



Topic Study Group 5.1: Students' identity, motivation and attitudes towards mathematics and its study

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Team details

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Overview

Topic Study Group 5.1 in ICME-15 is about students' affect, with a special focus on Students' Identity, Motivation, and Attitudes towards Mathematics and its Study. Affective variables can be seen as either hidden or explicit factors that influence learning processes and outcomes. The different research perspectives used in the study of students' affect include psychological, sociological, philosophical, and linguistic, and we welcome all these as well as other perspectives. In addition to the general domain "affect", the title of this Topic Study Group highlights three concepts that have been popular in the field of mathematics education: identity, motivation, and attitudes. This should not be seen as restrictive. On the contrary, we invite discussion on all areas of affect, encompassing anxiety, attitude, beliefs, emotion, flow, goals, identity, interest, meaning, motivation, needs, norms,





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self-concept, values etc. All of them play a crucial role in students' learning of mathematics and they also have subtle differences. In addition, we welcome the analysis of the mutual relationship between affective constructs and their connection to: cognition, social/political contexts, and other constructs studied in mathematics education as well as the description of programs for promoting aspects of affect.

The aims of Topic Study Group 5.1 at ICME-15 are:

1. To present an overview of the state of the art in the research field of students' affect (identity, motivation, and attitudes) in mathematics education.
2. To identify new trends and developments in research and practice in these areas.
3. To engage participants in a critical reflection of this field and generate discussion of an agenda for future research on students' identity, motivation, and attitudes in mathematics education.

Areas of interest

In Topic Study Group 5.1, we welcome theoretical, methodological, empirical, or developmental papers and poster proposals on issues such as the following:

- Clarification of the operational definitions of identity, motivation and attitude
- Role of identity, motivation, and attitudes in learning of mathematics at all levels (and including topic specific)
- Role of identity, motivation, and attitudes in addressing inequity and forms of marginalisation (including, geographic, racial, linguistic, gender, economic etc.)
- The intersection of identity, motivation, and attitudes with Indigeneity and other social identities in learning mathematics.
- The relationship between student and teacher identity, motivation, and attitude to learning mathematics.
- Intervention or comparative studies aimed at changes in identity, motivation, or attitude.
- Development of methodological approaches (including measurement instruments) for research on identity, motivation, and attitude.

Any paper/poster of relevance to the overall focus of the group will be considered. The focus of the research may vary from individual students in and out of school, higher education (e.g. vocational, university, etc.) courses, to people at work or in everyday life.





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The study of teachers' affect alone (i.e. not in relation to learners' identity, motivation, and attitude) is excluded from this Topic Study Group as this is in the focus of our related Topic Study Group 4.7 "Affect, beliefs, and identity of mathematics teachers".

We expect that participants will engage in the review process prior to the conference, and we will nominate respondents to presentations in order to enable deeper levels of critical discussion during the conference.

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.

