



15th International Congress on Mathematical Education

7-14 July 2024 • ICC Sydney, Australia
Come and be counted

Topic Study Group 3.2: Mathematics education at tertiary level

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Team details

Co-Chairs

Nadia Azrou (Yahia Fares University of Médéa, Algeria; nadiazrou@gmail.com)

Elena Nardi (University of East Anglia, United Kingdom; e.nardi@uea.ac.uk)

Members

Helen Alfaro (Universidad de Costa Rica, Costa Rica)

Linda Galligan (University of Southern Queensland, Australia)

Mitsuru Kawazoe (Osaka Metropolitan University, Japan)

IPC Liaison

Jianpan Wang (East China Normal University, China)

Overview

Research into the teaching and learning of mathematics at the tertiary level has developed significantly over the last decades. Studies in this area address a variety of issues, focus on the mathematical learning experiences of students across many and different disciplines and employ a range of theoretical and methodological perspectives. TSG 3.2 aims to share and discuss recent research findings and insights from teaching university mathematics around the world. The interests of the TSG 3.2 cover all aspects of teaching and learning mathematics in university, college, further education and vocational programmes, in their full variety: for specialists and non-specialists, in different locations, in different cultures and different institutional settings.





Areas of interest

TSG 3.2 welcomes contributions that report current state of affairs within the field and / or report innovative approaches to the teaching and learning of mathematics at the tertiary level. As the following list of themes demonstrates, we welcome studies that report all aspects of learning, pedagogy, curriculum, assessment and professional development for mathematics at the tertiary level:

- Transition to, across and from university mathematics;
- Teaching and learning of specific mathematical topics (such as: analysis and calculus; linear and abstract algebra; geometry; number theory; discrete mathematics; probability and statistics; programming; computational mathematics);
- Teaching and learning of particular aspects of mathematical activity (such as: proof and proving; argumentation and reasoning; problem-solving; modelling);
- Teaching and learning of particular aspects of mathematical communication (such as: formalism, notation, language, visualization and gesturing);
- Teaching and learning of mathematics in and across different disciplines and professions (such as architecture, biology, chemistry, engineering, economics, finance, medicine, nursing, psychology and physics);
- Mathematical affect at the tertiary level;
- Social, cultural, institutional and political issues concerning the teaching and learning of mathematics at the tertiary level;
- Curriculum analysis and reform for mathematics at the tertiary level;
- Assessment for mathematics at the tertiary level;
- Use of digital and other resources in the teaching and learning of mathematics at the tertiary level;
- Teacher education and professional development for teachers of mathematics at the tertiary level; and
- Epistemological, theoretical and methodological issues in mathematics education research at the tertiary level.

Finally, we stress that we welcome papers from all theoretical and methodological paradigms, and we see our TSG as offering a platform for productive exchanges between researchers and practitioners of mathematics education at the tertiary level and across disciplines.





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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.

