Ratih Ayu Apsari
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EDUCATION

University of California, Berkeley **California, USA**
PhD Candidate in Learning Science and Human Development (starting date: Fall 2021)
Berkeley School of Education

- Research Group: Embodied Design Research Laboratory (EDRL)
- Research Focus: Embodied mathematics design, culturally situated learning, and design-based research.
- Graduate Student Instructor (Teaching Assistant) Experience
  - ❖ Fall 2021: History of Science
  - ❖ Spring 2022: History of Science, Technology, and Society
  - ❖ Fall 2022: Project-Based Instruction
  - ❖ Spring 2023: Knowing and Learning in Science and Mathematics
  - ❖ Fall 2023: Knowing and Learning in Science and Mathematics
  - ❖ Spring 2024: Classroom Interactions in Science and Mathematics
  - ❖ Fall 2024: Classroom Interactions in Science and Mathematics
  - ❖ Spring 2025: Classroom Interactions in Science and Mathematics

Universitas Pendidikan Ganesha
(Ganesha University of Education) **Singaraja, Indonesia**

Master of Arts in Mathematics Education 2016

Thesis : Teaching addition and subtraction using empty number line to enhance second-grade students' ability in number sense

Utrecht University **Utrecht, the Netherlands**
Universitas Sriwijaya (Sriwijaya University) **Palembang, Indonesia**

Master of Science in Mathematics Education 2015
Joint Program
Thesis: Bridging between arithmetic and algebra: Using patterns to promote algebraic thinking

Universitas Pendidikan Ganesha **Singaraja, Indonesia**

Bachelor of Arts in Mathematics Education 2012
Thesis: The impact of IKRAR learning model with local wisdom orientation towards the students' problem-solving ability

PROFESSIONAL EXPERIENCE

Universitas Mataram **Mataram, Indonesia**
Faculty Member 2019 to 2021

- Taught undergraduate courses in the Mathematics Education study program
- Served as coordinator for supervised students in the scientific writing program.
- Assisted research on mathematics teaching and learning.

Universitas Pendidikan Ganesha **Singaraja, Indonesia**
Faculty Member 2015 to 2019

- Taught undergraduate courses in the Mathematics Education study program.
- Supervised students in Olympiad preparation and paper presentations on mathematics and mathematics education.
- Supported research on the teacher preparation program.

Foundation CIMD **Singaraja, Indonesia**
Voluntary Teacher 2011 – 2012, 2015 – 2019

- Taught mathematics and basic life skills to sponsored and children with disabilities.

Taman Cerdas Ganesha **Singaraja, Indonesia**
Initiator, Head of Project 2017 – 2019

- Founded and led a community-based initiative providing mathematics education in rural areas of Buleleng (past sites: Padang Bulia, Pangkung Paruk, Temukus; ongoing: Dencarik, Kerobokan, and Suwug).
- Trained volunteers to teach mathematics and developed integrated learning materials tailored to local needs.
- Coordinated stakeholders, volunteers, participants, and donors. (IG:@tamancerdasganesha)

SELECTED COMMUNITY INVOLVEMENT

- Director of Digital Communications, Indonesia Mengglobal 2017—2023
  Non-profit organization supporting Indonesian youth in pursuing international study and career opportunities (www.indonesiamengglobal.com/ IG: @indonesiamengglobal)
- Head of Educational Division, Buleleng Social Community 2016—2019
  Non-profit organization focusing on social and humanitarian development.
  Singaraja, Indonesia
- Head of Communications Division, IGRiME 2024—present
  Non-profit organization on mathematics education research and practice (IG: @igrime.id)

SELECTED PUBLICATION

- Apsari, R. A., & Abrahamson, D. (in press). Culturally situated embodied design: A cognitive–anthropological investigation of Balinese spatial practice toward grounding geometry. In X. Yao, A. McCloskey, R. M. Zbiek., & R. Martinez (Eds.), Proceedings of the 47th annual meeting of the North-American Chapter of the International Group for the Psychology of Mathematics Education. PMENA.
- Apsari, R. A., & Abrahamson, D. (2025). Strings attached: A Balinese dance from attentional anchors to auxiliary constructions. In T. Verhoeff, D. Swart, & S. L. Gould (Eds.), *Proceedings of Bridges 2025*. Eindhoven University of Technology.
- Apsari, R. A., & Abrahamson, D. (2025). Grounding mathematics learning in culturally authentic movement practices: From attentional anchors in Balinese dancing to auxiliary lines in geometry reasoning. In A. Rajala, A. Cortez, R. Hofmann, A. Jornet, H. Lotz-Sisitka, & L. Markauskaite (Eds.), *Proceedings of the annual International Conference of the Learning Sciences (ICLS 2025)*. ISLS.
- Apsari, R.A. (2025). Geometry Resources in Dance (GRiD): *Embodied design-based research to foster the construction of auxiliary lines in solving geometry problems from tacit attentional anchors in movement practice*. Poster presented for the New

Member New Members Session Poster Presentations, The International Conference of the Learning Sciences. ISLS.

- Apsari, R. A., & Abrahamson, D. (2024). Dancing geometry: Imagining auxiliary lines by reflecting on physical movement. International Journal of Mathematical Education in Science and Technology. https://doi.org/10.1080/0020739X.2024.2427099
- Apsari, R.A. (2023). *Grounding Auxiliary Geometrical Constructions as Semiotic Articulation of Tacit Proprioception: The Case of Basic Posture in Balinese Dance*. Poster prepared for Research Day, Berkeley School of Education, University of California, Berkeley.
- Apsari, R.A. (2024). *Grounding Auxiliary Geometrical Constructions as Semiotic Articulation of Tacit Attentional Anchors: The Case of Balinese Dance.* Poster presented for Research Day, Berkeley School of Education, University of California, Berkeley.
- Apsari, R.A. (2024). *Grounding Geometry as Movement Discourse: The Case of Auxiliary Constructions in Balinese Dance*. In D. Abrahamson (Chair) & S. Gerofsky (Discussant), In-sight out: Challenges and opportunities in learning mathematics through negotiating egocentric and allocentric perspectives. Symposium presented for the SIG Research in Mathematics Education at the annual meeting of the American Educational Research Association, Philadelphia, April 11–14.

SELECTED INVITED TALKS & WORKSHOPS

- Speaker, Linnaeus Symposium Design Research in Mathematics Education, Linnaeus University, Vaxjo, Sweden — October 29, 2025
- Invited Speaker, *The 7th International Conference on Education and Social Science (ICESS)*, Universitas Mataram, Indonesia — July 10, 2025
- Invited Speaker, *The 2nd International Conference of Interdisciplinary Research and Studies in Mathematics (Inciresma 2025)*, Universitas Negeri Surabaya, Indonesia — July 19, 2025
- Facilitator, *Dancing and Mathematics Family Day Activity*, *Bridges: Mathematics, Art, Music, Architecture, Education, Culture Conference*, Eindhoven, the Netherlands — July 17, 2025
- Facilitator, *Workshop for Educators and Researchers at the Tinkatorium Station*, Copernicus Science Center, Warsaw, Poland — July 4, 2025
- Facilitator, *Expand Your Horizon at Berkeley* — Workshop for 5th–8th grade girls, trans youth, and gender non-conforming and/or non-binary students, University of California, Berkeley — April 12, 2025
- Guest Lecturer, *Elementary School Teacher Education Program*, Universitas Islam Raden Rahmat, Malang, Indonesia — December 13, 2024
- Facilitator, *Participatory Presentation at the Embodied Design and Multimodal Learning Analytics International Workshop*, University of California, Berkeley — May 9, 2024
- Invited Speaker, *Seminar Nasional Pendidikan Matematika dan Terapan (National Seminar on Mathematics Education and Application)*, Universitas Mataram, Indonesia — November 18, 2023
- Role Model, *Scientific Adventures for Girls*, Washington Elementary School, Berkeley — November 16, 2023

GRANTS & AWARDS

- Jacobs Institute Innovation Catalysts, Spring 2024
- Student Travel Scholarship, Bridges Mathematics and Arts Conference, Summer 2025

RESEARCH MENTOR EXPERIENCE

- EDSTEM C122 (Fall 2023: 3 students; Spring 2024: 6 students, Fall 2025: 2 students)
- URAP (Fall 2024: 2 students; Spring 2025 & Fall 2025: 1 student)
- EDRL independent undergraduate research mentoring program (Fall 2023—Spring 2025, 5 students)

REFERENCES

Prof. Dor Abrahamson | Advisor | Berkeley School of Education | dor@berkeley.edu

Prof. Tesha Sengupta- Irving |Advisor | Berkeley School of Education | tsi@berkeley.edu