

# INTERNATIONAL ASSOCIATION FOR STATISTICAL EDUCATION <a href="http://www.cbs.nl/isi/iase.htm">http://www.cbs.nl/isi/iase.htm</a>

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# 1. Report from the IASE President 2000

The period from June to August has been a very busy one for the IASE. The work of the ICOTS-6 IPC is going very well and has reached a stage where most of the session organizers have been appointed and a general call for papers has gone out. I am especially pleased with the most positive response from so many people and we now have over 70 sessions in place. A progress report appears later and I wish to thank all those involved in getting the program off to such a good start. I especially want to thank Maria-Gabriella Ottaviani, the IPC Chair, Dani Ben-Zvi the IPC Scientific Secretary and Dani's son Dagan who has done such a wonderful job in developing a great IPC website for the conference, see



http://www.beeri.org.il/icots6/. Furthermore, the local organizers under the guidance of Delia North as Chair, and Linda Haines, President South Africa Statistical Association, are also doing a terrific job with the local planning, see their website <a href="http://icots.itikzn.co.za/">http://icots.itikzn.co.za/</a>. It is now up to all those involved with statistical education to show expressions of interest by responding to the call and making others aware of this great event so that all concerned about statistical education experience a very special event.

In early July I was involved in the Statistical Society of Australia's Statistical Education workshop in Adelaide. This was a great success with over 40 people from across Australia and New Zealand, plus Canada and the USA, attending a wonderful program, superbly led by David Moore who gave the plenary address. In August, ICME-9 was held at the convention centre in Makuhari, near Tokyo, Japan and was attended by over 2000 people from about 50 countries. Having mathematics and statistics educators in the same meeting provided a great opportunity to observe the similarities and differences between the methodologies used in the two disciplines. One thing that became clearer was that both mathematics and statistics educators are increasingly facing many of the same challenges, especially how technology should be best used in the classroom. The fact that it was reported that the Japanese have cut their hours of mathematics in schools by up to 30% is very disturbing, but may indicate that we all have to be even more diligent about keeping our courses up to date using the best methods available. The main IASE involvement was organising a topic group on The Teaching and Learning of Statistics. I would like to thank Susan Starkings, the Topic Chair, and the excellent group of speakers from across the globe who presented most interesting and varied papers in two sessions. The talks ranged from research into statistical education for young children, attitudes and intuitions of school students in statistics, conceptual challenges facing senior school students, the use of multimedia, methods for teaching advanced topics students in higher education and problems facing teachers of statistics in transitional countries, see the list on http://www.swin.edu.au/maths/iase/icme9.html. It is planned that a booklet of these papers will be available soon. I am pleased to say that Joe Wisenbaker of University of Georgia, USA has agreed to co-ordinate our efforts at ICME-10 which will be held in Copenhagen in 2004.

The major IASE activity over this period was the IASE Round Table Conference on Training Researchers in the Use of Statistics. This most successful event was due to the hard work of a lot of people and I especially wish to thank Carmen Batanero for organising such an excellent event and to the Japanese hosts, in particular Professor Yuki Miura, President of the Japan Statistical Society and Dr Ryoichi Shimizu, the Director General, The Institute of Statistical Mathematics, Japan. Carmen has presented a longer report below.

In October I was fortunate enough to be invited to the Indian Statistical Education Centre, ISEC Jubilee celebrations. This involved two meetings in opposite sides of the country and a wonderful opportunity to learn about ISEC as well as see a little bit of India. I give a fuller report later in this newsletter, but just mention here a point made by Peter Holmes during his presentation when he said that "most employers surveyed during the MeaNs Project regard statistical theory and knowledge of the statistics graduates they employ as much less important than you might think". We need to be aware of the results of such studies, and make a bigger effort to build some of the features employers desire into our programs. These include practical coursework and collaborative projects to develop the team work skills needed in employment, and also to gain a global overview of the discipline. Such aspects of learning can easily be overlooked as individual performance tends to be stressed and the increasing use of modules can obscure students vision of the "bigger picture". For more details see <a href="http://science.ntu.ac.uk/rsscse/means/means.html">http://science.ntu.ac.uk/rsscse/means.html</a>. IASE members have been also involved in a number of other conferences, a number of which are outlined later in this newsletter. In all the statistical education meetings I have attended this year the number and standard of presentations have been very pleasing, demonstrating the widespread interest in the topic at all levels and the quality of people involved.

Last year I reported the increasing number of **developing countries** who have been seeking our help and this has continued in 2000. In particular through the efforts of a number of people headed by Maria-Gabriella Ottaviani and Carmen Batanero, we have been able to assist countries such as South Africa and Chile who like many other developing countries are in the process of including more statistics in their school syllabi. We look forward to continued interaction in these and other countries.

The IASE executive continues working on many tasks, a number of which are reported in more detail later in this Review. We continue to develop our website which provides much useful information for anyone involved with statistical education. As well as providing information about the IASE and the ISI, it provides links to relevant conference sites, statistics teaching resources including sources of data for exercises, information on statistical packages, International Statistical Societies, National Data Archives and discussion lists. The site is regularly updated and I encourage all members to explore it starting at <a href="http://www.cbs.nl/isi/iase.htm">http://www.cbs.nl/isi/iase.htm</a>. I thank those members who have given me suggestions and appreciate further ideas to help improve this site so that it becomes the first place statistical educators look to for information.

It is most pleasing to see that some of our members from developing countries have been able to take advantage of the **ISI Development Fund** to attend international meetings. The ISI expects this initiative to continue after the initial two year period, so I encourage members from these countries to take advantage of this wonderful system, especially when planning for ICOTS-6, see http://www.cbs.nl/isi/devfundtxt.htm

Also encouraging is the increasing co-operation between ISI sections as seen both at ISI meetings and section conferences. It was interesting to read the ISI President's message in the recent ISI Newsletter, who when writing about the IAOS independent conference on "Statistics, Development and Human Rights", said how the sections could work together on these issues and that "the IASE can contribute as a major effort is needed to increase the statistical abilities of users". There is much that could be done. However there is still a low proportion of IASE members who are also ISI members as compared to other sections. The executive sees our low profile in the ISI as a weakness and we encourage IASE members to seek ISI membership. A form is available on <a href="http://www.cbs.nl/isi/Candidateform.htm">http://www.cbs.nl/isi/Candidateform.htm</a>

We continue to receive valuable assistance of a number of members who help the small executive carry out the many tasks in which the IASE is involved. I wish to thank all those members who assist greatly in the success of our organisation. This includes the national correspondents and the organisers and contributors at any of our conferences and other activities. I would particularly like to thank all members of the IASE Executive and the co-opted members for all their efforts this year. This includes those already been mentioned above, but I add here Joan Garfield for her work with the ISI newsletter and SRTL, Lionel Pereira-Mendoza for his work organising the IASE sessions at ISI-53 Seoul, 2001, Gilberte Schuyten for editing IASE Matters in Teaching Statistics, Tae Rim Lee as our Local organiser at ISI-53 Seoul 2001, and Maria-Gabriella Ottaviani both as ICOTS-6 IPC chair and her valuable advice as past president.

We now have to look to a new committee which will be installed in Seoul for the 2001-2003 period. Again as I said last year I encourage all members to become more involved in the activities of the IASE, which is your organisation and only survives by the action of its members. Because of our international nature it can be hard for members to keep their interest up between meetings, but if we don't increase our membership we will not be able to continue to provide the services we do now. I strongly encourage everyone to pay their membership, invite others to join the IASE, by distributing this Review to all people teaching statistics at your institution, either by copying this newsletter or giving them the web site <a href="http://www.swin.edu.au/maths/iase/review2000.doc">http://www.swin.edu.au/maths/iase/review2000.doc</a> from which it can be downloaded. There is no reason why we cannot significantly increase our membership over the next year. Finally I am pleased to report that the past year has been a most productive time for the IASE and look forward to continued growth of statistical education.

## 2. IASE Executive 1999 - 2001

President Brian Phillips (Australia)
President-Elect Carmen Batanero (Spain)

Vice Presidents Dani Ben-Zvi (Israel), Joan Garfield (USA),

Lionel Pereira-Mendoza (Singapore), Gilberte Schuyten (Belgium)

Co-opted members Maria-Gabriella Ottaviani (Italy) (Chair ICOTS-6 IPC)

Susan Starkings (IASE sessions at ICME-9)

Tae Rim Lee (LOC rep. for ISI-53)

Executive Director Van den Broecke, M.P.R. (Netherlands)

## 3. Honorary members



**David Moore** 

The IASE statutes were recently modified to include the possibility of nominating Honorary Members as a way of recognising the work and dedication of some of our members. It was with great pleasure that I was able to announce that the IASE Executive Committee approved the nominations of both David Moore and Anne Hawkins, who were our first two presidents in the crucial period of the establishment of the IASE and whose work has contributed significantly to the success and growth of our Association. Information on their outstanding contributions to statistical education can be seen in the web site <a href="http://www.swin.edu.au/maths/iase/people.html">http://www.swin.edu.au/maths/iase/people.html</a>



Anne Hawkins

#### 4. IASE SERN and SERG

## Statistical Education Research Newsletter and Statistical Education Research Group

This year the IASE was glad to present this first issue of the *IASE Statistical Education Research Newsletter* a new *IASE* publication, which continues the previous *Newsletter of the International Study Group for Research on Learning Probability and Statistics*. The *International Study Group for Research on Learning Probability and Statistics* was first started informally at *ICOTS-1* and was running in a rather informal way conducted by David Green (1982-87), Joan Garfield (1988-95) and Carmen Batanero (1996-99). More information about this group as well as all the Newsletters produced since 1996 is available from the web site: http://www.ugr.es/local/batanero/

From January 2000, the group was accepted as a special interest group within the IASE with the name *IASE Statistical Education Research Group,* and is also open to all who share our common interest in carrying out research into the teaching and learning of statistics and probability. The main activity this year has been producing the SERN newsletter (3 issues), which is located at <a href="www.ugr.es/local/batanero/sergroup.htm">www.ugr.es/local/batanero/sergroup.htm</a>. Carmen Batanero <a href="batanero@goliat.ugr.es">batanero@goliat.ugr.es</a>, Joan Garfield <a href="www.ugr.es/local/batanero/sergroup.htm">jogow2.sta.uniroma1.it></a> and John & Kath Truran <a href="www.ugr.es/local/batanero/sergroup.htm">wtruranjk@camtech.net.au></a> are members of the editorial committee. Their aim is to make SERN a tool of potential interest to researchers, and, therefore they are publishing short notes, summaries of papers, dissertations and research works, information about internet resources of interest, past and future conferences and bibliographies on particular research topics. The extent to which a research newsletter is useful depends on the quality and completeness of the information published. We need of your collaboration and we encourage you to send any type of information about your research projects and results that you consider of interest for other colleagues to one of the editors.

Carmen is also maintaining the Stated\_list, a restricted electronic list which serves to send the SERN table of contents and other news of interest to members. Members who are interested in entering the group, or who just want to be sent the information to contact Carmen who will be glad to subscribe them to the list. Please also remember to warn her when your e-mail address is changed.

# 5. National Correspondents

The IASE system of national correspondents help provide communication between local membership in their country and the IASE. This includes passing on information about the IASE activities to those concerned with teaching and learning statistics as well as letting the IASE know about activities in their country. You can find your national correspondent look at <a href="http://www.swin.edu.au/maths/iase/correspondents.html">http://www.swin.edu.au/maths/iase/correspondents.html</a> and make contact about issues of statistical education within your country.

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# 6. Some recent Meetings on Statistical Education

The Association places a strong emphasis on international co-operation and the exchange of information via its publications and meetings and provides people with the opportunity of being part of an international community which is interested in statistical education. The IASE provides the opportunity for its members to attend international meetings on statistical education on an annual basis. These occur through a series of conferences which are now organised or sponsored by the IASE, and are held in venues that are as widely dispersed as possible so that they will be accessible to delegates from many different geographical locations.

The major events the IASE organises are the International Conferences on Teaching Statistics, ICOTS, which are held every fourth year and cover all aspects of statistical education. The next, ICOTS-6, is being held in Durban, South Africa in July 2002. Another major event is the Round Table Conference, held every four years, which concentrates on a particular research topic. IASE meetings are also held within the ISI Biennial Sessions and organised the statistical sessions at the International Conference on Mathematical Education, ICME, held every four years. It also runs satellite meetings associated with both the ISI and ICME meetings. The following list gives the extent of statistical education events in 2000.

#### IASE and associated statistical education events around the world in the year 2000

In the past year the number of conferences with statistical education components increased around the world. In the SERN newsletter, the IASE pages in Teaching Statistics, ISI Newsletter and the IASE web page we have reported the following events:

- Encontro sobre Ensino e Aprendizagem da Estatística, Lisbon, Portugal, February, 3-4, 2000. Faculty of Sciences, University of Lisbon, Portugal with more than 600 participants, primary and secondary school teachers, and University lecturers from Portugal, Spain, Brazil, Argentina, Cuba and Mexico. This meeting was the consequence of a joint initiative from the Portuguese Statistical Society, Association of Teachers of Mathematics, and the Departments of Education and Statistics & Operational Research of the Faculty of Education, University of Lisbon. More information is available from João Pedro da Ponte, <iponte@fc.ul.pt>.
- Statistics Education Presentations at the American Educational Research Association Annual Meeting, New Orleans, April, 2000. The *American Educational Research Association (AERA*) has approximately 22,000 members and is made up of 11 main divisions. Parallel to the divisions are almost 200 Special Interest Groups (SIGs), one of which is the SIG—Educational Statisticians, whose purpose is to increase interaction among educational researchers interested in the theory, applications, and teaching of statistics in the social sciences. More information is available form Joan Garfield <jbg@tc.umn.edu>.
- Data Mining by Statistical Implicative Analysis, Caen, France, June, 2000. The conference was held at the Institut de Formation des Maîtres, Caen, France. The theme of this international conference, that was sponsored by IASE was "implicative analysis". More information is available from Régis GRAS <a href="mailto:gras@univ-rennes1.fr">gras@univ-rennes1.fr</a>.
- Statistical Education Workshop, Australian Statistical Conference held in conjunction with the Australian biannual Statistics Conference July 1-2, 2000, Adelaide, South Australia.
- The twenty-third annual conference of The Mathematics Education Research Group of Australia, Sydney, New South Wales, 5–9 July, 2000 and several stochastics papers were presented. Proceedings may be obtained by writing to <mergapub@tpgi.com.au>.
- PME-24 July 23-27, 2000 Hiroshima, Japan <a href="http://www.ipc.hiroshima-u.ac.ip/">http://www.ipc.hiroshima-u.ac.ip/</a>-pme24 (See report below).
- Statistical Education at ICME-9 July 31 August 6, 2000 Tokyo, Japan (See report below).
- IASE Round Table Conference on Training Researchers in the Use of Statistics
  August 7-11, 2000, The Institute of Statistical Mathematics, Tokyo, Japan <a href="http://www.ugr.es/~batanero/iasert.htm">http://www.ugr.es/~batanero/iasert.htm</a>
  (See report below).
- XXVIII Statistical Education Activities at the Coloquio Argentino de Estadística, Posadas, Misiones,
  Argentina August 8-11. There was a Section devoted to the teaching of statistics at the XVVIII Conference of
  Statistics in Argentina, as a contribution of the SAE (Argentina Statistical Society) to improving the teaching of
  statistics at the different educational levels. More information is available from Ana Silvia
  Haedo, <a href="mailto:haedo@qb.fcen.uba.ar">haedo@qb.fcen.uba.ar</a>>.
- ASA Joint Statistical Meetings August 13 17, 2000 Indianapolis, USA http://www.amstat.org/meetings/jsm/2000/.

• Stochastics Group at the IV Meeting of the Spanish Association for Research in Statistics Education September 11-14 which was held at the University of Huelva, Spain, There is Group of Research in the Teaching of Statistics, Probability and Combinatorics in this Association, which was invited to make a general presentation of its work and future projects to the whole Association. Additionally the group met in two sessions where 6 papers were presented by Spanish, Brazilian and Argentinean researchers. More information is available from Antonio Estepa, <a href="mailto:aestepa@ujaen.es">aestepa@ujaen.es</a>.

- "Statistical Education at the Beginning of the Millennium", 20 September 2000. This conference was held in conjunction with the *Royal Statistical Society Education Section*, this conference was jointly endorsed by ISI and the IASE. More information from Dr Nasrollah Saebi, MA S416@kingston.ac.uk.
- Universidad Austral de Chile, Valdivia, Chile XXVII JORNADAS NACIONALES DE ESTADÍSTICA October, 9 11 2000. (See report below).
- ISEC Jubilee Celebrations October 13 and 14, New Delhi, October 17 and 18, ISEC, Calcutta. Organised by the International Statistical Institute, the Government of India and the Indian Statistical Institute. (See report below).
- Stochastics Section of German Mathematics Education Association: Autumn Conference 2000, Berlin November, 10–12, 2000. This conference is jointly organised by the Gesellschaft für Didaktik der Mathematik and the Max-Planck-Institute for Human Development, and it is centred on the NCTM-Standards: Impulses for Improving Stochastics Instruction. More information is available from <a href="mailto:ak-stochastik@ph-ludwigsburg.de">ak-stochastik@ph-ludwigsburg.de</a>>.

## 7. Future conferences in Statistical Education

#### The Second International Research Forum on Statistical Reasoning, Thinking and Literacy SRTL-2

The Second International Research Forum on Statistical Reasoning, Thinking and Literacy (SRTL-2) will meet from 15 August to 20 August 2001 at the University of New England (UNE), Armidale in the beautiful New England area of the Northern Tablelands in Northern New South Wales Australia. This allows participants time to head to Seoul for the ISI-53 Conference. The research forum is being organized following the resounding success of the first SRTL which was held at Kibbutz Be'eri in Israel in July 1999. The SRTL-2 gathering is sponsored by The IASE Statistical Education Research Group (IASE SERG); The Centre for Cognition Research in Learning and Teaching (CRiLT) at the UNE; The School of Curriculum Studies (SCS) at the UNE; the Faculty of Education, Health and Professional Studies (FEHPS) at UNE; and The University of Minnesota, USA.

The STRL-2 Forum offers an opportunity for a small number of researchers from around the world to meet for a few days to share their work, discuss important issues and initiate collaborative projects. The topic of the Forum will be Statistical Reasoning, Thinking and Literacy, with an emphasis this time on Reasoning. Sessions will be held in an informal style, with small groups of participants meeting together to share the details of their work and show videos of students in classes or being interviewed. This format allows participants to validate their interpretations, as well as reflect and expand on their conclusions, which are then presented to the large group in a briefer format. The interesting scientific program includes participation of several well-known international researchers in statistics education. The research presented, coupled with the feedback and discussions, will serve as the basis for an edited book, "The Challenge of Developing Statistical Literacy, Reasoning, and Thinking". The University of New England setting offers modern facilities and opportunities to tour the surrounding area which should help to contribute to a successful and rewarding research forum. To learn more about the SRTL-2 Forum please visit the website <a href="http://www.beeri.org.il/srtl">http://www.beeri.org.il/srtl</a> or email the co-chairs Joan Garfield <a href="http://www.beeri.org.il/srtl">jbg@tc.umn.edu</a> and Dani Ben-Zvi <dani.ben-zvi@weizmann.ac.il> or the local organizer, Chris Reading <creading@metz.une.edu.au>.

#### IASE Satellite Conference on Statistical Literacy Seoul, Korea, 21-22 August, 2000

This satellite conference on statistical literacy is jointly organised by the IASE and the Korean Statistical Education & Consulting Section of the Korean Statistical Society and will immediately precede the ISI session in Seoul. It will give the opportunity for people to enjoy presentations given by people who have a special interest in statistical literacy. 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 components in statistical literacy and the relevance of statistical literacy in the general education of citizens. The approach will be non-technical, suitable for a non-specialist audience who would like to learn how to make better use of probability and statistical ideas in their everyday and working lives in areas in which chance and risk is involved. This meeting is intended to be of interest to a wide cross section of society including teachers, educational administrators, researchers in statistical education and in

probabilistic reasoning and others who want to gain a better grasp of statistics in general and who would like to broaden their knowledge of statistics applications. It should also be of interest to people wishing to understand more about risk in making investments and gambling, by those concerned with interpreting sociological, economical, political, scientific or educational reports, predicting sports results, by policy makers, journalists, health professionals and others from the general population. Local Organiser Professor Yong Goo Lee <leeyg@cau.ac.kr> Program Chair Brian Phillips <a href="mailto:bphillips@swin.edu.au">bphillips@swin.edu.au</a>> See <a href="http://www.swin.edu.au/maths/iase/statlit.html">http://www.swin.edu.au/maths/iase/statlit.html</a>.

53rd Session of the ISI Seoul, Korea IASE Sessions at ISI-53, August 22-29 2001



There are seven statistical education sessions at the 53rd ISI session to be held in Seoul, Korea in August 2001 to be organised by the IASE alone, with another four being jointly organised with other ISI sections. Lionel Pereira-Mendoza is co-ordinating our section of the programme.

#### **Invited IASE Sessions**

E1 Forum: IASE and statistics education in developing

countries

Organiser: Maria-Gabriella Ottaviani, Italy Email: <a href="mailto:ottavian@pow2.sta.uniroma1.it">ottavian@pow2.sta.uniroma1.it</a>

E3 The Future of Statistics Education Research

Organiser: Joan Garfield, USA Email: jbg@maroon.tc.umn.edu

E5 Undergraduate statistics education in non-statistics degree programmes Organiser: Elisabeth Svenssen,

Sweden Email: eliss@math.chalmers.se

E7 Postgraduate training of statisticians Organiser: Gilberte Schuyten, Belgium Email: Gilberte.Schuyten@rug.ac.be

**E2** Undergraduate level statistics programmes Organiser: Shen Shir Ming, Hong Kong, SAR, China

Email: HRNTSSM@hkucc.hku.hk

E4 Research on teaching statistics at School and

University levels Organiser: Susan Starkings, UK

**E6** Continuing Statistics Education in the Workplace

Organiser: Carol Blumberg, USA

Email: starkisa@sbu.ac.uk

Email: wncarolj@VAX2.WINONA.MSUS.EDU

#### **JOINT IASE Sessions**

Joint 1: Joint with CWS.

E8 Women's Contributions to Leadership in Statistical

Education Organiser: Martha Aliaga, USA

Email: aliaga@umich.edu

Joint 3: Joint with IAOS (IAOS to organise)

E10 The role of official statistics in the university

curriculum Organiser: Reiner Staeglin, Germany

Email: rstaeglin@diw.de

Joint 2: Joint with IASC (IASE to organise) E9 Technology in Statistical Education Organiser: Tae Rim Lee, Korea

Email: trlee@av9500.knou.ac.kr

Joint 4: Joint with IAOS (IASE to organise)

E11 Education and the Internet: Effective Structures for

the Net Organiser: Brian Phillips, Australia

Email: bphillips@swin.edu.au

Planning for invited sessions has completed but anyone interested in more information should contact Lionel lpereira@nie.edu.sg.

Anyone wishing to present a **contributed presentation**, talk, poster or title, should return the Preliminary Registration Form to the ISI53 Executive Secretariat, E-mail: <isi2001@nso.go.kr> by January 22, 2001, see <a href="http://www.nso.go.kr/isi2001/">http://www.nso.go.kr/isi2001/</a>. Of the 165 topics listed for Contributed Papers, several are specifically directed at Statistical Education, i.e. Contributed topic 133 Statistical Education, 134 Teaching Statistics for Non-statisticians. However there are many other topics that statistical educators could contribute to, for example Contributed topic 1 History of Statistics, 6 Multivariate Methods, 7 Correspondence Analysis and Optimal Scaling Methods, 8 Latent Variable Modelling, 9 Classification and Clustering, 23 Categorical Data, 25 Multi-level Models, 33 Nonparametric

Statistics, 59 Educational Statistics, 116 Neural Networks, 119 The Internet and Statistics, 130 Internet Statistical Software 145 Statistics and Law, 146 Statistics and Mass Media, 147 Statistics of Crimes, 148 Statistics in Tourism and Recreation, 149 Sports Statistics.

## 8. ICOTS-6 - IPC: Report of One Year of Work

Maria-Gabriella Ottaviani (Italy) and Dani Ben-Zvi (Israel)



The Sixth International Conference on Teaching Statistics

**Developing a Statistically Literate Society** 

Durban, South Africa, 7 - 12 July, 2002

IPC Website: <a href="http://www.beeri.org.il/icots6">http://www.beeri.org.il/icots6</a> LOC Website: <a href="http://icots.itikzn.co.za/">http://icots.itikzn.co.za/</a>

November 1999 - November 2000 has been a very important year for ICOTS-6: The year of planning. The Topics and Convenors were already in place by November 1999, but since then the Topic Convenors have been selected for the Sessions and addressed their ideas with the ways they could actually implement them. The exact record of all the work already done is on the ICOTS-6 Website (<a href="http://www.beeri.org.il/icots6">http://www.beeri.org.il/icots6</a>). Dani is the active and lively Scientific Secretary of the International Programme Committee (IPC) who, with his son Dagan, inspired the design of IPC Website. He had the idea to publish an abstract of each Topic, to guide the Session Organiser's work. In the Northern Spring all the session titles had already been decided. At this point, proposed Session Organisers have been contacted by the Topic Convenors. From August 2000 the IPC Website comprises the full programme: the Topics and their Sessions, with the Topic Convenor's and Session Organiser's names and addresses. Also the keynotes speakers of the Conference will soon be decided.

The preparation process is accelerating now. IPC members and Session Organisers are receiving expressions of interest of researchers from all around the world. The Website is being enriched by the abstracts of each Session. In the New Year period the IPC will approve the Invited Speaker's list and the Session Organisers will send them an official invitation letter. At that point, it will be the Invited Speaker's responsibility to prepare a most interesting, up to date and exciting paper for ICOTS-6. The harmonious and dedicated work of the membership of the International Programme Committee, the Session Organisers and the Local Organising Committee is the best omen for the success of ICOTS-6 in South Africa.

#### **IMPORTANT DEADLINES**

### **Invited Papers**

- Expressions of interest for invited sessions should have been sent to the relevant Session Organizer, or the IPC Chair. Anyone still wishing to express interest please do so ASAP.
- *Invitations* Session Organizers will formally invite the speakers by Jan. 31, 2001.
- Abstracts Each invited speaker has to present a (provisional) title and an abstract (no more than 500 words) of his/her presentation to their Session Organizer by April 1, 2001.
- Final manuscript the authors of invited papers are to submit the final manuscript of their paper to their Session Organizer by December 1, 2001.

#### **Contributed Papers**

Expressions of interest for contributed paper sessions are to be submitted to Susan Starkings <starkisa@sbu.ac.uk> by December 1, 2001. Papers not accepted for an invited speaker session will also be considered for these sessions.

### Other Contributions

Abstracts of posters, software demonstration and other special sessions should be submitted to the IPC Executive by February 1, 2002. Details of the final submission arrangements of papers and other presentations will be announced later. The Committee is convinced that the ICOTS-6 academic and social program will provide a most rewarding experience. For more information please contact the Conference Chair or the IPC Scientific Secretary.

IPC Chair Maria-Gabriella Ottaviani <ottavian@pow2.sta.uniroma1.it> International Organizer Brian Phillips <br/>
<br/>bphillips@swin.edu.au> IPC Scientific Secretary
Dani Ben-Zvi
<dani.ben-zvi@weizmann.ac.il>

#### 9. ICOTS-7

The International Conferences for Teaching Statistics are the IASE main events and are held only every four years. ICOTS conferences provide the opportunity for statistics educators from around the world to exchange ideas and experiences, to discuss the latest development in teaching statistics and to start collaborative projects with other colleagues. Attending ICOTS and meeting so many colleagues is a memorable opportunity for all who teach statistics, do research in statistics education, work as a statistician, or are just interested in statistics and in education, in general. It is for this reason that IASE tries to give the opportunity to attend one ICOTS conference to statisticians, statistics educators, statistics, mathematics teachers and educators from as many different countries and geographical areas as possible.

As reported above, the IASE is currently organising the Sixth International Conference on Teaching Statistics (ICOTS-6), which will be hosted by the South African Statistical Association (SASA) in Durban, 2002. Previous ICOTS conferences were held in Sheffield, England, 1982, Victoria, Canada, 1986, Dunedin, New Zealand, 1990, Marrakech, Morocco, 1994, and Singapore, 1998. Consequently, we see Central or South America as potential locations to celebrate ICOTS-7 in 2006 and are currently having negotiations with possible hosts. We expect to announce the ICOTS-7 location at the ICOTS-6 conference in Durban. For more information contact Carmen Batanero <a href="mailto:bhatanero@ugr.es">bhatanero@ugr.es</a> or Brian Phillips <a href="mailto:bhillips@swin.edu.au>">bphillips</a> <a href="mailto:bhillips</a> <a href="mailto

## 10. Publications

The IASE regularly has publications relating to its activities. As mentioned above, some to this year's meetings will have their proceedings published. In particular the proceedings of the IASE Round Table Conference on Training Researchers in the Use of Statistics and the ISEC Jubilee celebrations are due out early next year. Details of proceedings of past conferences and other important aspects of statistical education can be found on <a href="http://www.swin.edu.au/maths/iase/publications.html">http://www.swin.edu.au/maths/iase/publications.html</a>.

#### **ICOTS-5** proceedings

The organisers of ICOTS-5 have excess sets of the ICOTS-5 proceedings (Proceedings of the Fifth International Conference on Teaching Statistics, 21-26 June 1998, Singapore). many of which they will have to dump if not ordered very soon. You can check the contents at <a href="http://www.nie.ac.sg:8000/~wwwmath/THEFINAL.html">http://www.nie.ac.sg:8000/~wwwmath/THEFINAL.html</a>. They are happy to send them to anyone interested for the cost of postage and handling. This works out at \$US30 for sea mail. If your library has not got a set, or you know anyone who would like one please do the following: Send your requests to Lionel Pereira-Mendoza <a href="mailto:lipreira@nie.edu.sg">lipreira@nie.edu.sg</a>.

## 11. Benefits of Membership in the IASE

IASE offers its members the opportunity to become part of the only international community interested in the improvement of statistical education at all levels. Members can both contribute to innovations and progress in statistical education and learn from colleagues. Members receive various publications free and discount rates on others as well as discount rates at IASE meetings. If you are not already a member of IASE, you are strongly urged to consider joining IASE. Dues are only US \$19.00 per year. Members have found the publications, meetings and contacts formed through IASE membership have been most helpful in their teaching of statistics. For further information about the IASE membership benefits go to the IASE web site http://www.swin.edu.au/maths/iase/benefits.html. A Membership form can be found below or on the website.

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## 12. Conference Reports

## IASE Round Table Conference on Training Researchers in the Use of Statistics

Carmen Batanero (Spain)

The Institute of Statistical Mathematics, Tokyo, Japan, August 7-11, 2000:

Round Table Conferences, initially organised by the ISI Education Committee on topics in statistics education are now run by the the IASE. These are usually held as satellite meetings to the ICME meetings (International Congress on Mathematics Education) which is held every four years. This year the Round Table *Conference on Training Researchers* was held in Tokyo in August immediately following ICME-9.



Participants at the Round Table Conference on Training Researchers

This was a very productive five day conference where 45 speakers, discussants and observers representing 17 developing and developed countries in the five continents met. During the past year the *IASE* organised a refereeing process to assure the fairness and quality in the process of selecting the papers that were finally presented. The *IASE* is very grateful to the support received from the *ISI*, the Japan Statistical Society and the *Institute of Statistical Mathematics* as well as to the work by the referees and the local and scientific committees.

At the Opening, the participants were welcomed by Dr Ryoichi Shimizu, Director-General of The Institute of Statistical Mathematics, Japan, Dr. Yuki Miura, Japan Statistical Society and Carmen Batanero, International Association for Statistical Education. The 24 papers presented and discussions by 8 reactors were organised into five major themes:

- 1. Training researchers in particular statistical topics, with discussion by S.P. Mukherjee, India and Theodore Chadjipadelis, Greece. Elisabeth Svenson, Sweden (categorical data), Antonio Estepa, Spain (association), Chihiro Hirotsu, Japan (quality control), Ann Lee Wang, Malaysia (stochastic processes), Alan McLean, Australia (statistical models), and Gudmund Iversen, USA (Bayesian statistics) analysed the variety and complexity of statistical topics which are currently needed for research in almost all areas of knowledge. It was shown that statistics is misunderstood and misused by researchers, that they do not fully grasp the essence of statistical thinking and do not sufficiently appreciate the role of statistics in the research process. Some surveys also confirmed potential conflicts between the use of non-standard statistical methods in applied research in terms of acceptance by referees and journals. It was emphasised that it is unrealistic to expect researchers solve all their data analysis problems by themselves. This is also perceived by the researchers themselves, according to the results of different surveys carried out by the RTC participants.
- 2. Needs and problems in training researchers in specific areas, with discussion by Gilberte Schuyten, Belgium and Brian Phillips, Australia. The presentations by John Harraway (biological and health sciences), and David Saville (agriculture), New Zealand, Glenys Bishop (biological sciences), Australia, Carol Blumberg, USA (education), Michael Glencross and Andile Mji, South Africa (social sciences) dealt with the main abilities to be emphasised in the training of researchers and there was an agreement that successful courses will encourage a critical attitude towards data and statistical analyses and stress the importance of obtaining good quality data. Methodology for such courses should be based on encouraging participation and interaction, and working with data set in their own research areas.
- 3. How technology affects the training of researchers, with discussion by Kensey Araya, Japan. Technology is creating new didactical problems such as the teaching of techniques to deal with mass-data, the need to make researchers

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conscious of the ethical issues related to the use of institutional data (Megan Clark, New Zealand representating Sandra McDonald of Statistics New Zealand), and the danger in misusing statistical software (Toshiro Shimada, Japan). Tae Rim Lee, Korea and Dalene Stangl, USA, made also clear that technology is offering new didactical possibilities, such as the Internet, which is interactive, widely accessible and flexible and Gianfranco Galmacci, Italy presented a variety of resources in Internet that are potentially useful to researchers.

- 4. Consultation as a teaching and learning process, with discussion by Yuki Miura, Japan, Gabriella Belli, USA, Juan D. Godino, Spain, Flavia Jolliffe, UK, Ben-Chang Shia, Taiwan, China. In these presentations some surveys suggested that future statisticians feel they lack abilities for communicating with clients, and managing a consulting session. The relevance of making statisticians better acquainted with other research fields for assuring an optimal communication among statisticians and researchers was also made clear. Consultancy practices carried out by students is a didactical device that was suggested as a mean for both providing practical experience to future statisticians and creating a culture favourable to value statistical consultancy for future researchers.
- 5. International experiences in the training of researchers with discussion by M. Gabriella Ottaviani, Italy. Finally, we were glad to know the role played by local associations of statistics education, research resources centres and international projects in revising the training of statisticians (David Ospina, Colombia), and solving big challenges such as the training of a huge number of statisticians (Yuan Wei, Beijing, China), and the training of researchers who work in isolation in very widespread geographical areas (Shrikant I. Bangdiwala, USA, and Carlos Marcos Batista, Brazil). We hope to be able to see many more similar examples of national and international support to develop research excellence through supporting the training of researchers in statistics and the adequate use of statistics in research in the near future.

At the closing, Yuki Miura thanked the participants for visiting Japan and Carmen Batanero thanked the Institute of Statistical Mathematics and the Japan statistical society, as well as the Japanese colleagues for their wonderful hospitality and all their work to make participants feel at home while being in Japan. This stay enriched and widened the participants' knowledge about Japan, its culture and traditions, its history and its people and they have also been lucky to have the opportunity to know more about statistics and statistics education in Japan. To end the session, Brian Phillips surprised the audience with his imaginative presentation of a poem and artistic photographs of the conference sessions, social events and beautiful images of Tokyo.

The papers presented are now being revised and a monograph will be available next year which will include the starting document, papers and discussions and a summary of the main conclusions. More information is available from Carmen Batanero, Facultad de Educación, Universidad de Granada, Spain <a href="mailto:spaintenance">spaintenance</a> (papers) available from Carmen Batanero, Facultad de Educación, Universidad de Granada, Spaintenance</a> (papers) available from Carmen Batanero, Facultad de Educación, Universidad de Granada, Spaintenance</a> (papers) available from Carmen Batanero, Facultad de Educación, Universidad de Granada, Spaintenance</a> (papers) available from Carmen Batanero, Facultad de Educación, Universidad de Granada, Spaintenance</a> (papers) available from Carmen Batanero, Facultad de Educación, Universidad de Granada, Spaintenance</a> (papers) available from Carmen Batanero, Facultad de Educación, Universidad de Granada, Spaintenance</a> (papers) available from Carmen Batanero, Facultad de Educación, Universidad de Granada, Spaintenance</a> (papers) available from Carmen Batanero, Facultad de Educación, Universidad de Granada, Spaintenance (papers) available from Carmen Batanero, Facultad de Educación, Universidad de Granada, Spaintenance (papers) available from Carmen Batanero, Facultad de Educación, Universidad de Granada, Spaintenance (papers) available from Carmen Batanero, Facultad de Educación, Universidad de Granada, Spaintenance (papers) available from Carmen Batanero, Carmen Batane

### PME STL DG Report

John Truran (Australia)

At the 24th Psychology of Mathematics Education Meeting in Hiroshima in July 2000, (<a href="https://home.hiroshima-u.ac.jp/pme24/index.html">https://home.hiroshima-u.ac.jp/pme24/index.html</a>) the Stochastics Teaching and Learning Study Group held two meetings, which focused on the relationship between stochastical and mathematical thinking, learning and teaching. Three short papers were presented. Mario Barra (Italy) spoke on "The Relationship between Probability and Geometry: A Didactic Use" and presented some fascinating and quite unexpected geometrical models for common probabilistic situations. Jenni Way and Paul Ayres (UK/Australia) discussed "The Relationship between Pattern and Randomness" and suggested that the current school emphasis on pattern in mathematics may be inhibiting children's understanding of the concept of randomness. Finally, James Nicholson (Northern Ireland) looked at "Perspectives from Students and Teachers on the Differences in Thinking in Mathematics and Statistics" (Co-author Gerry Mulhern). He emphasised the difficulties of blending traditional mathematics with its deterministic "right answers" and statistics with its need for creative, non-unique interpretations. While none of these papers was in any sense trivial, all were presented informally and very enthusiastically to a fairly small group in circumstances where time was not at a premium. So the ensuing discussions were richer than is often the case with the formal, refereed presentation of research results. Our Japanese hosts had provided us with plenty of time to "confer", which was much appreciated.

PME-25: A similar format is planned for the next PME meeting in Utrecht (<a href="http://www.fi.uu.nl/pme25/">http://www.fi.uu.nl/pme25/</a>), in The Netherlands, from Thursday 12 July to Tuesday 17 July 2001. Anyone wishing to make a contribution to this meeting is asked to contact Kath Truran at <a href="http://www.ujaen.es/huesped/stochastics/">Kath.Truran@unisa.edu.au</a>>. For more information on the PME STL DG visit <a href="http://www.ujaen.es/huesped/stochastics/">http://www.ujaen.es/huesped/stochastics/</a>

ICME 9, Statistics Education Sessions July 31 - August 6, in Japan

Susan Starkings (UK)



Presenters/organisers in ICME 9 stat. education sessions

The 9th International Congress on Mathematical Education took place in Japan last August. Topic Group 4 sessions entitled 'Teaching and Learning Statistics' was well attended. hoped that the proceedings will be published by the ISI. Speakers presented various aspects of statistics and how these can be taught within the classroom environment. The session proved to be interesting and a lively debate on statistical education took place. This debate continued well beyond the time allocated. The delegates had many question to ask the speakers The delegates had many question to ask the speakers and unfortunately, due to the time constraints these were limited.

A note for further ICME conferences is that many delegates are interested in statistical education and that two sessions is not enough. Something many IASE members have been stating for some time now. The sessions had no underlying theme except that of statistics education, however, this did not detract from the quality and educational value of the speakers. Particular methods using multimedia techniques and traditional paper based exercises were explored. A list of speakers and titles can be found at http://www.swin.edu.au/maths/iase/icme9.html.

The delegates found the sessions useful and entertaining. My thanks go to all those who presented their papers and to the delegates who attended the sessions. Hopefully you all will be at future conferences where the IASE is organising sessions. If you require further information contact the chief organiser *Susan Starkings, South Bank University, Caxton House, Borough Road, London SE1 OAA; Tel: 0207 815 7455, Fax: 0207 815 6464, email: <starkisa@sbu.ac.uk>. Alternatively the Statistics Education Research Newsletter has more information and can be viewed on the following web address: <a href="https://www.ugr.es/local/batanero/sergroup.htm">https://www.ugr.es/local/batanero/sergroup.htm</a>* 

# A project to implement statistics teaching in the new SA school curriculum

Delia North (South Africa) and M. Gabriella Ottaviani (Italy)

South Africa is on the brink of major changes in the school mathematics syllabus with the introduction of a new curriculum which uses the outcome based education (OBE) as fundamental building block. The result of this new syllabus is that Statistics will be introduced at school level in South Africa. This Statistics content will have to be taught by teachers with no training in Statistics!

M. G. Ottaviani and D. North have succeeded in getting funds to finance a project to assist with the implementation of Statistics teaching at schools in South Africa. The grant came from an Italian Ministry and the University of Natal (Durban). The grant makes it possible for academics on the project to move from Rome to Durban and vice-versa and to stay in the host country for about one month.

The joint project focuses on optimal ways to assist teachers with the introduction of Statistics into the school syllabus in South Africa – much can clearly be gained as school teachers are unprepared for the possible Statistics content of their new syllabus. Prof. Linda Chisholm (Education Policy Unit, UND and chair of the review committee of Curriculum 2005) is also being very actively involved in this project.

In order for Gabriella to get a grasp of the South African Education system, a series of visits to local schools and tertiary institutions was essential, hence the reason for her visit to South Africa. Another important point of note is that the visit was planned to include meetings with AMESA (the mathematical association to which school teachers in South Africa belong) and the South African Education Department, vital to the successful implementation of the project results!

Gabriella was in Durban from September 2 to September 12 and spent a very interesting period there that was fruitful for the research project as well as for the planning of ICOTS-6. For some days, she also stayed in Pietermaritzburg, hosted by Prof. Linda Haines (University of Natal in Pietermaritzburg). Prof. L. Haines is the SA representative in the IPC of ICOTS-6, so Linda, Delia and Gabriella had also a meeting regarding various ICOTS-6 issues. M. Gabriella. Ottaviani also met Prof. Volmink, the Vice-Chancellor and Executive Director of the University of Natal during her visit to South Africa. Prof Volmink is a leading South African academic specializing in numeracy and is very interested in the project as well as ICOTS-6.

During her visit to SA, Gabriella and Delia paid visits to schools of all grades from 6 to 18 years, of all types from excellent facilities to very, poor from rural to urban. This allowed Gabriella and Delia to obtain an insight into the South

African school system and the subsequent difficulties that the teachers of mathematics will have to face before implementation of the new statistics content will be possible. As is the case elsewhere in the world, prior to the introduction of statistics, the curriculum has to be organised according to appropriate gradual stages, taking into account the students' age, their interests and their knowledge of mathematics tools. Finally, the teachers have to be trained in statistics. With this ideas in mind Delia North and M. Gabriella Ottaviani went through the whole proposed Statistics content of the new syllabus to adequate it to the needs of teachers and students in order to improve the statistical literacy level in SA.

#### XXVII Jornadas Nacionales de Estadistica, Valdivia, Chile, 9-11 October 2000

Pilar Loreto Iglesias Zuazola, Universidad Catolica de Chile, and Irma Molina, Universidad Austral (Chile)



Carmen Batanero, Pilar Iglesias (standing), Martha Aliaga, Sylvia Mori (Forest Service, California, USA) and Ricardo Aravena (Santiago de Chile who is also doing some work in statistics education).

The Chile Statistical Society (SOCHE) in collaboration with The Institute of Statistics at the Faculty of Economics and Administrative Sciences, Universidad Austral, Chile organised the 27th National Statistics Conference, which was held in Valdivia, October 9-11. This conference received support from IASE and Carmen Batanero and Martha Aliaga presented plenary lectures on education themes. The activities, aimed to exchange knowledge and experience were mainly oriented towards the role of Statistics in Science, Education, Business and Economy.

At the Opening session, the Dean of the Faculty of Economics and Administrative Sciences (Eng. Edmundo Borel), and the President of the Chile Statistical Society (Dr. Pilar Iglesias) welcomed the participants.

Dr. Carmen Batanero IASE President-Elect emphasised in her plenary lecture the role of national and international associations -in particular IASE- in improving statistics education, to thus benefit research, science and technique and offer promising perspectives to future generations. Three short courses were offered to participants:

- Teaching statistics and probability at secondary school level (Dr. Carmen Batanero, University of Granada, Spain
- Reliability methods in the analysis of product life-time data (Dr. Luis Escobar, Lousiana State University, USA)
- Statistical methods forest monitoring and research (Dr. Sylvia Mori, Forest Service, CALIFORNIA, USA)

Plenary lectures by were given by experts in the following different fields:

- Education: Interactive Statistics by Dr. Martha Aliaga (University of Michigan, USA),
- Science: An application of generalised estimating equations in the analysis of longitudinal data by Dr. Antonio Sanhueza (Universidad de la Frontera, Chile) and Bayesian model for spatial data by Dr Renato Assunçao, Universidad de Minas Gerais, Brazil,
- Economy and Business: New methodological and technological frontiers of official statistics by Eng. Maximo Aquilera, Director of National Statistical Institute, Chile)
- Statistical theory "Distance Tests Under Non regular Conditions: Applications to the Comparative Calibration Model" Dr. Heleno Bolfarine (Universidad de Sao Paulo, Brazil),
- International activities: Aims and activities of the Inter-American Statistical Institute by Dr Evelio Fabbrioni (Technical secretary of the IASI)

There was a practical presentation of new developments in the package Statgraphics by Rigg Technology and around 52 short papers and 6 posters were presented, 3 of them dealing with statistical education. There were 188 attendees to the conference, including members of SOCHE, university lecturers, professionals of forest services and the national statistical institute. Students majoring in statistics, statistical engineering, and doctoral students in statistics contributed with their presence (about 50% of the attendees) to a more lively and enjoyable meeting. A Round Table coordinated by Victor Figueroa (Director of the Instituto de Estadistica, Universidad Austral, Chile, with participation of Martha Aliaga, Carmen Batanero, Luis Escobar, Evelio Fabbrioni, Pilar Iglesias and Sylvia Mori debated the main challenges for Statistics in Science, Education, Business and Economy. There was agreed that time is ripe for statisticians to take the leadership in changing the statistical activity, which should follow technological advances. Otherwise, other professionals would mark the future direction of statistics developments, methods, tools and applications from their

own specific fields. A compromise was stated to continue the exchange of experiences and thus to collaborate in the advancement of statistics from the current situation, as in maintaining an open communication and increasing collective work efficiency is fostered. The conference was sponsored by the IASE, INE, Forest Service, RIGG, Banco de Chile, Universidad Austral de Chile, Chile Statistical Society and received a wide diffusion through regional television and newspapers. The SOCHE is very grateful to all these institutions and to the following people who spent a lot of time and effort to prepare the meeting and contribute with their warm welcome to make participants enjoy the conference

Scientific Committee: Héctor Allende, Universidad Técnica Federico Santa María; Luis Cid, Universidad de Concepción; Gloria Icaza, Universidad de Talca, Pilar Iglesias, Pontificia Universidad Católica de Chile, Juan Moncada, Universidad Católica de Temuco, Sergio Muñoz, Universidad de La Frontera, Eliana Scheihing, Universidad Austral de Chile, Claudio Silva, Universidad de Santiago de Chile and Héctor Varela, Universidad de Antofagasta.

Local organising committee: Irma Molina, Victor Figueroa, Andrea Báez, Juan Moncada y Osvaldo Rojas; Universidad Austral.

**Introduction to research:** Ricardo Aravena, P. Universidad Católica de Chile and Manuel Galea, Universidad de Valparaíso.

# **ISEC Jubilee Celebrations**Brian Phillips (Australia)



Some of the ISI delegation on excursion during Delhi meeting.

The International Statistical Education Centre (ISEC), established in ISI Calcutta 1950, is run in collaboration with the International Statistical Institute under the auspices of UNESCO and the Government of India. This Centre has been providing training in Statistics programs to sponsored students mainly from Asia, Africa and the Far East and also offers various short-term courses in statistics. To celebrate 50 years of continuous operation of the Centre, two conferences were held, the first in Delhi, the second in Calcutta in late October, 2000. Presenters and participants were drawn from ISEC, the Indian Statistical Institute, the Indian Government, The International Statistical Institute, the IASE and other sections of the ISI.

The theme of the Delhi Conference was "Policy Issues in Demography, Health & Education, and Economics" held at the India International Centre, New Delhi on Friday, 13 October 2000 and Saturday, 14 October 2000, while the theme of the Calcutta Conference was "Contemporary Issues in Statistical Education" held at the Indian Statistical Institute, Calcutta on Tuesday, 17 October 2000 and Wednesday, 18 October 2000.

The opening session included messages from The President of the Indian Statistical Institute: Professor M.G.K. Menon, Professor J.L. Bodin, President, International Statistical Institute, Brian Phillips, President, International Association for Statistical Education, Professor I. Yoshimura, Former Visiting Professor to ISEC, Japan, Professor K. B. Sinha, Director, Indian Statistical Institute and a very frank keynote address by Dr. Arun Shourie, Honourable Minister of State, Statistics & Program Implementation in which it was advocated that statisticians should make greater efforts to enlighten the public about some possible misleading aspects of reports involving statistics.

A number of international visitors representing the International Statistical Institute gave presentations at the meetings. These included Jean-Louis Bodin (France), Marcel Van den Broecke (Netherlands), Daniel Berze (Netherlands), Brian Phillips (Australia), Peter Holmes (UK), Liugi Biggeri (Italy), Derek Bond (Northern Ireland), David Vere-Jones (New Zealand) and Rudolf Teekens (Luxemburg). There were also a number of presenters from ISEC, the Indian Statistical Institute and the Indian Government. Talks ranged from historical presentations about ISEC, through relationship between female literacy and birth rate and the future of statistics education. The event itself and the experience of spending some time in India and getting some concept of what living in a population of about one billion people really means was quite remarkable. It was also pleasing that it involved representatives from the ISI and several sections as well as the Indian statisticians, groups which were involved in the establishment of ISEC. I wish to thank all involved with organising this event with all its complexities, in particular Dr. Premananda Bharati from the Indian Statistical Institute who looked after our complex travel arrangements and Dr. Manoranjan Pal, ISEC who was the chief organiser of the meetings. Some titles and abstracts of the conference can be found at

http://www.swin.edu.au/maths/iase/isecproq.doc. There are plans to publish the proceedings early next year.

# 13. Summary of upcoming Statistics Education Conferences

(See <a href="http://www.swin.edu.au/maths/iase/conferences2.html">http://www.swin.edu.au/maths/iase/conferences2.html</a> for details)

January 2-5, 2001, 7<sup>th</sup> Islamic Countries Conference on Statistical Sciences: "Challenges of the 21<sup>St</sup> Century", Lahore, Pakistan. Topics for statistics education. Postgraduate Training of Statisticians, Statistical Education in Islamic Countries, Teaching of Statistics at School, Undergraduate and Graduate levels, Technology and Statistical Education, The Future of Statistical Education Research, The Statistical Profession, Present and Future, Statistical Education in Non-Statistics Degree Programs. Conference Secretariat: Faculty of Mathematical Sciences, The University of Lahore, 1-K.M. Raiwind, Lahore, Pakistan, Tel:+92-42-5411901/5411905/5411917/5411986, Fax:+92-42-5413036, Email: <a href="mailto:drmunir@brain.net.pk">drmunir@brain.net.pk</a>.

April 19 –21, 2001 Symposium in Honour of Emeritus Professor David Vere-Jones Victoria University of Wellington, New Zealand.

July 12-17, 2001 **The 25th PME conference** will be held at <u>Utrecht University</u>, the Netherlands. Following the PME-25 Conference, a SUMMER SCHOOL will be organized by the Freudenthal Institute. The dates of the summer school are July 18-20, 2001. *Further information:* <a href="http://www.fi.uu.nl/pme25">http://www.fi.uu.nl/pme25</a> or contact Marja van den Heuvel-Panhuizen University of Utrecht, Freudenthal Institute Utrecht, The Netherlands. Email: <a href="mailto:m.vandenheuvel@fi.uu.nl">m.vandenheuvel@fi.uu.nl</a>.

August 15 - 20, 2001 The Second International Research Forum on Statistical Reasoning, Thinking and Literacy (SRTL-2), University of New England, Armidale, Australia.

August 21-22, 2001 IASE Satellite meeting - Statistical Literacy Satellite to ISI, Seoul, Korea.

August 22-29, 2001, 53rd Session of the ISI Seoul, Korea IASE Sessions at ISI-53.

June 2002. The second ICMI-EARCOME (East Asia Regional Conference on Mathematics Education) is to be held in Singapore. This conference, also designated as the Ninth Southeast Asian Conference on Mathematics Education or SEACME 9, has been officially recognized as an ICMI Regional Conference. It will be hosted by the National Institute of Education, Nanyang Technological University, Singapore and the Association of Mathematics Educators, Singapore. Information can be obtained from EARCOME 2002, Division of Mathematics, National Institute of Education, 469 Bukit Timah Road, Singapore 259756, Republic of Singapore <<a href="mailto:earcome2@nie.edu.sg">earcome2@nie.edu.sg</a>>.

July 7 - 12, 2002 The Sixth International Conference on Teaching Statistics (ICOTS-6), Durban, South Africa.

#### IASE Executive Committee and co-opted members



Carmen Baranero (President Elect)



Lionel Pereira-Mendoza (Vice President)



Dani Ben-Zvi (Vice President)



Maria-Gabriella Ottavianni



Joan Garfield (Vice President)



Tae Rim Lee (Co-opted member)



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Susan Starkings (Co-opted member)

(Past President)



# INTERNATIONAL ASSOCIATION FOR STATISTICAL EDUCATION <a href="http://www.cbs.nl/isi/iase.htm">http://www.cbs.nl/isi/iase.htm</a>

# **Application form**

To become a member of IASE, please complete and return this form to:

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Work Address (	(If different from above):		
Areas of Interes	st in statistical education:		
Annual Fees -	Tick as appropriate		
For p	eople from a developed country		
[ ] [ ] [ ]	I wish to become an IASE member @ 50 Dutch Guilders, basic fee (US \$19, EURO 23) I also wish to subscribe to the ISR only @ 45 Dutch Guilders (US \$17, EURO 20) I also wish to subscribe to the SBR only @ 20 Dutch Guilders (US \$9, EURO 9) I also wish to subscribe to the ISR and the SBR @ 50 Dutch Guilders (US \$19, EURO 23)		
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