Sani Sahara

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Skillset

Magister of mathematics education, Researcher of Scopus h-index 3, A proponent of technological advancements, English proficient of 550 TOEFL score.

Academic Background

2016 - $2020\,$: Bachelor of Mathematics Education (S.Pd.) — Universitas Jember

Thesis : Pengembangan Game Edukasi 'Mathedu:Fruity House' Berbasis Android Berbantuan Software Unity untuk Meningkatkan Kemampuan Penalaran Matematis Siswa pada Topik Pola Bilangan

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2020 - $2022\,$: Master of Mathematics Education (M.Pd.) — Universitas Sebelas Maret

Thesis: Design Research on Mathematics Education: Batik as Means to Support High

School Students' Learning of Geometric Transformation

2023 - ongoing: Doctoral of Mathematics Education (Dr.) — Universitas Pendidikan Indonesia

Thesis : (to be defensed) Penelitian Desain Didaktis: Pita-Garis Bilangan sebagai

Sarana Sistemik-Epistemik Didaktik Pecahan di Sekolah Dasar

Research Interest

Elementary School Mathematics, Didactical Design Research, Anthropological Theory of the Didactics, Theory of Didactical Situation, Realistic Mathematics Education, Design Research.

Relevance Experiences in Academia

- 1. Discussion mentor in the Indonesian Didactical Design Research Development Centre (PUSBANGDDRINDO), Centre of Excellence, Universitas Pendidikan Indonesia.
- 2. International supervising of master thesis research with Freudenthal Institute-Utrecht University former professor, Prof. Maarten Dolk.
- 3. Former lecturer assistance (undergraduate) for the courses of
 - Numerical Method.
 - Digital Learning Media,
 - Algorithm and Programming.
- 4. Former teacher of Manendra Acharya tutoring for undergraduate mathematics.
- 5. Former teacher of several private courses for junior-senior high school mathematics.
- 6. Technology Officer of Elsyits Project education startup based in Solo, Indonesia.
- 7. Founder and Developer of "Pengembang Matematika" Google Play with developed educational games:
 - GESIT: Permainan Matematika Pola Bilangan
 - MathEdu: Fruity House
 - CovidAdventure

The APKs are still available in the internet including sanisahara.com, discontinued from Google Play.

Journal and Proceeding Publications

Article	Q	\mathbf{C}
Sahara, S., Dolk, M., Hendriyanto, A., Kusmayadi, T. A., & Fitriana, L. (2024). Transformation geometry in eleventh grade using digital manipulative batik activities. <i>Journal on Mathematics Education</i> , 15(1), 55–78.	Q2	1
Sahara, S., Juandi, D., Turmudi, T., Hendriyanto, A., Muhaimin, L. H., & Bulus, M. D. (2024). Geometric Reasoning to Reinventing Quadratic Formula: The Learning Trajectory on Realistic Mathematics Education Principles. <i>Mathematics Teaching Research Journal</i> , 16(3), 164–196.	Q3	0
Sahara, S., Kusmayadi, T. A., & Fitriana, L. (2022). Mathematical literacy in adolescent students in ICT-based boarding schools. <i>AIP Conference Proceedings</i> , 2566(1).	-	1
Sahara, S., Turmudi, T., Hendriyanto, A., Muhaimin, L. H., & Mustofa, B. (2024). Interactive-visualized tools as means to support learning calculus with infinitesimals: A study of the learning trajectory. <i>AIP Conference Proceedings</i> , 3220(1).	-	0
Fitriana, L., Kusmayadi, T. A., & Sahara, S. (2022). Students' Epistemological Obstacles on Geometric-algebraic Relations of Transformation Geometry. <i>International Journal of Progressive Sciences and Technologies</i> , 21(2), 54–60.	-	0
Hendriyanto, A., Suryadi, D., Juandi, D., Dahlan, J. A., Hidayat, R., Wardat, Y., Sahara, S., & Muhaimin, L. H. (2024). The didactic phenomenon: Deciphering students' learning obstacles in set theory. <i>Journal on Mathematics Education</i> , 15(2), 517–544.	Q2	3
Kusmayadi, T. A., Sahara, S., & Fitriana, L. (2022). Application of Newman Errors Analysis theory related to mathematical literacy problems: A case study of secondary students in class 11. AIP Conference Proceedings, 2566(1).	-	2
Dasari, D., Hendriyanto, A., Sahara, S., Suryadi, D., Muhaimin, L. H., Chao, T., & Fitriana, L. (2024). ChatGPT in didactical tetrahedron, does it make an exception? A case study in mathematics teaching and learning. Frontiers in Education, 8, 1295413.	Q2	6
Hendriyanto, A., Priatna, N., Juandi, D., Dahlan, J. A., Hidayat, R., Sahara, S., & Muhaimin, L. H. (2023). Learning mathematics using an ethnomathematics approach: A systematic literature review. <i>Journal of Higher Education Theory and Practice</i> , 23(7).	Q4	18
Pahmi, S., Hendriyanto, A., Sahara, S., Muhaimin, L. H., Kuncoro, K. S., & Usodo, B. (2023). Assessing the influence of augmented reality in mathematics education: A systematic literature review. <i>International Journal of Learning, Teaching and Educational Research</i> , 22(5), 1–25.	Q3	22
Muhaimin, L. H., Sholikhakh, R. A., Yulianti, S., Hendriyanto, A., & Sahara, S. (2024). Unlocking the secrets of students' mathematical literacy to solve mathematical problems: A systematic literature review. EURASIA Journal of Mathematics, Science and Technology Education, 20(4), em2428.	Q2	5
Muhaimin, L. H., Kusumah, Y. S., Juandi, D., Hendriyanto, A., & Sahara, S. (2023b). The role of augmented reality-based media for enhancing students' mathematical ability: A systematics literature review. <i>AIP Conference Proceedings</i> , 2909(1).	-	1
(In Press) Sahara, et al. Ecological dimension of fraction arithmetic activities within two environmental countries: Study on textbooks and reference model. Frontiers in Education (Q2)		
(In Press) Sahara, et al. Institutional relativity of reduction within arithmetical fractions: A study on Japanese, Indonesian, and Malaysian school textbooks. International Journal of Science and Mathematics Education (Q1)		

^{*}Q: Quartile C: Citation

Community Service

- 1. Voluntary speaker in general training of article writing for students in universities.
- 2. Serving Indonesian marginal elementary students at Indonesian community school in Sekolah Indonesia Kuala Lumpur and neighbourhoods, Malaysia.
- 3. Elsyits Project: Educational community for consultant and developer based in Surakarta, Indonesia.

Journal Editorial

- Journal of Mathematics and Mathematics Education (JMME) Magister Pendidikan Matematika, Universitas Sebelas Maret (Sinta 4) https://jurnal.uns.ac.id/jmme/about/editorialTeam
- Journal of Didactic Studies (JDS) Pusat Pengembangan DDR Indonesia, Universitas Pendidikan Indonesia (ISSN). https://ejournal.upi.edu/index.php/jds/about/editorialTeam

Scholarship

The Indonesian Endowment Fund for Education Agency (LPDP — PK 193).

Committee and Organisations

- 1. The 6th International Conference on ICT Integration in Technical Education (ETLTC2024), The University of Aizu, Japan Technical committee.
- 2. The 3rd International Conference on Entertainment Technology and Management (ICETM2024), The University of Aizu, Japan Technical committee.
- 3. Mathematics and Mathematics Education International Conference (M2EIC), Universitas Pendidikan Indonesia Digital, technical.
- 4. The 2nd International Conference on Mathematics and Mathematics Education (ICMME2022), Universitas Sebelas Maret, Indonesia Editorial, digital, technical.
- 5. The 1st International Conference on Mathematics and Mathematics Education (ICMME2021), Universitas Sebelas Maret, Indonesia Editorial, digital, technical.
- 6. Former member of Mathematics Students Club (MSC), Mathematics Education, Universitas Jember.