



TSG 19

MATHEMATICAL LITERACY, NUMERACY AND COMPETENCY IN MATHEMATICS EDUCATION

The Organizing Team

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TSG 19 aims to gather participants interested in exchanging views, experiences, projects, analyses, and outcomes related to the meaning, place and role of mathematical literacy in the practice, research and development of mathematics education at all school levels. This Call describes the specific themes of focus within TSG 19, the plan for the four sessions of the TSG (each 90 min), submission processes, key dates, and contact info.

We will focus on the four related but separate themes:

1. The “place” of mathematical literacy

Mathematical literacy, and related notions and terminologies (e.g., numeracy, financial/quantitative/statistical literacies), are used to refer to the usefulness of, and ability to use or apply, mathematics ideas, in a range of different life contexts, for personal empowerment, civic participation, etc. What are the specific focuses and topics that characterize the notion of mathematical literacy? How does the notion of mathematical competency relate to mathematical literacy? Should mathematical literacy be directly taught, or be integrated across curriculum subjects, and how? Or can it emerge as a by-product of teaching “regular” mathematics? What evidence do we have about possible (re)solutions?

2. Theories of mathematical literacy

What are some theories and methodologies that can be useful to understand some of the issues related to the practice or research of mathematical literacy?

3. What can research tell us about the teaching and learning of mathematical literacy?

What do empirical results from large- and small-scale studies indicate that can inform our thinking about the conceptualization, teaching, learning, or assessment of mathematical literacy? How are notions of mathematical literacy figured into curricula, and in teachers' identities, beliefs, attitudes and practices, in teacher education, in learning materials, in local/national assessments, etc?

4. Views about the future of mathematical literacy

If we are committed to developing mathematical literacy at the school level, what barriers should we overcome? What new types of initiatives, policies, or collaborations (across subject areas, outside schools) are needed? What are potential gains/losses with possible initiatives?