Announcement of Topic Study Group 12 (TSG-12)

TEACHING AND LEARNING OF STATISTICS

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Please note that the proposal submission deadline has been postponed:

The new deadline of TSG proposal submission is: November 30, 2011.

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Call for papers

Being able to provide sound evidence-based arguments and critically evaluate data-based claims are important skills that all citizens should have. It is not surprising therefore that statistics instruction at all educational levels is gaining more students and drawing more attention than it has in the past. The study of statistics provides students with tools, ideas and dispositions to use in order to react intelligently to information in the world around them. Reflecting this need to improve students' ability to think statistically, statistical literacy and reasoning are becoming part of the mainstream school and university curriculum in many countries.

As a consequence, statistics education is a growing and exciting field of research and development. Statistics at school level is usually taught in the mathematics classroom in connection with learning probability. Our topic includes probabilistic aspects in learning statistics, whereas research with a specific focus on learning probability is being discussed in TSG-11 of ICME-12.

Within this broad domain and across educational levels, TSG-12 welcomes presentations on the following topics:

1. Students' reasoning about key statistical concepts, such as data, distribution, variability, comparing distributions, sample and sampling, and covariation;
2. Students' making statistical inferences (from informal inference to more formal inference, role of context, randomness, models and probability in the inferential process, etc.);

3. Statistical literacy (its role in the curriculum, the challenges in preparing teachers to teach with statistical literacy as a goal);

4. Role of technology in teaching and learning statistics (including software packages, simulations, Internet, online teaching, etc.);

5. Preparing teachers to teach statistics;

6. Teaching statistics, with particular attention to research on how to structure learning sequences that enable students to develop over time a deep conceptual understanding;

7. Building a common research basis that will enable the field of statistics education to move forward, in particular innovative ways to connect data and chance.

The purpose of TSG-12 is to provide a forum for presentations of high-quality studies and discussions on the current state-of-the-art in these themes, seen from an international perspective as well as perspectives of different countries and cultures. During the conference, TSG-12 will convene for four one and a half hour timeslots.

How to Contribute

Participants who would like to present their research in TSG-12 are requested to submit proposals by November 30, 2011 to the ICME-12 Website http://www.icme12.org/ and to Dani Ben-Zvi and Jean-Claude Oriol by e-mail. The proposal in English of up to 1,200 words has to include a title, author(s)' name, e-mail, institution and country, abstract (up to 200 words), introduction, brief literature review, methodology, key results, and references. The proposals will be peer-reviewed, and if your proposal is accepted, you will be invited to prepare a paper of no more than 8 pages (including references and appendices) using the ICME-12 template (see http://www.icme12.org). The final accepted papers should be submitted in the ICME-12 Website as well as sent to the co-chairs via e-mail no later than April 10, 2012.

The final program of TSG-12 will be decided by the Organizing Team. We plan to include invited talks, selected oral presentations, posters and rigorous discussions around key issues in the study of statistics education.

Deadlines

November 30, 2011: Proposal submission

January 15, 2012: Notification of acceptance

April 10, 2012: Submission of final manuscript

TSG-12 Organizing Team

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TSG-12 Website: http://www.icme12.org/sub/tsg/tsgload.asp?tsgNo=12