



JUL. 18 FRI - 22 TUE, 2025

Seoul National University, Siheung Campus
Korea

9th ICMI-East Asia Regional Conference on Mathematics Education (EARCOME 9)

Topic Study Group 8 (TSG 8) The Essence of Mathematics Education with Equity and Culture

CALL FOR CONTRIBUTIONS

About TSG 8

The role and influence of culture in the teaching and learning of mathematics have long been recognized and acknowledged as critical given the varied cultures and subcultures that are found in every country. In particular, the stellar performances of many East Asian countries in international large-scale assessments brought to fore the stark differences in mathematics education practices and priorities between the Eastern and Western cultures and sparked rich discussions across the world. Alongside, issues of equity and social justice have gradually emerged, particularly in Asia, paving the way for a more critical stance in addressing problems of underachievement, poor quality teaching, and inadequate resources in mathematics among many others. Issues of equity get intertwined with culture as problems of underrepresentation and underachievement have been observed to be more prevalent among ethnic minorities, the lower social economic classes, and migrants, among others. Considering the diverse conditions and perspectives in East Asian countries, where *equity*, *culture*, and *equity and culture* together may have numerous and disparate meanings, a single set of topics or research questions will not do justice to the potentially engaging discussions in TSG 8.

TSG 8 revisits the essence of mathematics education in the era of digital transformation amidst many and multi-level issues involving *equity*, *culture*, and *equity and culture*. As we navigate a new world marked by rapid digitalization, emergence of artificial intelligence, and development of sophisticated tools for teaching and learning on one hand, and by multiple tensions emanating from chaotic geo-political conditions, unjust structures, unfair distribution of resources, inequitable institutional policies and practices, and prejudiced cultures on another, we pause and reflect on the foundational ideas and core principles of mathematics education.

What We Seek

We invite researchers, practitioners, scholars, and thought leaders to submit contributions emerging from empirical or theoretical/philosophical studies to TSG 8 discussions in the form of research papers, critical essays and reflections, and reports of useful and practical projects and initiatives focusing on but are not limited to the following broad topics, themes, and sample questions:

- Equity and social justice (e.g. SES, ethnic groups, gender)
 - What are instances of inequities in mathematics education and what have been done to minimize these?
 - How do East Asian countries integrate social justice concerns in the teaching of mathematics?
- Culture and cultural concerns (e.g. ethnomathematics, classroom culture, values)
 - What culturally relevant pedagogies have been shown to successfully improve students' learning of mathematics?
 - How does classroom culture affect mathematics achievement in schools?
- Policy and/or political stance (e.g. management of resources, 21st century skills, technology)
 - What government policies have been effective in addressing problems of poor-quality teaching?
 - How do policies on assessments contribute to improvements in the teaching and learning of mathematics?

We particularly seek contributions that explore, provoke, and offer alternative perspectives on equity, culture, and equity and culture together. The above topics are expected to expand as discussions ensue and flourish, hopefully, advancing ideas that will assist in our understandings of the essence of mathematics education within the frames of equity, culture, and equity and culture together. We especially look forward to discussions and sharing about personal, community, or institutional contexts and backgrounds in relation to the above topics, and other related ones that have not been mentioned. We hope that based on the accepted contributions our discussions will allow for the group to identify commonalities in our understanding, perspectives, and actions as well as differences that could further our collective notions of the essence of mathematics education with equity and culture as both foreground and background. Contributions that attend to other issues such as the implications of digital technology and AI, and other global-local trends are welcome and are expected to enrich our discussions.

Submission Guidelines

- Proposal Length: Proposals should be limited to a maximum of 4 pages.
- Language: Proposals must be written in English.
- Format: Please ensure that all abstracts or papers follow the EARCOME 9 template available at [template for EARCOME 9](https://www.earcome9.org/earcome9/05_view.html?sMenu=05&s=l&blIdx=MTM=).
(https://www.earcome9.org/earcome9/05_view.html?sMenu=05&s=l&blIdx=MTM=)

- Timeline:
 - o Full Paper Submission: By February 1, 2025
 - o Notification of Acceptance and Feedback to Authors: By March 31, 2025
 - o Revision Submission: By April 30, 2025
- Submission Platform: Please refer to the EARCOME website at <https://www.earcome9.org/abstract/01.html?sMenu=01>

Topic Study Group 8 Contact Information

For additional information or inquiries, please feel free to reach out to the team members listed below:

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