

PAST CONFERENCE

USCOTS 2007
UNITED STATES CONFERENCE ON TEACHING STATISTICS
Columbus OH, USA, May 17-19, 2007



The second biennial United States Conference on Teaching Statistics (USCOTS 07) was held on May 17-19, 2007 at the Ohio State University in Columbus, Ohio, hosted by CAUSE, the Consortium for the Advancement of Undergraduate Statistics Education. The target audience for USCOTS is teachers of undergraduate and AP statistics, from any discipline or type of institution. Teachers from two-year colleges are particularly encouraged to attend.

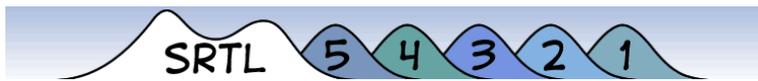
The theme for USCOTS 2007 was *Taking Statistics Teaching to the Next Level*. “Next level” has many interpretations, such as developing a second course, gaining more confidence in teaching statistics, moving students beyond statistical literacy to statistical thinking, and using the latest technology to improve teaching and learning. USCOTS is a “working conference” with many opportunities for hands-on activities, demonstrations, networking, idea sharing, and receiving the latest information on research and best practices in teaching statistics. Leaders in statistics education gave plenary talks, including Jessica Utts, Paul Velleman, Dick DeVeaux, Allan Rossman, and Mike Shaughnessy.

For more information, visit the USCOTS web page: <http://www.causeweb.org/uscots/>

FORTHCOMING IASE CONFERENCES

SRTL-5
THE FIFTH INTERNATIONAL RESEARCH FORUM ON STATISTICAL
REASONING, THINKING, AND LITERACY
 Coventry, UK, August 11 - 17, 2007

Reasoning about Statistical Inference:
Innovative Ways of Connecting Chance and Data



The Forum's focus will be on informal ideas of

inference rather than on formal methods of estimation and tests of significance. This topic is emerging from the presentations and discussions at SRTL-3 and 4 and is a topic of current interest to many researchers as well as teachers of statistics. As new courses and curricula are developed, a greater role for informal types of statistical inference is anticipated, introduced early, revisited often, and developed through use of simulation and technological tools. Papers will address reasoning about statistical inference at all levels of education including the professional development of elementary and secondary teachers.

TOPICS

Submitted research papers address questions such as the following:

1. What are the simplest forms of statistical inference that students can understand?
2. How does reasoning about statistical inference develop from the simplest forms (informal) to the more complex ones (formal)?
3. How can instructional tasks and technological tools be used to promote the understanding of statistical inference?
4. What are sequences of activities that can help student develop a conceptual understanding of statistical inference?
5. What types of misconceptions are found in students' reasoning about statistical inference?
6. What types of foundational knowledge and reasoning are needed for students to understand and reason about statistical inference?
7. How do students develop an understanding of the language used in describing statistical inference (e.g., significance, confidence)?
8. How does an understanding of statistical inference connect and effect understanding of other statistical concepts?
9. What are useful items and questions to use to assess understanding of statistical inference?

LOCAL SRTL-5 ORGANIZERS

Janet Ainley, janet.ainley@warwick.ac.uk

Dave Pratt, dave.pratt@ioe.ac.uk

For more information visit the SRTL-5 website: <http://srtl.stat.auckland.ac.nz/>

**IASE SATELLITE CONFERENCE ON
ASSESSING STUDENT LEARNING IN STATISTICS
Guimaraes, Portugal, August 19-21, 2007**

The meeting will be held on 19-21 August 2007 in Guimarães, Portugal, immediately prior to ISI 56 in Lisbon. The fascinating historic city of Guimarães is about 50 km from Portugal's second largest city, Oporto. This Satellite will involve papers on many aspects of assessing student learning in statistics. Over 40 papers will be presented along with a number of posters and discussions of examination questions. Proceedings will be available on CD and free at the publication page of IASE.

Non-participants must register by 31 May 2007.

CONFERENCE COMMITTEE

Brian Phillips (Australia) (Joint Chair and Joint Chief Editor) bphillips@swin.edu.au
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Local Organiser: Bruno C. de Sousa (Portugal) bruno@mct.uminho.pt

For more information visit the website:

<http://www.stat.auckland.ac.nz/~iase/conferences.php?show=iasestat07>

**ISI-56
THE 2007 SESSION OF THE INTERNATIONAL STATISTICAL INSTITUTE
Lisboa, Portugal, August 22 – 29, 2007**



The 56th Session of the International Statistical Institute (ISI) will be held in Lisboa, Portugal. As it does at each major ISI conference, IASE will be organizing about 10 statistics education sessions for ISI-56. Please check the website at <http://www.isi2007.com.pt/> for more information, and contact the session organizers below if you would like to offer to speak in one of the sessions.

IASE SPONSORED IPMS (ORGANIZERS, PRESENTERS, DISCUSSANTS)

IPM37 *Research on Reasoning about Distribution*

Organizer: Joan Garfield, USA

Presenters: Rolf Biehler, Germany; Jane Watson, Australia; Chris Reading, Australia

Discussants: Roxy Peck and Beth Chance, USA

IPM38 *How Modern Technologies Have Changed the Curriculum in Introductory Courses*

Organizers: Lucette Carter, France; Catherine Pardoux, France

Presenters: Cecily Peters, Malaysia; Brigitte Chaput, France; Mathilde Mougeot, France

Discussants: Carmen Capilla, Spain; Robert Gould, USA

- IPM39 *Preparing Teachers of Statistics*
 Organizer: Allan Rossman, USA
 Presenters: Carmen Batanero, Spain; Penelope Bidgood, UK; Verônica Yumi Kataoka, Brazil; Madhuri Mulekar, USA
 Discussant: Jerry Moreno, USA
- IPM40 *Research on the Use of Simulation in Teaching Statistics and Probability*
 Organizer: Rolf Biehler
 Presenters: Nicolas Christou, Ivo D. Dinov and Juana Sanchez, USA; Joachim Engel, Germany; Andrew Zieffler and Joan B. Garfield, USA
 Discussant: Andrej Blejec, Slovenia
- IPM41 *Optimizing Internet-Based Resources for Teaching Statistics*
 Organizers: Roxy Peck, USA; Ginger Holmes Rowell, USA
 Presenters: Mary Townsend, Canada; Iddo Gal and Dani Ben-Zvi, Israel; Dennis Pearl, USA
 Discussant: Irena Ograjensek, Slovenia
- IPM42 *Observational Studies, Confounding, and Multivariate Thinking*
 Organizer: Milo Schield, USA
 Presenters: Donald Rubin, USA; Nancy Wermuth, Sweden and David Cox, UK; James Nicholson, Jim Ridgway, and Sean McCusker, UK; John Harraway, New Zealand
- IPM43 *Teaching of Official Statistics*
 Organizer: Sharleen Forbes, New Zealand
- IPM44 *Teaching of Survey Statistics*
 Organizer: Steve Heeringa, USA
 Presenters: Don Royce, Canada; James J. Brown, UK; Marie-Christine Ponsonnet, France; Giulio Ghellini, Italy
 Discussant: Graham Kalton, USA
- IPM45 *Studying Variability Through Sports Phenomena*
 Organizer: Brian Phillips, Australia
 Presenters: Tim Swartz, Canada; Stephen Clarke, Australia; Phil Everson, USA; Kaznori Yamaguch, Michiko Watanabe, and Fumitake Sakaori, Japan
 Discussant: Larry Weldon, Canada
- IPM46 *Use of Symbolic Computing Systems in Teaching Statistics*
 Organizer: Zaven Karian, USA

IASE ORGANIZING COMMITTEE

Allan J. Rossman (USA) arossman@calpoly.edu
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 Chris Wild (New Zealand) c.wild@auckland.ac.nz

For more information visit the ISI 56 website at <http://www.isi2007.com.pt/> or contact members of IASE OC.

**JOINT ICMI /IASE STUDY
STATISTICS EDUCATION IN SCHOOL MATHEMATICS:
CHALLENGES FOR TEACHING AND TEACHER EDUCATION
Monterrey, Mexico, June 30 to 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. The conference is co-sponsored by the American Statistical Association and endorsed by the Interamerican Statistical Institute, Mexican Statistical Association and the International Statistical Literacy Project.

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.

Proposed papers for contributions to the Joint Study Conference should be submitted by e-mail no later than October 1, 2007, to the IPC Study Chair (Carmen Batanero, batanero@ugr.es). Papers should be relevant to the Joint Study focus and research questions, as described in the Discussion Document (which is available at the Joint Study Website (http://www.ugr.es/~icmi/iase_study/)). Guidelines for preparing and submitting the paper are also available in the Discussion Document. Please address questions to Carmen Batanero, batanero@ugr.es or Joan Garfield, jbg@umn.edu.

INTERNATIONAL PROGRAMME COMMITTEE

Carmen Batanero (Spain)
Bernard Hodgson (Canada, ICMI representative)
Allan Rossman (USA, IASE representative)
Armando Albert (México, ITSM representative)
Dani Ben-Zvi (Israel)
Gail Burrill (USA)
Doreen Connor (UK)
Joachim Engel (Germany)
Joan Garfield (USA)
Jun Li (China)
Maria Gabriella Ottaviani (Italy)
Maxine Pfannkuch (New Zealand)
Mokaeane Victor Polaki (Lesotho)

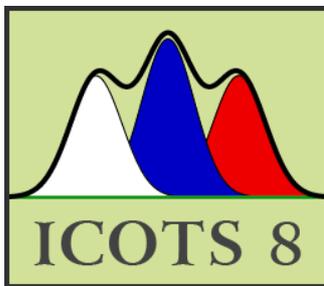
Chris Reading (Australia)

LOCAL ORGANISING COMMITTEE

Blanca Ruiz (Chair)
Ernesto Sánchez
Tomás Sánchez
Armando Albert

More information is available from Carmen Batanero, batanero@ugr.es or from http://www.ugr.es/~icmi/iase_study/

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



CONFERENCE THEME

The realization that data is preferable to anecdote or intuition as a basis for robust decision making is spreading through many professions and sections of society. More and more, people want to see “the evidence”. Statistical methodology and modelling are increasingly pervading the research fabrics of all fields that advance by employing empirical enquiry. And because the root purpose of statistics is to extract insight and meaning about real contexts using data, statistics educators are increasingly realizing that this cannot be modelled by teachers without the use of rich, real contexts. It is important that data and contexts pervade statistical learning and teaching, to help students understand the nature and value of the statistical sciences, and to facilitate their learning. Successful learning processes involve data and contexts that are meaningful to students. These can be relevant to everyday life or to disciplines as varied as psychology, biology, business, sociology, engineering, the health sciences and statistics itself. But many questions remain about the myriad ways in which we can exploit context to achieve our educational goals. We also must look hard at how well we use the data and contexts that should be guiding our own educational practices.

EVIDENCE-BASED PRACTICE IN OTHER DISCIPLINES: SOME EXAMPLES

Statisticians are often essential contributors in research teams in many disciplines and examples drawn from these contexts can enrich and facilitate the teaching of statistics. Interaction between statistics educators, statisticians and researchers in a relevant specialization can contribute significantly to the rich, real contextual and data resources that are of such value in both motivating and assisting statistical learning. Trends in medicine and other health sciences are governed by data, and evidence-based medicine is taught now in all medical schools. Data from the biological sciences provide information for resolving problems on environmental and ecological issues. The six-sigma revolution uses statistical quality control methods to monitor and improve industrial and engineering processes resulting in evidence-based decision making in industry. National statistics offices and international agencies contribute to evidence-based decision making in government and on public policy by collecting, collating, analysing and presenting data to populations at large and to governments in particular.

EVIDENCE-BASED PRACTICE IN STATISTICS EDUCATION

Evidence-based practice should also be employed in statistics education itself. How do we use context when teaching about variability, probability, inference and modelling? How do we interpret data from surveys, questionnaires or interviews and how are these related to the research hypotheses? To what extent are conclusions valid and reliable? Are we dealing with and explaining risk appropriately? Only with the answers to these intriguing questions will we be able to make informed decisions as we strive to reach an evidence-based society. Education ideas are shared on the web, through international and national projects, programmes, workshops and conferences in statistics education where diverse innovations are shared. The impact and relevance of new ideas are assessed and often adopted by others in their own teaching. Reports on the successes of recent statistics education programmes in South Africa and Latin America reflect the impact of the two ICOTS conferences and provide helpful ideas for other countries.

THE INTERNATIONAL PROGRAMME COMMITTEE EXECUTIVE

IPC Chair: John Harraway

Programme Chair: Roxy Peck

Information Manager: John Shanks

Scientific Secretary: Helen MacGillivray

Editor Proceedings: Alan McLean

LOCAL ORGANISING COMMITTEE

LOC Chair: Andrej Blejec

For more information visit the ICOTS-8 website: <http://ICOTS8.org>

OTHER FORTHCOMING CONFERENCES

2007 JOINT STATISTICAL MEETINGS Salt Lake City UT, USA, July 29 - August 2, 2007

The 2007 Joint Statistical Meetings will be held July 29 - August 2, 2007 at the Salt Palace Convention Center located at 100 South West Temple, Salt Lake City, Utah 84101.

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 at the meeting include oral presentations, panel sessions, poster presentations, continuing education courses, an 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. Salt Lake City is the host city for JSM 2007 and offers a wide range of possibilities for sharing time with friends and colleagues. For information, contact jsm@amstat.org

Website: <http://www.amstat.org/meetings/jsm/2007/>

JOINT SOCR (STATISTICS ONLINE COMPUTATIONAL RESOURCE) CAUSEWAY CONTINUING EDUCATION WORKSHOP 2007 UCLA, Los Angeles CA, USA, 6-8 August 2007



The 2007 joint SOCR/CAUSEway continuing education workshop aims at demonstrating the functionality, utilization and assessment of the current UCLA, SOCR and CAUSEweb resources. This workshop will be of most value to AP teachers and college instructors of probability and statistics classes who have interests in exploring novel IT-based approaches for enhancing statistics education. The workshop will provide an interactive forum for the exchange of ideas and recommendations for strategies to integrate computers, modern pedagogical approaches, the Internet and new student assessment techniques.

For further information:

http://wiki.stat.ucla.edu/socr/index.php/SOCR_Events_Aug2007/

**9TH INTERNATIONAL CONFERENCE OF THE MATHEMATICS
EDUCATION INTO THE 21ST CENTURY PROJECT
MATHEMATICS EDUCATION IN A GLOBAL COMMUNITY
Charlotte NC, USA, September 7 - 13, 2007**



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. The next conference is planned for September 7 - 13, 2007 in Charlotte, North Carolina. The chairman of the Local Organising Committee is Dr. David K. Pugalee, of the University of North Carolina Charlotte. The title of the conference is "Mathematics Education in a Global Community." Papers are invited on all innovative aspects of mathematics education. Our conferences are renowned for their friendly and productive working atmosphere. They are attended by innovative teachers and mathematics educators from all over the world, 25 countries were represented at our last conference for example.

For more information:

Alan Rogerson, arogerson@inetia.pl

Website: <http://math.unipa.it/~grim/21project.htm>