

Summer 2006

http://www.stat.auckland.ac.nz/~iase/

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A WORD FROM THE PRESIDENT OF IASE

Hello statistics educators,

The IASE REVIEW 2005 is available now on our website at the publication page:

http://www.stat.auckland.ac.nz/~IASE/publications/review/2005.pdf.

Highlights of 2005 were the IASE sessions at the ISI Biennial and the Satellite conference 'Statistics education and the communication of statistics', both at Sydney. IASE also welcomes two new national correspondents, Hanan Innabi from the United Arab Emirates and James Ntozi from Uganda. Hanan reports in the IASE REVIEW about what is happening with statistics education in the United Arab Emirates. For 2006 the most important event will be ICOTS-7 in Salvador in Brazil. For the coming years an important joint study with ICMI has been set up concerning teacher education. Please download and print for stimulating reading the IASE REVIEW 2005!

Contents:

- 1. IASE executive 2005-2007.
- Communication from the president of the IASE presented at the IASE general assembly during the ISI-55 meeting.
- First announcement of the joint ICMI/IASE study "Statistics education in school mathematics: challenges for teaching and teacher education".

- 4. Getting more and more excited about ICOTS 7.
- 5. Statistics Education Research Journal (SERJ).
- Special IASE thanks to Flavia Jolliffe, original founding member of SERJ.
- 7. Report on IASE/ISI satellite conference "Statistics education and the communication of statistics", Sydney, 4–5 April 2005.
- 8. IASE activities at the 55th session of the International Statistical Institute, 5–12 April 2005, Sydney.
- IASE invited session on "Publishing in statistics education journals: views from the editors" at the joint statistical meetings, Minneapolis, Minnesota, USA, 8 August 2005.
- SRTL-4, the fourth International research forum on Statistical Reasoning, Thinking and Literacy, New Zealand, 2–7 July 2005.
- 11. Update on the IASE publications and links webpages.
- 12. Curricular development in statistics education. Proceedings of the IASE round table.
- 13. Update on the International Statistical Literacy Project (ISLP).
- 14. Statistics education in the United Arab Emirates.
- 15. Meetings related to statistics education in 2005.
- 16. National correspondents.
- 17. Becoming a member of IASE.

Gilberte Schuyten President of IASE

International Association for Statistical Education

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ICOTS-7: WORKING COOPERATIVELY IN STATISTICS EDUCATION Information about Registration, Accommodation, and Tours

SALVADOR (BAHIA), BRAZIL, JULY 2-7, 2006



Local organisers: Pedro Alberto Morettin, (Chair); Lisbeth K. Cordani, Pedro Silva, Clélia Maria C. Toloi and Wilton de Oliveira Bussab.

IPC Executive Committee: Carmen Batanero (Chair), Susan Starkings (Programme Chair), Allan Rossman and Beth Chance (Editors

of Proceedings), John Harraway (Scientific Secretary) and Lisbeth Cordani (Local organisers representative).

The International Association for Statistical Education (IASE) and the International Statistical Institute (ISI) are organizing the Seventh International Conference on Teaching Statistics (ICOTS-7) which will be hosted by the Brazilian Statistical Association (ABE) in Salvador (Bahia), Brazil, July 2–7, 2006.

Almost all the information about ICOTS-7 is on the website: http://www.maths.otago.ac.nz/icots7/icots7.php and in particular under the "Registration" tab there, where there is information about registration, accommodation and tours. If you have problems with accommodation arrangements or tour details contact Mrs Rosangela Magalhaes at rosiesuzano@eventusturismo.com.br.

Although the ICOTS7 information is on the website, we draw your attention to the following:

The timetable and program details with links to sessions and abstracts are now available under the "Timetable" tab. We have to congratulate the organisers for this effective feature, which will not only enable planning of personal itineraries but also provide a possibility to get familiar with the presentations way ahead of the conference.

Another view to the conference is available under the "Scientific Programme" tab. Here you can find links to the lists of keynote speakers, topics, contributed papers, posters, special interest groups, and special sessions. Each list has links to paper abstracts and authors.

There are reduced fees for IASE/ISI members, and participants from Latin American or Developing Countries.

There is a program for accompanying persons – some details are given on the web page. Accompanying persons may choose what they wish to attend and pay for the items they choose while in Salvador. There are some details on the web page about the pre-arranged tours.

REASONING ABOUT DISTRIBUTIONS: A COLLECTION OF CURRENT RESEARCH STUDIES PROCEEDINGS OF SRTL-4

Report by Joan Garfield

We are pleased to announce the publication of Reasoning about Distributions: A Collection of Current Research Studies, a unique CD that contains research papers on reasoning about distributions presented at the Fourth International Research Forum on Statistical Reasoning, Thinking and Literacy (SRTL-4) held in July 2005 at the University of Auckland, New Zealand. Many of these papers (all written in English) contain video segments (in English or with English subtitles) of student or teacher interviews, or learning interactions. The video segments and research studies provide a rich resource for researchers and teachers. Note: revised versions of some of these papers will appear in a special issue of the IASE Statistics Education Research Journal in November 2006. However, they will not contain video links and not all papers in the CD will be in this issue.

Due to ethical agreements with participants in the research studies, the video segments included on the CD are to be used only for research purposes. For any other purpose (e.g., professional development), permission must be obtained from individual authors. The CDs are available for a minimal cost that covers materials and postage. They may be purchased from Dr Katie Makar at the University of Queensland (Australia). The total cost including shipping in Australia and New Zealand is A\$20 and the total cost for shipping overseas is A\$25 or US\$20. Please make checks (in Australian or US dollars) payable to Katie Makar (SRTL4). Bank transfers can be arranged.

Mail checks to:
Dr Katie Makar (SRTL4)
School of Education, SBS Bldg 24
University of Queensland. QLD 4072. AUSTRALIA.

SRTL-5

The Fifth International Research Forum on Statistical Reasoning, Thinking, and Literacy The University of Warwick, Coventry, UK, August 11–17, 2007

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

Report by Dani Ben-Zvi

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. We encourage research papers that address reasoning about statistical inference at all levels of education including the professional development of elementary and secondary teachers.

We encourage submission of research papers that address questions such as the following:

- 18. What are the simplest forms of statistical inference that students can understand?
- 19. How does reasoning about statistical inference develop from the simplest forms (informal) to the more complex ones (formal)?
- 20. How can instructional tasks and technological tools be used to promote the understanding of statistical inference?
- 21. What are sequences of activities that can help student develop a conceptual understanding of statistical inference?
- 22. What types of misconceptions are found in students' reasoning about statistical inference?
- 23. What types of foundational knowledge and reasoning are needed for students to understand and reason about statistical inference?
- 24. How do students develop an understanding of the language used in describing statistical inference (e.g., significance, confidence)?
- 25. How does an understanding of statistical inference connect and effect understanding of other statistical concepts?
- 26. What are useful items and questions to use to assess understanding of statistical inference?

The local SRTL-5 organizers:

Janet Ainley, University of Warwick, janet.ainley@warwick.ac.uk
Dave Pratt, University of Warwick, dave.pratt@warwick.ac.uk

SRTL-5 Website: http://srtl.stat.auckland.ac.nz/

INFORMATION ON INTERNATIONAL STATISTICAL LITERACY PROJECT (ISLP)

Report by Carol Joyce Blumberg In order to improve the usefulness of the ISLP webpages we are conducting a survey of users and potential users of these webpages. If you have not yet filled out this (anonymous) survey, please go to http://course1.winona.edu/cblumberg/survey.htm.

For those unfamiliar with the ISLP, its mission is to provide those interested in statistical literacy with information and resources and to aid them in the development of statistical literacy around the world. Presently, the major focus has been on webpages that list these resources in useful groupings. For each resource, a few sentences are given that describe that item and complete access or ordering information is given. The emphasis is on items available for free on the Internet.

As you may be aware, the webpages of the International Statistical Literacy Project have been on the Internet for three years now. So, several of the page coordinators have decided to step down. Hence, we are seeking new page coordinators or co-coordinators for several of the pages. In particular, coordinators or co-coordinators are needed for the General Resources, Primary Level, Secondary Level, Adult Learner, Teacher Training, and Journalists and other Mass Media webpages. To explore these pages and the other pages of the website, go to http://course1.winona.edu/cblumberg/islplist.htm. If you are interested in helping with any of these pages, please contact me at cblumberg@winona.edu.

We would like to expand the material on the webpage (http://course1.winona.edu/cblumberg/islpart.htm) that has publicly available newspaper and Internet articles and reports (both good and bad) that can be used when teaching statistics. If you have any good articles or reports (especially from countries other than the USA), please submit the articles along with an approximately 3- to 5-sentence paragraph of how they can be used when training teachers to Eunice Goldberg at egoldberg@nl.edu. Make sure to include a complete reference to where the article is located and, if possible, information on who needs to be contacted to get permission to reproduce the article on our website.

Finally, the website mostly contains resources in English. If you know of any applicable resources in a language other than English, please send me (at cblumberg@winona.edu; Fax: ++1-507-4575376) a description of the item in the language of publication. Also, include an English translation of the description. Descriptions of items in English are also welcome and can be sent to either me or the appropriate page coordinator (http://course1.winona.edu/cblumberg/islpcoord.htm). Please feel free to contact me directly or by using the (http://course1.winona.edu/cblumberg/survey.htm) survey form with any suggestions that you have for the ISLP and its webpages.

IASE ACTIVITIES AT THE 56TH SESSION OF THE ISI

Reported by Allan Rossman

IASE organizes several sessions at the 56th Session of the ISI, to be held in Lisbon on 22–29 August 2007:

- Research on Reasoning about Distribution, Joan Garfield.
- 2. How modern technologies have changed the curriculum in introductory courses, Lucette Carter.
- 3. Preparing Teachers of Statistics, Allan Rossman.
- 4. Research on the use of simulation in teaching statistics and probability, Rolf Biehler.
- Optimising Internet-based Resources for Teaching Statistics, Ginger Holmes Rowell.
- Observational Studies, Confounding and Multivariate Thinking, Milo Schield.
- 7. Teaching of Official Statistics, Sharleen Forbes.
- 8. Teaching of Survey Statistics, Steve Heeringa.
- 9. Studying variability through sports phenomena, TBD.
- Use of Symbolic Computing Systems in Teaching Statistics, Zaven Karian.

IASE organizing committee: Allan J. Rossman (USA) – Chair Gilberte Schuyten (University of Gent, Belgium) Chris Wild (University of Auckland, New Zealand) For more information visit the ISI 56 website at http://www.isi2007.com.pt/.

IASE WEBPAGE NEWS

Reported by Andrej Blejec

IASE webpage is a valuable resource of statistics education information. In past few months, the webpage has become richer with the extensive list of links and publications. The "Links" section provides links categorized in several groups: Research, Learning, Assessment, Curriculum Guidelines, Bibliographies, Discussion lists, Indexes and Abstracting Services, Major Journals, Other Journals, Newsletters, Publishers, Datasets, Java Applets, Software, Statistical Calculators, Organizations, International Agencies and Non-Profit Organizations. Each group provides links to interesting and useful pages for statistics educators and researchers. The other interesting link is a "Publications" section with a list of IASE past publications and links to many other interesting sites. Of special interest is the Dissertations in Stats Ed section. IASE is beginning to build what we intend to become a comprehensive archive of doctoral dissertations in Statistics Education. We have to thank Chris Wild for the careful updating and maintenance of IASE web pages.