Topic Study Group 5.7: Mathematics education in and for work; lifelong mathematics education including adult education

Strand B

Team details

Co-Chairs
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Overview

This Topic Study Group (TSG5.7) aims to bring together researchers, practitioners, and policy-makers to explore two interrelated themes: mathematics in and for work, and lifelong mathematics teaching and learning. Together, they incorporate mathematics and adult numeracy education that take place in formal education settings such as colleges, polytechnics, or adult basic schools; semi-formal settings such as vocational education and training organized by, for example, employers or by community-based providers, to meet personal and social needs; and informal settings that may be part of the daily activities of adults in and outside work. TSG 5.7 thus combines the themes to consider mathematics and numeracy education from these different contexts and practices of where
mathematics is either related to work or the many other important aspects in the lives of adults as individuals or citizens. Some issues will explicitly be considered: how mathematical (and numeracy) demands of work and society, especially in relation to technology and the proliferation of data, are changing as we move further into the 21st century. How are we dealing with this issue in adult and workplace education, and in schools’ preparation of their learners for participating as youth and adults in the world outside school classrooms? What research agenda on these themes do we need for the future?

Areas of interest

At ICME-15 TSG 5.7 will include oral presentations, poster sessions, workshops with hands-on activities, group discussions and other enjoyable learning opportunities. In a nutshell, TSG 5.7 sessions will follow both formal and non-formal approaches to learning and will focus on areas and questions addressed in submissions to TSG5.7 such as:

- What are new trends and developments in research on the two related themes?
- What are the differences between the learning (teaching) of mathematics and numeracy to younger students compared with adults?
- What mathematics do people currently learn in preparation for work or in adult education; how could/should this be improved?
- What mathematics knowledge and skills are embedded and required in out-of-school practices; what is this mathematics like and how is it learned?
- How is mathematics and numeracy valued in different societies, and how do power, social, and political identities structure adult numeracy practices?
- What can formal education learn from 'out-of-school mathematics’?
- What is the impact of technologies on workplace and civic mathematics and numeracy practices and the lifelong learning of adults?
- How do different numeracies (for example health, digital, and financial numeracies) differ from, and relate to literacy equivalents (such as health, digital, and financial literacies)?

How to make a submission to this Topic Study Group

Submissions for Topic Study Group Papers and proposals for Posters open 28 April 2023 via the official ICME-15 website, icme15.org. The website also contains a timeline of dates for the activity of the Topic Study Groups in the lead up to the Congress.

For questions about this TSG, please contact the Co-Chairs using the email addresses provided.