

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"

This July, the Sixth International Conference on Teaching Statistics will take place in Cape Town, South Africa. Due to circumstances that were beyond of the control of ICOTS-6 IPC, IASE Executive or the ICOTS-6 local organisers, the ICOTS-6 venue has been moved from its original location of Durban. This was because the South African Department of Foreign Affairs recently moved the date of the Inaugural meeting of the African Union forward to the same week as ICOTS, at the Durban International Conference Centre (our planned venue). Due to the security arrangements and other inconveniences, the ICOTS local organisers have arranged to move the conference to Cape Town, at the Holiday Inn Cape Town. Costs remain the same as advertised for Durban.

Furthermore, the IPC Executive along with the local organisers have made the decision to drop the hard copy version of the ICOTS-6 Proceedings. This is because there was virtually no demand for it from the registrants (they had to tick a box and pay an extra \$US40) and as there would be over 1600 pages in the written proceedings, it would be a considerable undertaking.

Our plan now is to provide participants with the following:

- CD with all papers and other information for everyone registered (included in the registration fee);
- Abstracts book(s) of papers and posters for everyone;
- Program booklet for everyone;
- Special hard copy edition of selected papers for local teachers and others who would like to buy it;
- A list of participants and e-mails.

We suggest authors take a few spare copies of their papers to distribute to those who really need it.

Brian Phillips, the Editor of the Proceedings, has completed editing of all the papers and is well advanced in having the CD produced. All the usual information found in a proceedings book will be included. It will have an abstracts section in HTML which will be searchable, then a link from each abstract to the appropriate

paper. Actually, the papers look much better on the CD as, for example, the colours show out. No doubt the CD will be sensational. Thanks to Brian, it seems like we are moving into the 21st Century.

By early May, over 330 delegates had already registered (with a large number of local delegates still to register). This will be a unique occasion for you to be involved in the interesting world of Statistics Education; a very peculiar world in which 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 and in the society at large.

If you have not already registered and are considering attending ICOTS-6, please contact the Local Organising Committee – see <http://icots.itikzn.co.za/> or the International Programme Committee.

Important dates:

June 1, 2002: Detailed timetable and scientific program announced on the ICOTS-6 Web site, <http://www.beeri.org.il/icots6/>

July 1-5, 2002: Association for Mathematics Educators of SA (AMESA) Conference, Durban

July 6, 2002: Pre ICOTS-6 Workshop: Census at School, Durban

July 7, 2002: Pre ICOTS-6 Workshop: Census at School, Cape Town

July 7-12, 2002: The Sixth International Conference on Teaching Statistics (ICOTS-6), Cape Town

All statisticians and statistics educators and researchers are invited to join the IASE and ICOTS-6 in Cape Town, South Africa. We look forward to see each of you in July.

The ICOTS-6 International Program Committee Executive:

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Report from OZCOTS-4

A two day Statistical Education Workshop was held on December 4 and 5, 2001, hosted by statistics@swinburne at the Swinburne University of Technology, Australia. The aim of this very successful series of meetings is to give anyone interested in statistics education the opportunity to hear what some of their colleagues have been doing in the past twelve months.

The Program consisted of workshops and regular presentations. The three workshops were:

- Excel Workshop, presented by Rodney Carr, Deakin University;
- On-line workshop: "Live-to-Air Online Statistics Class" presented by Lyn Roberts, Robyn Pierce & Chris Turville, University of Ballarat ;
- PaceXL Workshop presented by Robin G Boyle, Deakin University.

There was a session on "The statistical re-education of psychology" in which a number of researchers, including students, headed by Fiona Fidler, Geoff Cumming from La Trobe University gave the following talks:

- What can medicine teach psychology about statistical reform?
- Editorial influence on statistical practices in the Journal of Consulting and Clinical Psychology;
- Researchers' interpretation of graphically-presented confidence intervals and other error bars: Implications for replication;

- Researchers' interpretation of the width of graphically-presented confidence intervals and other error bars
- Inference by eye: Some rules of eye to guide the interpretation of graphically-presented confidence intervals and other error bars".

Regular presentations included:

- Brian Phillips, Swinburne University of Technology. IASE events in 2001;
- Yong Goo Lee, Korea. Teaching Statistical Concepts to young students using SPSS mapping;
- Peter Petocz and Anna Reid, University of Technology, Sydney and Macquarie University, How students experience statistics, learning statistics and teaching Statistics;
- Julie Pallant, Swinburne University of Technology Developing a Scale of attitudes to Statistics;
- Peter Martin, University of Ballarat: The Six Sigma Enigma;
- Alice Richardson, University of Canberra: The beasts of the field, the fowls of the air and the fishes of the sea: estimation of population size;
- Ken Sharpe: University of Melbourne. Detection of recombinant human erythropoietin (r-HuEPO) abuse in athletes;
- Neil Diamond and Ewa Sztendur, VUT Teaching S-Plus for 1st Years;
- Rodney Carr, Deakin University Some Issues In Teaching Statistics To Off campus students;
- Jason Giri, Peter Martin, Robyn Pierce, University of Ballarat 'Hypothetical' based around the work of Rev John Snow – for teaching nurses.

The presentations were of the highest standard with a number of presenters taking the opportunity to trial their proposed ICOTS-6 talk. If this is typical of what we can expect to hear at ICOTS-6, we are assured of a wonderful experience.

Some images of the sessions can be seen in the photo gallery of the OZCOTS4 site, <http://www.swin.edu.au/math/iase/ozcots4.html>

Papers from the IASE Satellite Conference on Statistical Literacy

Most of the papers and or presentations given at the IASE Satellite Conference on Statistical Literacy Seoul, Korea, 21-22 August, 2001 can now be found on <http://www.swin.edu.au/math/iase/statlit.html>



IASE Satellite Conference on Statistics Education and the Internet

Organisers: This conference is to be organised by the IASE in co-operation with the German Statistical Society, the Section on Stochastics of the German Mathematics Education Association, the Max-Planck-Institute for Human Development and the Probability and Statistics Interest Group of the German Mathematical Association.

Dates and venue: It will immediately precede the ISI session in Berlin and will be held during the 11-12 August 2003 at the Max-Planck Institute for Human Development, Berlin.

Aims: The aim is to discuss the implications of the Internet for teaching and learning statistics: web based teaching, learning, materials and resources.

Audience: This meeting is intended to be of interest to a wide cross section of society, including teachers, educational administrators and researchers in statistical education.

Electronic proceedings and a limited number of printed copies of the set of refereed papers presented will be produced after the conference.

Structure: 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, suitable for teachers who would like to learn how to make better use of Internet resources in their everyday work in the classroom.

Possible topics include:

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

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

Local Committee: Joachim Engel, German IASE National Correspondent (Chair), Rolf Biehler, University of Kassel (biehler@mathematik.uni-kassel.de), and Laura Martignon, Max-Planck Institute, Berlin (lauram@mpib-berlin.mpg.de)

More information can be obtained from: Larry Weldon (weldon@sfu.ca) or Joachim Engel (JoaEngel@aol.com) or refer to the following web page: <http://.ph-ludwigsburg.de/iase/>

Papers should be sent to the Conference Chair, Larry Weldon. Details of formatting and guidelines will be made available at the web site. The deadline for the submission of papers is April, 30, 2003.

Statistics Education Research Journal

The first issue of the Statistics Education Research Journal (SERJ) is now finished and available at the SERJ web site <http://fehps.une.edu.au/serj>

This is the electronic journal of the International Association of Statistical Education (IASE). Its aims include the encouragement of research activity in statistics education, the advancement of knowledge about students' attitudes, conceptions and difficulties and about improved statistical pedagogy.

Access to the first two issues is free to everyone, but in the future only IASE members will be able to access current issues. It is hoped that you will support this new project and we look forward to your reactions, suggestions and contributions.

The editors are: Carmen Batanero, Flavia Jolliffe, Annie Morin, Maria Gabriella Ottaviani, Chris Reading and Chris Wild.

The first issue contains the following:

1. Editorial.
2. Introduction to the Editorial Board.
3. John M. Truran (In Memoriam).
4. Sharing Experiences in the Training of Researchers. A set of short notes by Joan B. Garfield, Carmen Batanero, Carolina Carvalho, David Green, Michel Henry and Bernard Parzys, Lionel Pereira- Mendoza, Ernesto Sánchez, Chris Reading and Susan Starkings. Introduction by Flavia R. Jolliffe.
5. The International Research Forums on Statistical Reasoning, Thinking and Literacy: Summaries of presentations at STRL-2 by Ruth Heaton and William Mickelson, Maxine Pfannkuch, Dani Ben-Zvi, Arthur Bakker, Chris Reading, Mike Shaughnessy, Jane Watson, Jere Confrey and Katie Makar, Jonathan Moritz, Rolf Biehler, Graham A. Jones et al, Mark Earley, Robert delMas, Joan G. Garfield and Beth L. Chance and Pat Thompson. Introduction by Chris Reading.
6. Maria Meletiou. Conceptions of Variation: A Literature Review.
7. Recent Publications.
8. Recent Dissertations.
9. Information on Past and Forthcoming Conferences.

S-PLUS

A FREE download of the S-PLUS student edition is now available from Insightful Corporation (the publisher of S-PLUS) to students or faculty using the software in their classrooms. This download allows access to the software for a full year. The student edition is also available on CD for a media charge of US\$20. Information on this free student edition and download instructions are available from:

<http://elms03.e-academy.com/splus/>

For further information for those residing in North America and South America, contact Michelle Bula at mbula@insightful.com. Outside of the Americas, please look at the Insightful website at <http://www.insightful.com> for contact information.

Technology in Maths Education

Technology in Maths Education (TIME) is a free academic service to all who are interested in using technology for teaching mathematics. This academic newsletter is sent to people who it is believed to have an interest in using technology in mathematics education. A lot of encouraging feedback has made Bernhard Kutzler continue with this newsletter.

To get on the mailing list to receive this newsletter please contact Bernhard Kutzler E-mail: bernhard@kutzler.com

Statistics on the Streets

The Dirección General de Economía of the Balearic Islands, Spain is launching its project "Statistics on the Streets" through the Instituto Balear de Estadística. The aim is to extend and diffuse the teaching of statistics and increase statistical literacy in the Balearic Islands. Statistical offices are now conscious of the relevance of statistical knowledge for the general citizen so that they are in a position to take informed decisions and to be able to interpret everyday random phenomena. The following actions were carried out in 2001:

- A book has been produced called "Dice and data" where elementary statistical concepts and historical information about the development of statistics are introduced in an easy way, in comic format.
- The European Workshop on "Teaching and the Diffusion of Statistics" took place during October, 2001. This was sponsored by the Balearic Government, Eurostat and with scientific support from the IASE. As a result of this workshop an important set of papers were collected.

Current actions to be carried out in 2002 include the following:

- The production of the proceedings of the European Workshop on the "Teaching and the Diffusion of Statistics". The book contains 33 papers in 5 languages, with summaries in English, French, Spanish and Catalan. The book is to be accessible from the web site www.ibae.caib.es;
- The development of a course to train secondary school mathematics teachers to teach statistics in collaboration with the Ministry of Education;
- Training courses for workers in statistical offices and for journalists;
- Publication of a new book: Dice and data II, to continue the diffusion of statistical concepts among school students and the general public;
- Statistical meetings in schools and universities. Physical space and technological equipment will be provided where students will be able to access statistical information and participate in games, competitions, surveys, with the aim of reinforcing the teaching of statistics in the Balearic Islands.
- Hosting the first International Virtual Conference on Statistics Education: meeting point for teachers, researchers, statisticians and those interested in improving the teaching of statistics and exchanging their experience.
- Production of an Electronic Journal on Statistics Education: the aim of this journal is to provide teachers and statistics educators with an opportunity to discuss teaching problems and exchange their experiences and solutions.

More information is available from Mauricio Beltran, INSTITUT BALEAR D' ESTADÍSTICA (IBAE), Sant Feliu 8-A 07012 PALMA DE MALLORCA Illes Balears. Tel: 971-176755 FAX: 971-177362 E-mail: mbeltran@ibae.caib.es

Statistical Education at Czech Universities

The summary below is from a paper by Richard Hindls, Josef Štěpán, and Stanislava Hronová from University of Economics & Charles University, Prague, Czech Republic.

SUMMARY

Statistical education at Czech universities began in the period between the two world wars. After the Second World War, this education reached a high degree of independence and a good professional position at international level. Nowadays, introductory statistics and statistical methods are compulsory in almost all non-statistical specialities at the Faculties of Economics and there is a specialisation in statistics at the Charles University and the University of Economics. New requirements in the European Union lead to modifications of course contents, namely in the area of national accounting, price and industrial statistics, sampling surveys, time series, conjuncture analysis and computational statistics.

Keywords: teaching statistics, teaching economics and business students.

If you are interested in learning more of this paper then please contact the authors on the following E-mail addresses hindls@vse.cz or hronova@vse.cz

Forthcoming Conferences with Statistics Education Components

The InterAmerican Conference on the Teaching of Statistics, Buenos Aires, Argentina, October, 28 to November 1 2002. This conference is organised by the InterAmerican Statistical Institute (IASI) and the Universidad Nacional Tres de Febrero, in connection with CLATSE V (LatinoAmerican Conference of Statistics), which is organised by the Argentinean, Chilean and Uruguayan Statistical Societies and the Argentinean Group of Biometry. The Organising Committee are Ana Haedo, María Teresa Blaconá (SAE), Susana Filippini, Laura Marangunich, and Ana Agulla (GAB), Roberto Muiños(IASI), Ernesto Rosa and Celina Curti (UNTREF).

More information can be obtained from Celina Curti E-mail: ccurti@ciudad.com.ar

Details of the VISIT-ME-2002 Vienna International Symposium on Integrating Technology into Mathematics Education, 10-13 July 2002 is now available at <http://www.acdca.ac.at/visit-me-2002>. You can find titles and abstracts of all the presentations. Keynote lectures are Bruno Buchberger (Austria), Miguel de Guzman (Spain), Albert Rich (Hawaii, one of the authors of Derive) and Hans-Georg Weigand (Germany). Prof. Buchberger's opening keynote has the provocative title "Teaching Without Teachers?"

You can register online via <http://www.acdca.ac.at/visit-me-2002>.

The Stochastic Thinking Group at the Third Conference of the European Society for Research in Mathematics Education (CERME 3), Bellaria, Italy, February 28 - March 3 2003. CERME is a conference organised by the European Society for Research in Education, and is designed to foster a communicative spirit. It deliberately and distinctively moves away from research presentations by individuals towards collaborative group work. The organisers for Group 5 (Stochastic Thinking) invite research-based papers on stochastic thinking, including probability, statistics and the interface between these domains. They will be particularly interested in theoretical, empirical or developmental papers that address one or more of the following themes (though any papers of relevance to the overall focus of the group will also be considered):

- The nature and development of stochastic thinking and its relationship to other types of mathematical thinking, including the interface between probabilistic and statistical thinking, such as in modelling or data exploration;
- The relationship between stochastic thinking and external factors such as teaching methodologies, tools, tasks and setting;
- The role of computer-based tools, including microworlds, on stochastic thinking;

- The elaboration of theoretical frameworks that may provide insightful models for interpreting evidence from research on stochastic thinking.

Details of conference and format for papers are given on the CERME3 web site <http://fibonacci.dm.unipi.it/~didattica/CERME3/>. More information is available from the organisers: Dave Pratt (Group 5 Coordinator); (dave.pratt@warwick.ac.uk), Carmen Batanero (batanero@goliat.ugr.es), Rolf Biehler (biehler@mathematik.uni-kassel.de) and Michel Henry (michel.henry@