10.1088/1742-6596/948/1/012076>
- Deda, Y. N., Disnawati, H., Tamur, M., & Rosa, M. (2024). Global Trend of Ethnomathematics Studies of The Last Decade: A Bibliometric Analysis. *Infinity Journal*, 13(1), 233–250. <https://doi.org/10.22460/infinity.v13i1.p233-250>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133(April), 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Espanola, R. ., & Ouano, J. . (2024). Ethnomathematical aspects of learning geometry and values related to the motifs used by the Dayak Ngaju tribe in Central Kalimantan. *Malaysian Journal of Learning and Instruction*, 21(1), 217–247. <https://doi.org/10.32890/mjli2024.21.1.4>
- Faiziyah, N. (2021). Ethnomathematics: Mathematics in Batik Solo. In *Journal of Physics: Conference Series* (Vol. 1720, Issue 1). <https://doi.org/10.1088/1742-6596/1720/1/012013>
- Farokhah, L., Arisetyawan, A., & Jupri, A. (2017). the Effect of Ethnomathematics-Based SAVI Approach on Mathematical Communication Skill on Geometry in Elementary School. *IJAEDU- International E-Journal of Advances in Education*, III(9), 534–543. <https://doi.org/10.18768/ijaedu.370417>
- Fouze, A. Q., & Amit, M. (2019). Ethnomathematics and Geometrical Shapes in Bedouin Women ' s Traditional Dress. *Creative Education*, 10, 1539–1560. <https://doi.org/10.4236/ce.2019.107112>
- Hallinger, P., & Chatpinyakoo, C. (2019). A bibliometric review of research on higher education for sustainable development, 1998-2018. *Sustainability (Switzerland)*, 11(8). <https://doi.org/10.3390/su11082401>
- Haryanto. (2019). The use of ethnomathematics at arfak (west papua, indonesia): The representation of lines on rumah kaki seribu construction. In *IOP Conference Series: Earth and Environmental Science* (Vol. 243, Issue 1). <https://doi.org/10.1088/1755-1315/243/1/012069>
- Hermita, N., Putra, Z. H., Alim, J. A., Tang, J., Wijaya, T. T., Li, L., Pereira, J., & Tamur, M. (2021). The Hungry Ant: Development of Video-Based Learning on Polyhedron. *International Journal of Interactive Mobile Technologies*, 15(17), 18–32. <https://doi.org/10.3991/ijim.v15i17.23099>
- Hidayat, E. (2020). Ethnomathematics: Disclosing mathematical concept in batak toba

- traditional house. In *Journal of Physics: Conference Series* (Vol. 1657, Issue 1). <https://doi.org/10.1088/1742-6596/1657/1/012053>
- Juandi, D., Kusumah, Y. S., & Tamur, M. (2022). A Meta-Analysis of the Last Two Decades of Realistic Mathematics Education Approaches. *International Journal of Instruction*, 15(1), 381–400. <https://doi.org/10.29333/iji.2022.15122a>
- Juandi, D., Tamur, M., & Suparman. (2023). Formulating Best Practices for Digital Game-Based Learning: A Meta-analysis study. *AIP Conference Proceedings*, 090003(1), 1–7. <https://doi.org/10.1063/5.0155520>
- Knijnik, G. (2012). Differentially positioned language games: Ethnomathematics from a philosophical perspective. *Educational Studies in Mathematics*, 80(1), 87–100. <https://doi.org/10.1007/s10649-012-9396-8>
- Knijnik, G., & Wanderer, F. (2015). Mathematics Education in Brazilian Rural Areas: An analysis of the Escola Ativa public policy and the Landless Movement Pedagogy. *Open Review of Educational Research*, 2(1), 143–154. <https://doi.org/10.1080/23265507.2015.1052009>
- Kurniasari, I., Rakhmawati, R., & ... (2018). Pengembangan e-module bercirikan etnomatematika pada materi bangun ruang sisi datar. *Indonesian Journal of ...* <http://www.ejournal.radenintan.ac.id/index.php/IJSME/article/view/3597>
- Kyeremeh, P., Awuah, F. K., & Dorwu, E. (2023). Integration of Ethnomathematics in Teaching Geometry: A Systematic Review and Bibliometric Report. *Journal of Urban Mathematics Education*, 16(2), 68–89. <https://doi.org/10.21423/JUME-V16I2A519>
- Lakapu, M., Ningsi, G. P., Arif, D., Prasetyo, B., Fernandez, A. J., Waruru, B. M., Katolik, U., Mandira, W., Katolik, U., Santu, I., Ruteng, P., Sanata, U., & Yogyakarta, D. (2023). Workshop Pengembangan Perangkat Pembelajaran Berbasis Etnomatematika Untuk Mgmt Matematika SMP Kabupaten Manggarai. *Jurnal Abdimas Ilmiah Citra Bakti*, 4(3), 388–399. <https://doi.org/10.38048/jailcb.v4i3.1693>
- Mahpudin, M., & Sunanto, L. (2019). Ethnomathematics an Alternative in the Development of Multicultural Education At the Primary School. *Social, Humanities, and Educational Studies (SHEs): Conference Series*, 1(2), 269. <https://doi.org/10.20961/shes.v1i2.26872>
- Marleny, A. S. (2020). Ethnomathematics-based learning using oil palm cultivation context. In *Journal of Physics: Conference Series* (Vol. 1480, Issue 1). <https://doi.org/10.1088/1742-6596/1480/1/012011>
- Muhtadi, D., Sukirwan, Warsito, & Prahmana, R. C. I. (2017). Sundanese ethnomathematics: Mathematical activities in estimating, measuring, and making patterns. *Journal on Mathematics Education*, 8(2), 185–198. <https://doi.org/10.22342/jme.8.2.4055.185-198>
- Nurjanah, Latif, B., Yuliardi, R., & Tamur, M. (2020). Computer-assisted learning using the Cabri 3D for improving spatial ability and self-regulated learning. *Heliyon*, 6(11), e05536. <https://doi.org/10.1016/j.heliyon.2020.e05536>
- Nurjanah, N. (2021). Ethnomathematics study of Minangkabau tribe: formulation of mathematical representation in the Marosok traditional trading. *Ethnography and Education*, 16(4), 437–456. <https://doi.org/10.1080/17457823.2021.1952636>
- Nurjanah, N., Mardia, I., & Turmudi, T. (2021). Ethnomathematics study of Minangkabau tribe: formulation of mathematical representation in the Marosok traditional trading. *Ethnography and Education*, 16(4), 437–456. <https://doi.org/10.1080/17457823.2021.1952636>
- Paiva, O. O. de. (2021). Ethnomathematics: An experience in the rural family home in Breves/PA. *Margens*, 15(24), 237–252. <https://doi.org/10.18542/rmi.v15i24.10057>
- Paloloang, M. F. B., Juandi, D., Tamur, M., Paloloang, B., & Adem, A. M. G. (2020). Meta Analisis: Pengaruh Problem-Based Learning Terhadap Kemampuan Literasi Matematis

- Siswa Di Indonesia Tujuh Tahun Terakhir. *AKSIOMA: Jurnal Program Studi Pendidikan Matematika*, 9(4), 851–864. <https://doi.org/10.24127/ajpm.v9i4.3049>
- Pereira, J., Tang, J., Tan, S., Wijaya, T. T., Tamur, M., & Neni, H. (2022). Analysis of students' mathematical problem solving ability: Arithmetic operation cases at Filial Baduro elementary school Timor Leste. *The 4th International Conference on Science and Science Education (IConSSE 2021)*, 2542(1), 1–6. <https://doi.org/10.1063/5.0103492>
- Prahmana, R. C. I., & D'Ambrosio, U. (2020). Learning geometry and values from patterns: Ethnomathematics on the batik patterns of yogyakarta, indonesia. *Journal on Mathematics Education*, 11(3), 439–456. <https://doi.org/10.22342/jme.11.3.12949.439-456>
- Radiusman, R. (2021). Ethnomathematics in Balinese Traditional Dance: A Study of Angles in Hand Gestures. In *Journal of Physics: Conference Series* (Vol. 1779, Issue 1). <https://doi.org/10.1088/1742-6596/1779/1/012074>
- Rahayu, R. (2018). Collaborative assessment using QR-code on ethnomathematics learning for pre-service teacher. *International Journal of Engineering and Technology(UAE)*, 7(2), 413–417. <https://doi.org/10.14419/ijet.v7i3.2.14563>
- Ramadhani, R., Syahputra, E., & Simamora, E. (2023). Ethnomathematics approach integrated flipped classroom model: Culturally contextualized meaningful learning and flexibility. *Jurnal Elemen*, 9(2), 371–387. <https://doi.org/10.29408/jel.v9i2.7871>
- Rosa, M. (2015). A trivium curriculum for mathematics based on literacy, matheracy, and technoracy: an ethnomathematics perspective. *ZDM - International Journal on Mathematics Education*, 47(4), 587–598. <https://doi.org/10.1007/s11858-015-0688-1>
- Rudhito, M. A. (2020). Development of open online ethnomathematics course. In *Journal of Physics: Conference Series* (Vol. 1470, Issue 1). <https://doi.org/10.1088/1742-6596/1470/1/012057>
- Setiawan, H. (2021). The Development of Geometrical Learning Devices Based on Rumah Gadang Ethnomathematics for Grade VII Junior High School. In *Journal of Physics: Conference Series* (Vol. 1742, Issue 1). <https://doi.org/10.1088/1742-6596/1742/1/012003>
- Sudirman, S., Yaniawati, R. P., Melawaty, M., & Indrawan, R. (2020). Integrating ethnomathematics into augmented reality technology: Exploration, design, and implementation in geometry learning. *Journal of Physics: Conference Series*, 1521(3). <https://doi.org/10.1088/1742-6596/1521/3/032006>
- Sunzuma, G. (2019). Teacher-related challenges affecting the integration of ethnomathematics approaches into the teaching of geometry. *Eurasia Journal of Mathematics, Science and Technology Education*, 15(9). <https://doi.org/10.29333/ejmste/108457>
- Sunzuma, G., & Maharaj, A. (2020). Exploring Zimbabwean Mathematics Teachers' Integration of Ethnomathematics Approaches into the Teaching and Learning of Geometry. *Australian Journal of Teacher Education*, 45(7), 77–93. <https://doi.org/10.14221/ajte.2020v45n7.5>
- Supriadi, S. (2019). Didactic design of sundanese ethnomathematics learning for primary school students. *International Journal of Learning, Teaching and Educational Research*, 18(11), 154–175. <https://doi.org/10.26803/ijlter.18.11.9>
- Suryawan, I. P. P., Jana, P., Pujawan, I. G. N., Hartawan, I. G. N. Y., & Putri, P. E. W. (2023). Ethnomathematically Controversial Problem-Based Multimodal Approach in Terms of Students' Critical Thinking Ability. *Pegem Journal of Education and Instruction*, 13(3), 323–336. <https://doi.org/10.47750/pegegog.1>
- Tamur, M., Fedi, S., Sennen, E., Marzuki, Nurjaman, A., & Ndiung, S. (2021). A meta-analysis of the last decade STEM implementation: what to learn and where to go. *Journal of Physics: Conference Series*, 1882(1), 012082. <https://doi.org/10.1088/1742-6596/1882/1/012082>



- Tamur, M., Gahung, A., Belos, M. A. L., Limur, M., Sutrani, D. F., & Lagam, Y. E. W. (2022). Bermain dan Belajar dengan Kahoot!: Meningkatkan Keterlibatan Siswa SMP Menggunakan GAME Digital. *AKSIOMA: Jurnal Program Studi Pendidikan Matematika*, 11(4), 2857–2865. <https://doi.org/10.24127/ajpm.v11i4.6065>
- Tamur, M., Jedia, L. L., Kurniyati, R., & Banggut, M. A. (2022). Analisis Bibliometrik Penggunaan Geogebra dalam Meningkatkan Kemampuan Pemecahan Masalah Matematis Siswa Dekade Terakhir. *Suska Journal of Mathematics Education*, 8(2), 75–86. <https://doi.org/10.24014/sjme.v8i2.19868>
- Tamur, M., Jehadus, E., Negara, H. R. P., Siagian, M. D., Marzuki, M., & Sulastri, R. (2021). Pembelajaran Selama Krisis COVID - 19 : Meta - Analisis dari Sudut Hasil Belajar yang Diukur. *Jurnal Riset Teknologi Dan Inovasi Pendidikan (JARTIKA)*, 4(1), 101–108. <https://doi.org/10.36765/jartika.v4i1.413>
- Tamur, M., & Juandi, D. (2020). Effectiveness of Constructivism Based Learning Models Against Students Mathematical Creative Thinking Abilities in Indonesia: A Meta-Analysis Study. *Pervasive Health: Pervasive Computing Technologies for Healthcare*, 1, 107–114. <https://doi.org/10.4108/eai.12-10-2019.2296507>
- Tamur, M., Juandi, D., & Adem, A. M. G. (2020). Realistic Mathematics Education in Indonesia and Recommendations for Future Implementation : A Meta-Analysis Study. *Jurnal Teori Dan Aplikasi Matematika*, 4(1), 17–27. <https://doi.org/10.31764/jtam.v4i1.1786>
- Tamur, M., Juandi, D., & Kusumah, Y. S. (2020). The Effectiveness of the Application of Mathematical Software in Indonesia; A Meta-Analysis Study. *International Journal of Instruction*, 13(4), 867–884. <https://doi.org/10.29333/iji.2020.13453a>
- Tamur, M., Juandi, D., & Subaryo. (2023). A meta-analysis of the implementation of the gamification approach of the last decade. *AIP Conference Proceedings*, 090002(1), 1–7. <https://doi.org/10.1063/5.0155519>
- Tamur, M., Kurnila, V. S., Jehadus, E., & Ndiung, S. (2021). *Learning from the Past : Meta-Analysis of Contextual Teaching-Learning of the Past Decade*. 4(1), 1–10.
- Tamur, M., Kurnila, V. S., Jehadus, E., Nurjaman, A., Mandur, K., & Ndiung, S. (2021). The Effect of the Realistic Mathematics Education Approach : Meta-Analysis of the Measured Mathematical Ability Angle. *Advances in Social Science, Education and Humanities Research*, 550(Icmmmed 2020), 40–46. <https://doi.org/10.2991/assehr.k.210508.040>
- Tamur, M., Kusumah, Y. S., Juandi, D., Wijaya, T. T., Nurjaman, A., & Samura, A. O. (2021). Hawthorne effect and mathematical software based learning: A meta- analysis study. *Journal of Physics: Conference Series*, 1806(1), 012072. <https://doi.org/10.1088/1742-6596/1806/1/012072>
- Tamur, M., Mbela, K. S., Kurnila, V. S., Mandur, K., Ramda, A. H., Nendi, F., & Belos, Teklaniati, G. L. (2021). *Pembelajaran Bangun Ruang di SMP Berbasis Cabri 3D* (G. P. Ningsi (ed.)). UNIKA Santu Paulus Ruteng.
- Tamur, M., Men, F. E., Ermi, K. E., Muhut, A. M., Nunang, R., & Lay, O. A. (2022). Penggunaan ICT dan Pengaruhnya terhadap Kemampuan Penalaran Matematis Siswa: Sebuah Analisis Bibliometrik. *Juring (Journal for Research in Mathematics Learning)*, 5(4), 261. <https://doi.org/10.24014/juring.v5i4.19991>
- Tamur, M., Ndiung, S., Weinhandl, R., Wijaya, T. T., Jehadus, E., & Sennen, E. (2023). Meta-Analysis of Computer-Based Mathematics Learning in the Last Decade Scopus Database: Trends and Implications. *Infinity Journal*, 12(1), 101. <https://doi.org/10.22460/infinity.v12i1.p101-116>
- Tamur, M., Nurjaman, A., & Marzuki, M. (2023). Analisis Bibliometrik Tren Riset Global Tentang Penerapan Software Matematika Menggunakan Basis Data Scopus. *AKSIOMA Jurnal Program Studi Pendidikan Matematika*, 12(3), 3025.

<https://doi.org/10.24127/ajpm.v12i3.7347>

- Tamur, M., Pantaleon, K. V., Studi, P., Matematika, P., Katolik, U., Santu, I., & Ruteng, P. (2023). *Pengembangan E-Modul Matematika Interaktif Terintegrasi Kahoot ! untuk Mendukung Literasi Matematis Siswa SMP*. 9(2), 135–144.
- Tamur, M., Sennen, E., & Men, F. E. (2018). *Konsep Dasar Matematika Berbasis CAS dan DGS*. STKIP St. Paulus Ruteng.
- Tamur, M., Sennen, E., & Pantaleon, K. V. (2017). Etnomatematika Daerah Manggarai Flores-Ntt Dalam Tradisi Belis Dan Pengukuran. *Seminar Nasional Matematika Dan Pendidikan Matematika*, 5, 15–21.
- Tamur, M., Wijaya, T., Nurjaman, A., Siagian, M., & Perbowo, K. (2023). Ethnomathematical Studies in the Scopus Database Between 2010-2022: A Bibliometric Review. *The Third International Conference on Education, Humanities, Health and Agriculture (3rd ICEHHA)*. <https://doi.org/10.4108/eai.21-10-2022.2329666>
- Umbara, U., Wahyudin, W., & Prabawanto, S. (2021). How to predict good days in farming: ethnomathematics study with an ethnomodelling approach. *JRAMathEdu (Journal of Research and Advances in Mathematics Education)*, 6(1), 71–85. <https://doi.org/10.23917/jramathedu.v6i1.12065>
- Vitoria, L. (2020). Developing ethnomathematics-based worksheet to teach linear equations. In *Journal of Physics: Conference Series* (Vol. 1460, Issue 1). <https://doi.org/10.1088/1742-6596/1460/1/012021>
- Widada, W. (2019). The influence of the inquiry learning model and the Bengkulu ethnomathematics toward the ability of mathematical representation. In *Journal of Physics: Conference Series* (Vol. 1318, Issue 1). <https://doi.org/10.1088/1742-6596/1318/1/012085>
- Wijaya, T. T., Cao, Y., Weinhandl, R., & Tamur, M. (2022). A meta-analysis of the effects of E-books on students' mathematics achievement. *Heliyon*, 8(6), e09432. <https://doi.org/10.1016/j.heliyon.2022.e09432>