



TSG 52

ETHNOMATHEMATICS AND MATHEMATICS EDUCATION

The Organizing Team

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Topic Study Group 52 at ICME-14 aims to gather researchers and practitioners from different countries interested in exploring the latest research, critique, connections, and practices of Ethnomathematics and Mathematics Education. A few decades ago Brazilian mathematician and educational researcher Ubiratan D'Ambrosio offered the phrase “Program Ethnomathematics” using “ethno” rather than “ethnic” to challenge cultural hegemonic practices within mathematics and mathematics education. It is a program that D'Ambrosio in 2015 suggested can open the “epistemological cage” toward more inclusive, holistic, creative, transdisciplinary and critical ways of engaging with knowledge in general, and mathematical actions in society more specifically. Today Ethnomathematics has varied definitions, interpretations, and theorized practices. Yet, it is political, focused on ethics of diversity and social justice.

In TSG 52 our intention is to examine issues that consider intersections between the areas of mathematics and culture, but also go beyond to create synergies between them. We use “culture” in a dynamic, emergent, living sense to focus attention on both common traditions and understandings practiced by a group as well as how these understandings and practices shift, vary, and change over time. Our goal is to invite provocative critical engagement in the ideas of Ethnomathematics research and pedagogical practices. We aim to explore connections between mathematics, culture, community, politics, and social as well as ecological justice using reciprocal relations while going beyond non-essentialized understandings.

Subthemes and Questions

Cultural self-confidence and reclamation: How can ethnomathematics (or ethnomathematics practices and ethnomathematics research) support transformation of educational systems (from exclusion to inclusion) at local and at global levels (toward regaining 'cultural self-confidence')?

Decolonizing and Indigenizing: To what extent can ethnomathematics support (or challenge) practices of decoloniality (i.e., challenge how knowledge is constructed across time and place)? How can ethnomathematics be engaged in a political/epistemological level with other systems of knowledge, in a way that respects self-determination and sovereignty?

Indigenous education and teacher education: What role does ethnomathematics play for Indigenous education and what are the social and cultural impacts of these uses for their own communities? What kind of ethnomathematics experiences are needed for Indigenous teacher education? What research exists in this area and what have we learned from these experiences?

Critical mathematics education: In what ways does ethnomathematics converge/interact with critical mathematics education (as conceptualized by Skovsmose) and the problematizing of mathematics epistemologies and mathematics education?

Heterogeneous cultural groups: What can ethnomathematics offer in working with heterogeneous cultural groups (with varied linguistic, ethnic, caste/race diversity) but with access to rich funds of knowledge?

By focusing on these questions, the TSG 52 will examine current trends, developments, and future directions of ethnomathematics and mathematics education. Submissions should draw upon specific examples of research and/or practice to address one or more of the questions above.