

International Association for Statistical Education



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The Sixth International Conference on Teaching Statistics



Durban, South Africa
7 - 12 July 2002
<http://www.beeri.org.il/icots6/>



ICOTS 6 - "Developing a Statistically Literate Society" 2002 is the year of ICOTS-6 for the IASE. Twenty years after the first ICOTS, at Sheffield UK, "Looking after the growing needs of statistics knowledge and competencies", the IASE has devoted this 2002 Conference to "Developing a Statistically Literate Society". The Local Organising Committee has prepared a wonderful venue and activities, and Durban awaits the arrival of the ICOTS-6 delegates. The International Programme Committee has prepared a very interesting and comprehensive Scientific Programme with something for everyone involved with teaching statistics.

The topics that will be explored include: statistics literacy, statistics education at the school level, post secondary level and in the workplace, statistics education and the wider society, research in statistics education, technology in statistics education, international perspectives on statistics education and other determinants and developments in statistics education. Contributed papers, poster sessions, demonstrations, forums, commercial exhibits and special sessions are planned. Six plenary sessions and an international forum on statistics literacy complete the framework.

This will be an occasion for you to see and hear the interesting world of Statistics Education, where statisticians, teachers, educators and practitioners work together, discussing better ways to present statistics and the many problems of statistics teaching and learning at all levels in society at large.

By late January 2002, about 300 delegates had already registered to attend ICOTS -6. Brian Phillips, Editor of the Proceedings, had received about two hundred papers and he is expecting up to one hundred more submissions for the conference. In order to improve the quality of the proceedings the IASE organised a refereeing process that is now complete. Thanks goes to Brian Phillips for his effort and his efficiency in carrying out this process and to the work of Dani Ben-Zvi. We have an updated Website that is able to give you all the information you need on the Conference. Please look carefully at: <http://www.beeri.org.il/icots6/>.

If you have not already registered and are considering attending and possibly giving a talk at ICOTS-6 please contact the International Programme Committee.

Important dates:

April 1, 2002: Poster presenters to have submitted abstracts. See the Posters portion of the ICOTS 6 Website, or contact Andrew I. Dale (dale@nu.ac.za). All authors must have registered by this date to have their paper published in the proceedings.
June 1, 2002: Detailed timetable and scientific programme announced.
July 1–5, 2002: Association for Mathematics Educators of SA (AMESA) Conference, Durban.
July 7, 2002: Pre ICOTS–6 Workshop: Census at School.
July 7–12, 2002: The Sixth International Conference on Teaching Statistics (ICOTS–6).

All statisticians and statistics educators and researchers are invited to join the IASE and ICOTS–6 in Durban, South Africa. We look forward to seeing all of you in Durban.

The ICOTS–6 International Program Committee Executive:

Maria–Gabriella Ottaviani

IPC Chair Dani Ben–Zvi

IPC Scientific Secretary Brian Phillips

ICOTS–6 Proceedings Editor

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Statistics Education Research Journal

The IASE is pleased to announce that the first issue of its new electronic journal, the Statistics Education Research Journal (SERJ) will be published in May 2002. SERJ replaces the Statistics Education Research Newsletter that began in 2000 under the editorship of Carmen Batanero, and is a natural development of that Newsletter, which will no longer be published. Material, which formerly appeared in the Newsletter, will in future be incorporated into the Journal.

Initially the SERJ will be published twice a year. Carmen Batanero (e-mail: batanero@ugr.es) and Flavia Jolliffe (e-mail: F.R.Jolliffe@gre.ac.uk) are the founding editors. The other members of the editorial board are M. Gabriella Ottaviani, Chris Reading, and Chris Wild. Sadly John Truran, who had agreed to be on the editorial board and contributed a great deal to the early discussions about changing the Newsletter into a Journal, died in December 2001. Carol Blumberg, who currently co-ordinates IASE publications, has also been involved in the development of SERJ.

The journal's aims include the encouragement of research activity in statistics education, the advancement of knowledge about students' attitudes, conceptions and difficulties as regards stochastic knowledge and the improvement of the teaching of statistics at all educational levels. The intended readership is those engaged in statistical education research or in any aspect of statistical education, that is both researchers and teachers. The first issue includes contributions on experiences in the training of researchers in statistics education, a bibliography on variation, tributes to John Truran, and information about past and forthcoming conferences. The editorial board welcomes the submission of papers and research reports, theoretical or methodological analyses, literature surveys, thematic bibliographies, summaries of research papers and dissertations relevant to the journal's aims. Papers giving details of ongoing studies or consisting of reflective thoughts may be submitted, provided that the theoretical framework and, in the case of studies, some preliminary results, are included. Contributions in English are preferred, but contributions in French and Spanish are also acceptable. All the papers will be refereed. Further information and guidelines for authors will be available on the journal's web page, which is currently under development. The web address will be announced widely at the earliest opportunity.

It is hoped that SERJ will have the full support of all those concerned with statistical education. It provides a long-needed outlet for statistics education research and is intended to supplement rather than compete with the Journal of Statistics Education and Teaching Statistics.



ISI 54th Session, Berlin, 2003

IASE Conference on Statistics Education and the Internet

This conference is to be organised by the IASE in co-operation with the Section on Stochastics of the German Mathematics Education Association and the Max–Planck–Institute for Human Development. It will immediately precede the ISI Session in Berlin and be held on the 11–

12 August 2003 at the Max-Planck-Institute for Human Development, Berlin.

The aim of this conference is to discuss the implications of Internet for the teaching and learning of Statistics, web based teaching, materials and resources. There will be a number of invited speakers, as well as the opportunity for others to give contributed presentations. The presentations are planned to include discussions of the main effects and challenges that the Internet is posing to statistics education.

In addition to research reports there will also be non-technical presentations for teachers who would like to learn how to make better use of the Internet in their everyday work in the classroom. This meeting is intended to be of interest to a wide cross section of society including teachers, educational administrators and researchers in statistical education.

An electronic copy of the proceedings and limited printed copies of papers presented will be produced after the conference.

Possible topics include:

- Overview of Internet resources for statistics education;
- Use of the Internet in statistics classes and in assessment;
- Training teachers to teach statistics with Internet resources;
- Research on how students learn or what they learn in teaching environments based on the web;
- Challenges for statistics education in the Internet age.

For further information contact the Scientific or Local Organising Committee.

Scientific Committee: Larry Weldon (weldon@sfu.ca), Canada (Chair); Joachim Engel, Germany (JoaEngel@aol.com); Brian Phillips, Australia (BPhillips@swin.edu.au); Gilberte Schuyten, Belgium (gilberte.schuyten@rug.ac.be).

Local Committee: Joachim Engel (JoaEngel@aol.com), Chair; Rolf Biehler (biehler@mathematik.uni-kassel.de), University of Kassel; Laura Martignon (lauram@mpib-berlin.mpg.de), Max-Planck Institute, Berlin.

Hipotesis Alternativa

We are glad to announce that Hipotesis Alternativa, the IASE Spanish language electronic newsletter, produced for over a year by Audy Salcedo, our National Correspondent in Venezuela, is now available at the Website <http://www.ugr.es/~iase/Hipotesis.htm>

The aim of this newsletter is to help Spanish speaking people keep in contact with the IASE and to keep updated about statistics education research and developments. Three issues will be published each year. Hipotesis Alternativa includes translations of some materials previously published in the Statistics Education Research Newsletter, as well as local papers and news of interest for statistical educators in Spain and Latin America. The following types of contributions are welcome: reflections on statistics teaching, learning and assessment, summaries of research projects, papers, theses and books, information about past and forthcoming conferences, specialised bibliographies and Internet resources of interest.

Those interested in sending their contributions are encouraged to contact

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Report on the European Workshop on the Teaching and Diffusion of Statistics

The General Council of Economy of the Balearic Islands Government (Spain) through the Balearic Institute of Statistics organised a two-day European Statistics Workshop on "The teaching and diffusion of statistics", which was held in Palma de Mallorca, Spain on October 10-11, 2001 with support from Eurostat and other European statistical offices. Conference topics included experiences in the diffusion and teaching of statistics, statistics and the wider society, statistical literacy, attitudes towards statistics, teaching of statistics, statistical training for business and professional work, and teaching resources including software,

multimedia and the Internet. Participants included over 70 representatives of the main national and regional statistical offices in Spain and other European countries, university lecturers and secondary school teachers. Presentations were organised into two main streams, each with plenary presentations and a Round Table Discussion.

The teaching of statistics

- Statistical content in the primary school mathematics curriculum. Alex Costa, Catalan Statistical Institute.
- Present and future Statistics Education. Carmen Batanero, IASE.
- A new view about the teaching of statistics. Carlos Matrán, University of Valladolid.
- Initiatives to improve the teaching of statistics at the University level. M. Pilar Muñoz Gracia, Valeri Cobo et al. Polytechnic University of Cataluña.
- Teaching materials: An example problem from problem example in the introductory statistics course. F. Montes & M. Plaza. University of Valencia, University of Castilla (La Mancha).
- The experience of Istat in the promotion of statistical literacy in schools. Giovanni Barbieri & César Margarita, ISTAT.
- Round Table on the Teaching of Statistics. Antoni Montserrat, Economy Vice President of the Balearic Government; Catalina Juaneda, University of the Balearic Islands; Lourdes Llorens, Basque Statistical Institute; Miguel Castro, Spanish Statistical Institute; and Carmen Batanero, IASE.

Statistical offices' activities in the diffusion of statistics

- The European view of Statistics. Amador Rodríguez-Prieto, Eurostat
- The ALEA project. Teaching and diffusion of statistics on the Internet. Pedro Campos, Portuguese National Statistical Institute.
- Statistical information points. Antonio Rufián, Andalusian Statistical Institute.
- Reflections about the diffusion of statistics in small areas. José Luis Cervera, Valencian Institute of Statistics.
- Round Table on the Diffusion of Statistics. Antoni Montserrat, Economy Vice President of the Balearic Government; Antonio Argüeso, Spanish National Statistical Institute; Jordi Oliveres, Regional Statistical Institute of Catalonia; Pedro Campos, Portuguese National Statistical Institute; Amador Rodríguez Prieto, EUROSTAT.

About 30 papers were received from Argentina, Chile, France, Israel, Italy, Portugal and Spain. The Institute is now producing a book with these papers, which will be published in their original languages and will include a summary in Spanish, English, Catalan and French. More information is available from the Institute (Tel: 34 971 176755), E-mail (ibae@caib.es) or from the conference web page: http://www.caib.es/ibae/esdeveniment/jornades_10_01/main.html

Report on the Meeting of Stochastics Section of German Math Education Association (Gesellschaft für Didaktik der Mathematik) in Kassel, November 9–11, 2001

Statistical Thinking and the Curriculum for Grades 1 – 13

The following lectures were held:

1. Manfred Borovcnik (Klagenfurt): From Stochastic Thinking to the Current Debate on Statistical Thinking
2. Rolf Biehler (Kassel): Concepts of Statistical Thinking
3. Hans-Dieter Sill (Rostock): On Process-oriented Observation of Random Events and its Consequences for Instructional Design
4. Siegfried Zseby (Berlin): Simulations in Mathematics of Finance
5. Dieter Wickmann (Köln): Demonstration of a Computer Program for Bayesian-Statistics

Report on the discussion of the probability and statistics school curriculum towards drafting a declaration.

Inspired by the current debate on statistical thinking and international curricula for its implementation (e.g. NCTM Standards, Quantitative Literacy Project) the Section is preparing a declaration calling for changes and innovations in the school curriculum regarding stochastics instruction. The objective is to present a statement outlining a school curriculum throughout all grades that recognises statistical literacy and quantitative reasoning skills. The first version of a declaration has been presented and a vivid internal discussion process has been initiated. One controversial issue relates to the role of formal mathematics in probability and statistics instruction. The statement is intended as a guideline for curriculum planners for all types of schools in Germany and Austria. The plan is to continue the internal discussion process until spring 2002 and then to open the debate on the Internet to the public, before voting on a final declaration, sometime after the end of 2002.

The 2002 conference of the Stochastics Section will be held from November 8–10 in Dortmund with the topic: Stochastics education and new technologies.

Further information (in German) on the 2001 meeting and other events including announcements for the 2002 meeting can be found on the Website <http://www.uni-klu.at/ak-stochastik> or by email from, ak-stochastik@ph-ludwigsburg.de

Report on the The Royal Statistical Society (RSS) and Statistical Education

The RSS has always been concerned with the promotion of statistical education. This is well evidenced in its support for the RSS Centre for Statistical Education at Nottingham Trent University, U.K. (<http://science.ntu.ac.uk/rsscse/>) and through its various meetings and publications. More recently aware of the serious lack of suitably qualified statisticians to meet a considerable demand from government, education and industry and commerce it has established an Educational Strategy Group.

This group will co-ordinate the Society's educational activities and draw up a long term education strategy to take over much of the work of the Society's old Education Committee and Education Section. The Group includes members drawn widely from education and includes people with expertise in all phases from Primary to Higher Education, as well as people with knowledge of government and industry and those concerned with the school curriculum. It plans to set up networks of people interested in all these areas to promote the exchange of ideas. The group is chaired by Harvey Goldstein, Professor of Statistics at the Institute of Education, University of London.

A major concern of the new Group is to reach out to the general public and various proposals for taking part in popular science events are being considered. One of the challenges in doing this is to find ways of explaining the relevance of statistics through well-motivated applications and the Group welcomes any suggestions or materials that people think may be useful. The Centre for Statistical Education has a great deal of such material, including the recent 'Census at School Project' which provides survey data on some 60,000 pupils, their schools and their homes. In addition the journal 'Teaching Statistics' contains expository articles, materials and general information about statistics education (contact Gerald Goodall, g.goodall@rss.org.uk). The Group is keen to collaborate with other bodies concerned more widely with Mathematics and Science education and has already set up some links with professional bodies in this area which we very much hope we can extend and consolidate these. From time to time the Group will be identifying issues that need detailed investigation and will be looking at the possibilities for commissioning research and development. It expects that these issues will be identified from its existing activities and also from external bodies and individuals, for example in response to educational policy initiatives that are aimed at curriculum content and structure. We are very open to suggestions about our activities not only from fellows of the RSS but also from others concerned with enhancing statistical literacy. The secretary to the group is Paul Gentry (p.gentry@rss.org.uk) or you can email Harvey Goldstein at h.goldstein@ioe.ac.uk. The RSS Website www.rss.org.uk is also a useful source of activities about the Royal Statistical Society generally.

Forthcoming Conferences with Statistics Education components

The Latin-American meeting in Mathematics Education is to be held at the Instituto Politécnico J. A. Echevarría, La Habana, Cuba, 15–19 July, 2002.

This conference is organised by the Latin American Committee for Mathematics Education. The activities are intended to encourage delegates to share experiences and research on the teaching and learning of mathematics including the teaching and learning of statistics and statistical thinking. For more information contact by email ecarlos@ind.ispjae.edu.cu or the Website: <http://www.cinvestav.mx/clame>.

PME-NA XXIV. Psychology of Mathematics Education. North American Chapter will be at the University of Georgia, Athens, Georgia, U.S.A. , October 26-29, 2002.

The purpose of this meeting is to provide a forum for scholarly discussion of central and current issues in mathematics education, particularly as they pertain to the role of psychology in mathematics education. English is the official language of the conference. The theme for PME-NA XXIV is "Linking Research and Practice". The conference aims to highlight examples of the interplay between research and practice (i.e., practice that has been shaped by research and research that grows out of practice). For more information, see the Website: (<http://www.pmena.org/2002>).