FORTHCOMING IASE CONFERENCES

JOINT ICMI /IASE STUDY STATISTICS EDUCATION IN SCHOOL MATHEMATICS: CHALLENGES FOR TEACHING AND TEACHER EDUCATION Monterrey, Mexico, June 30 - July 4, 2008



The International Commission on Mathematical Instruction (ICMI, http://www.mathunion.org/ICMI/) and the International Association for Statistical Education (IASE, http://www.stat.auckland.ac.nz/~iase/) are pleased to announce the Joint ICMI /IASE Study Statistics Education in School Mathematics: Challenges for Teaching and Teacher Education.

Following the tradition of ICMI Studies, this Study will comprise two parts: the Joint Study Conference and the production of the Joint Study book. The Joint Study Conference will be merged with the IASE 2008 Round Table Conference.

The Joint Study Conference (ICMI Study and IASE Round Table Conference) will take place at the Instituto Tecnológico y de Estudios Superiores. Monterrey, Mexico (http://www.mty.itesm.mx/), from June 30 to July 4, 2008. Participation in the Conference is only by invitation, based on a submitted contribution and a refereeing process. Accepted papers will be presented in the Conference and will appear in the Proceedings that will be published by ICMI and IASE as a CD-ROM and on the Internet.

The second part of the Joint Study – the Joint Study book – will be produced after the conference and will be published in the ICMI Study Series. Participation in the Joint Study Conference does not automatically assure participation in the book, because a second selection and rewriting of selected papers will be made after the conference.

More information: Carmen Batanero, batanero@ugr.es

 $Website: http://www.stat.auckland.ac.nz/{\sim}iase/temp/RoundTable2008Announce.htm$

ICME 11 INTERNATIONAL CONGRESS ON MATHEMATICAL EDUCATION TOPIC STUDY GROUP # 13 RESEARCH AND DEVELOPMENT IN THE TEACHING AND LEARNING OF

PROBABILITY

Monterrey, Mexico, July 6 - 13, 2008

Probability and statistics education are relatively new disciplines. Both have only recently been introduced into main stream school curricula in many countries. Although application-oriented statistics is undisputed in its relevance, discussion about probability is more ambivalent. When probability is reduced to its classical conception, mainly based on combinatorics or its formal treatment in higher mathematics, it can be seen as irrelevant, and may be abandoned to leave only the statistical element of the stochastics discipline. However, we believe that there are some powerful arguments in favour of a strong role for probability within stochastics curricula.

We invite submissions related to the following topics:

Statistics Education Research Journal, 7(1), 60-67, http://www.stat.auckland.ac.nz/serj © International Association for Statistical Education (IASE/ISI), May, 2008

Individuals' corner

- Students' understanding and misunderstanding of fundamental probabilistic concepts
- Ideas of probability in young children

Impact of technology

- The use of technology for students' learning of probability
- Using specific software to study probability and sampling distributions
- Special issues in e-learning

Teacher's corner

- Teacher education on the topic of probability
- Teachers' conceptions about teaching probability

Fundamental ideas

- The probabilistic idea of random variable; distribution, expectation
- The central limit theorem; convergence
- Bayes' theorem and conditional probability; independence; exchangeability
- Probabilistic modelling a probabilistic look at distributions

TEAM CHAIRS

Manfred Borovcnik (Austria), manfred.borovcnik@uni-klu.ac.at Dave Pratt (U.K.), d.pratt@ioe.ac.uk Silvia Alatorre Frenk (Mexico), alatorre@solar.sar.net

TEAM MEMBERS

Carmen Batanero (Spain), batanero@ugr.es Wu Yingkang (China),ykwu@math.ecnu.edu.cn

Website: http://tsg.icme11.org/tsg/show/14

ICME 11

INTERNATIONAL CONGRESS ON MATHEMATICAL EDUCATION TOPIC STUDY GROUP # 14

RESEARCH AND DEVELOPMENT IN THE TEACHING AND LEARNING OF STATISTICS

Monterrey, Mexico, July 6 - 13, 2008

Statistics education is a growing field of research and development at school and university level. The topic group will focus on presenting and discussing recent research.

Statistics at school level is usually taught in the mathematics classroom in connection with learning probability. Inferential statistics is based on basic understandings of probability. Our topic includes probabilistic aspects in learning statistics, whereas research with a specific focus on learning probability is being discussed TSG 13 of ICME.

We are open to all kinds of relevant research papers, but our specific focus will be on the following topics:

- Students' thinking and reasoning about distributions (including variability, comparing distributions)
- Students' making inferences from data (from informal inference to more formal inference, inference from sample to population or process, from data to context, role of models and probability)
- Statistical literacy

- Role of technology (tools, applets, internet)
- Research on teachers and teaching of statistics

TEAM CHAIRS:

Rolf Biehler (Germany), biehler@mathematik.uni-kassel.de Mike Shaughnessy (USA), mikesh@pdx.edu

TEAM MEMBERS

Omar Rouan (Morocco), orouan@yahoo.com Ernesto Sánchez (Mexico), esanchez@cinvestav.mx Jane Watson (Australia), Jane.Watson@utas.edu.au

Website: http://tsg.icme11.org/tsg/show/15

SRTL-6

THE SIXTH INTERNATIONAL RESEARCH FORUM ON STATISTICAL REASONING, THINKING, AND LITERACY

The Role of Context and Evidence in Informal Inferential Reasoning Brisbane, Australia, July 10-16, 2009



The sixth in a series of International Research Forums on Statistical Reasoning,

Thinking and Literacy (SRTL-6) is to be held in Brisbane, Australia from July 10 to July 16, 2009. The School of Education at The University of Queensland, will host the Forum. The Forum's focus will build on the work presented and discussed at SRTL-5 (August, 2007, Coventry, UK, http://srtl.stat.auckland.ac.nz/srtl5/research_forums) on informal ideas of statistical inference. Recent research suggests an important role for developing ideas of informal types of statistical inference even at early educational levels. Researchers have developed instructional activities that encourage students to infer beyond samples of data and use technological tools to support these informal inferences.

The findings of these studies reveal that the context of the data and the use of evidence may be important factors to study further. The role of context is of particular interest because in drawing (informal) inferences from data, "students must learn to walk two fine lines. First, they must maintain a view of data as 'numbers with a context'" (Moore, 1992). At the same time, "they must learn to see the data as separate in many ways from the real-world event they observed" (Konold & Higgins, 2003, p. 195). That is, they must abstract the data from that context. The role of evidence is also of particular interest because in learning how to make data-based claims (argumentation), students must consider the evidence used to support the claim, the quality and justification of the evidence, limitations of the evidence and finally, an indication of how convincing the argument is (Ben-Zvi, Gil, & Apel, 2007).

Based on SRTL-5, we characterize Informal Inferential Reasoning (IIR) as the cognitive activities involved in drawing conclusions with some degree of uncertainty that go beyond the data and having empirical evidence for them. Three principles appear to be essential to informal inference: (1) generalizations (including predictions, parameter estimates, and conclusions) that go beyond describing the given data; (2) the use of data as evidence for those generalizations; and (3) conclusions that express a degree of uncertainty, whether or not quantified, accounting for the variability or uncertainty that is

unavoidable when generalizing beyond the immediate data to a population or a process (Makar & Rubin, 2007).

An interesting range of diverse research presentations and discussions have been planned and we look forward to a stimulating and enriching gathering. These papers will address the role of context and evidence when reasoning about informal inference at all levels of education including the professional development of elementary and secondary teachers.

The structure of the scientific program will be a mixture of formal and informal sessions, small group and whole group discussions, and the opportunity for extensive analysis of video-taped research data. There will also be a poster session for exhibiting current research of participants on additional topics related to statistics education. The Forum is co-chaired by Dani Ben-Zvi (University of Haifa, Israel) and Joan Garfield (University of Minnesota, USA), locally organized by Katie Makar and Michael Bulmer (The University of Queensland), and planned by a prestigious international advisory committee. Conference attendance is by invitation only. For more information, visit the SRTL website at: http://srtl.stat.auckland.ac.nz/ or email SRTL2009@gmail.com.

ISI-57
THE 2009 SESSION OF THE INTERNATIONAL STATISTICAL INSTITUTE
Durban, South Africa, August 16 - 22, 2009



IASE sponsored Invited Paper Meetings for 57th Session in Durban are being organised by Helen MacGillivray (Australia, h.macgillivray@qut.edu.au). The IASE Programme Committee for ISI-57 has chosen the theme - Statistics Education for the Future.

IASE has nine IPM (Invited Paper Meeting) sessions, two of which include issues raised by the local organisers, and has two joint sessions with IAOS. These sessions are currently being finalised and details will be

available in the next issue. The website http://www.statssa.gov.za/isi2009/ has information on all matters relating to ISI 2009, including important dates, and will be regularly updated as new information develops.

ICOTS-8 DATA AND CONTEXT IN STATISTICS EDUCATION: TOWARDS AN EVIDENCE-BASED SOCIETY Ljubljana, Slovenia, July 11 - 16, 2010



The 2010 International Conference on Teaching Statistics will be held in the city of Ljubljana, Slovenia, July 11-16. It is being organised by the IASE and the Slovenian Statistical Association. The venue will be the Ljubljana Cultural and Congress Centre.

Statistics educators, statisticians, teachers and educators at large are invited to contribute to the scientific programme. Types of contribution include invited papers, contributed papers and posters. No

person may author more than one Invited Paper at the conference, although the same person can be co-author of more than one paper, provided each paper is presented by a different person.

Voluntary refereeing procedures will be implemented for ICOTS8. Details of how to prepare manuscripts, the refereeing process and final submission arrangements will be announced later.

INVITED PAPERS

Invited Paper Sessions are organized within 10 Conference Topics as follows.

Topics and Topic Convenors

- Data and Context in Statistics Education: Towards an Evidence-based Society. Brian Phillips (Australia) bphillips@swin.edu.au
 Irena Ograjensek (Slovenia) irena.ograjensek@ef.uni-lj.si
- 2. Statistics Education at the School Level.

Mike Shaughnessy (USA) mikesh@pdx.edu Doreen Connor (UK) doreen.connor@ntu.ac.uk

3. Learning to Teach Statistics.

Katie Makar (Australia) k.makar@uq.edu.au Joachim Engel (Germany) engel@math.uni-hannover.de

4. Statistics Education at the Post Secondary Level. Elisabeth Svensson (Sweden) elisabeth.svensson@esi.oru.se

Larry Weldon (Canada) weldon@sfu.ca

5. Assessment in Statistics Education. Beth Chance (USA) bchance@calpoly.edu Iddo Gal (Israel) iddo@research.haifa.ac.il

6. Statistics Education, Training and the Workplace.

Gabriella Belli (USA) gbelli@vt.edu

Peter Petocz (Australia) peter.petocz@mq.edu.au

7. Statistics Education and the Wider Society.
Richard Gadsden (UK) R.J.Gadsden@lboro.ac.uk
Oded Meyer (USA) meyer@stat.cmu.edu

8. Research in Statistics Education.

Arthur Bakker (The Netherlands) a.bakker@fi.uu.nl Tim Burgess (New Zealand) t.a.burgess@massey.ac.nz

9. Technology in Statistics Education.

Deborah Nolan (USA) nolan@stat.berkeley.edu

Paul Darius (Belgium) paul.darius@biw.kuleuven.be 10. An International Perspective on Statistics Education.

Delia North (South Africa) northd@ukzn.ac.za

Enriqueta Reston (Phillipines) edreston@usc.edu.ph

Session themes within each Topic are currently being discussed. The themes and Session organizers with email contact will be available on the ICOTS-8 web site http://icots8.org/, under "Scientific Programme" by June 2008. Those interested in submitting an invited paper should contact the appropriate Session Organiser before December 1, 2008.

CONTRIBUTED PAPERS

Contributed paper sessions will be arranged in a variety of areas. Those interested in submitting a contributed paper should contact Gilberte Schuyten (Gilberte.Schuyten@UGent.be), John McKenzie (mckenzie@babson.edu), or Flavia Jolliffe (F.Jolliffe@kent.ac.uk) before September 1, 2009.

POSTERS

Those interested in submitting a poster should contact Mojca Bavdaz (mojca.bavdaz@ef.uni-lj.si) or Alesa Lotric Dolinar (alesa.lotric.dolinar@ef.uni-lj.si) before January 15, 2010.

GENERAL ISSUES

More information is available from the ICOTS-8 web site at http://icots8.org/ which will continue to be updated over the next three years, or from the ICOTS IPC Chair, John Harraway (jharraway@maths.otago.ac.nz), the Programme Chair, Roxy Peck (rpeck@calpoly.edu), and the Scientific Secretary, Helen MacGillivray (h.macgillivray@qut.edu.au).

OTHER FORTHCOMING CONFERENCES

6TH AUSTRALIAN CONFERENCE ON TEACHING STATISTICS Melbourne, Australia, July 3 - 4, 2008

The 6th OZCOTS will be held as a satellite to the Australian Statistical Conference. Invited and contributed papers and forums on topics across the tertiary statistical education spectrum will be of interest to statisticians, statistical educators and the statistical profession. OZCOTS 2008 and its invited speakers are associated with a National Senior Teaching Fellowship on the teaching and assessment of statistical thinking within and across disciplines.

More information: http://silmaril.math.sci.qut.edu.au/ozcots2008/

CensusAtSchool: 2ND INTERNATIONAL WORKSHOP Los Angeles CA, USA, July 28 - 29, 2008

The International CensusAtSchool project encourages the use of real data, from and about school children, and promotes the teaching and learning of statistical thinking skills in the classroom. This gives children increased understanding of data, wherever it originates, and encourages them to develop a healthy skepticism towards statistics that are constantly presented to them by the media and the society they live in.

Teachers, public servants, statistics education researchers and all those interested in learning about the project are welcome to attend the workshop.

More information: Juana Sanchez (jsanchez@stat.ucla.edu) Website: http://censusatschool-california.stat.ucla.edu

2008 JOINT STATISTICAL MEETINGS Denver CO, USA, August 3 - 7, 2008

JSM (the Joint Statistical Meetings) is the largest gathering of statisticians held in North America. It is held jointly with the American Statistical Association, the International Biometric Society (ENAR and WNAR), the Institute of Mathematical Statistics, and the Statistical Society of Canada. Attended by over 5000 people, activities of the meeting include oral presentations, panel sessions, poster presentations, continuing education courses, exhibit hall (with state-of-the-art statistical products and opportunities), career placement service, society and section business meetings, committee meetings, social activities, and networking opportunities. Denver, the host city for JSM 2008, offers a wide range of possibilities for sharing time with friends and colleagues.

More information: jsm@amstat.org

Website: http://www.amstat.org/meetings/jsm/2008/

USCOTS 2009 UNITED STATES CONFERENCE ON TEACHING STATISTICS June 25 - 27, 2009

The third biennial United States Conference on Teaching Statistics (USCOTS 09) is scheduled for June 2009.

Details will be available at USCOTS page: http://www.causeweb.org/uscots/program/

10TH INTERNATIONAL CONFERENCE OF THE MATHEMATICS EDUCATION INTO THE 21ST CENTURY PROJECT MODELS IN DEVELOPING MATHEMATICS EDUCATION Dresden, Saxony, Germany, September 11 – 17, 2009

The Mathematics Education into the 21st Century Project was founded in 1986 and is dedicated to the planning, writing and disseminating of innovative ideas and materials in Mathematics and Statistics Education. You are invited to attend our 10th anniversary project conference to be held in the historic city of Dresden, Germany. The chairman of the Local Organising Committee will be Prof. Dr. Ludwig Paditz of the Dresden University of Applied Sciences.

More information: Alan Rogerson, arogerson@inetia.pl

Website: http://math.unipa.it/~grim/21_project/21_project_Dresden_2009.pdf