



Topic Study Group 1.6: Teaching and learning of probability

Strand B

Team details

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Overview

Our world is in crisis (environmentally, economically, health-wise, socially, ...) and education could be a key solution. This multi-factorial crisis has emphasized the significance of mathematics education, to develop reasoning and critical thinking skills. In a society where the use of probability is becoming more and more important, TSG1.6 seeks to contribute to the teaching and learning of probability. Indeed, there is a need to improve the understanding of probability concepts and the notion of risk in the current data world. This appears necessary to guide informed decision-making in different contexts – educational, but also social. In order to prepare the next era of research, it appears necessary to promote the diffusion and sharing of ideas related to probability education.





15th International Congress on Mathematical Education

7-14 July 2024 • ICC Sydney, Australia
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Areas of interest

In TSG 1.6, we invite both empirically grounded and theoretical contributions, concerning any level of education (from pre-kindergarten to university). More specifically, contributions to the following sub-themes would be welcome to enrich the discussion and share the development of research in such areas:

- Dispositions, attitudes and beliefs of students and teachers towards probability.
- Students' probability understanding.
- Ways to help students overcome barriers to learning probability.
- Development of early probabilistic thinking.
- Articulation of probabilistic approaches (theoretical, frequentist and subjective).
- Use of manipulatives in teaching and learning probability.
- Role of technology in teaching and learning probability.
- Probability teacher education (both pre-service and in-service)
- Analysis of curriculum or teaching resources related to the teaching of probability.
- Gambling awareness.
- Development of decision-making based on probability.
- Use of real risk contexts to teach probability.
- Emerging trends, developments and innovation in teaching and learning probability.
- Theoretical frameworks in probability education.
- Methodological frameworks in probability education.
- Connecting probabilistic thinking with data sciences learning.
- Other issues related to probability education.

TSG 1.6 aims to provide a platform for educators, teachers and researchers for the presentation of their research findings and discussion of issues on these sub-themes. Diversified perspectives, both conceptual and methodological, are expected to highlight the work done around the world on probability education. All submissions will be peer-reviewed.

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.

