CERME 13: Thematic Working Group 5
Probability and Statistics Education

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Scope and focus of the Working Group

Statistical and probabilistic thinking and reasoning are critical skills for citizens who need to interpret information presented through the media or workplace, to contribute to the knowledge society and to interpret scholarly papers. The confluence of historical and more recent environmental, economic, social, political and health crises have spotlighted the importance of the pedagogies and tools we use to communicate meaning in statistics and probability. Moreover, it has led to an appreciation of and surge in interest trustworthy statistics, evidenced by greater number of people accessing statistical information about their communities. Consequently, a significant challenge is to develop statistically literate citizens and promote the meaningful use of statistical tools. The professional development of teachers is crucial to respond to such developments. TWG 5 positions itself within research that is fundamentally important at a time when new developments and trends like data science education and collaboration with other disciplines provide further stimulus for growth in the landscape of research on probability and statistics education.

Call for papers and poster proposals
We are particularly interested in theoretical, empirical or design-based research papers and poster proposals that address one or more of the following themes:
- The nature and development of probabilistic and statistical thinking and its relationship to other types of mathematical thinking, including the interface between probabilistic and statistical thinking, such as in modelling and informal statistical inference.
- Dispositions, attitudes and beliefs of students and adults towards probability and statistics.
- The role of context in statistics, how changes in context influence how we approach the teaching and learning of probability and statistics and inform new priorities and agendas.
- Emerging trends, developments and innovation in teaching probability and statistics in schools.
- The professional development of teachers to teach statistics and probability.
- The role of computer-based tools on the learning and teaching of probability and statistics, in particular the use of new tools to support distance learning.
- The elaboration of theoretical frameworks that may provide insightful models for interpreting evidence from research on probability and statistics education.
- Data science education, practices of using big data in school and at the tertiary level.
- Assessment in probability and statistics education.

Papers and poster proposals should use the CERME template, and conform to the guidelines at https://cerme13.renyi.hu/. CERME 13 uses an electronic submission system https://www.conftool.pro/cerme13/. The authors submit the initial version of their paper on the website (uploading it both as a .doc and a .pdf file, and providing the required information, in particular the TWG number).

Reviews and decisions
Each paper will be peer-reviewed by two persons from among those who submit papers to this TWG. Please expect to be asked to review up to two papers yourself. The group leaders will decide about the acceptance of posters.

Important dates
- **15 February 2023:** Deadline for submission of papers and posters.
- **5 April 2023:** Preliminary decisions on papers and posters.
- **10-14 July 2023:** CERME 13 takes place.
- **See** https://cerme13.renyi.hu/deadlines **for other important dates**