

IASE Invited Paper Meetings for the 57th ISI Session, Durban, South Africa

| Number | Title | Committees Responsible | Organiser Name, country, e-mail | Participants Name, country |
|--------|---|------------------------|---|---|
| IPM37 | The roles of statistical agencies in developing statistical literacy | IASE IAOS | Reija Helenius, Finland, Reija.Helenius@stat.fi | 1. Gunter Schaefer, Germany 2. Siu-Ming Tam, Australia 3. Pedro Campos, Portugal Disc: Heli Mikkela, Finland Disc: Tae Rim Lee, Korea |
| IPM38 | Educating the public on how to use official statistics. | IASE Local Hosts | Peter Wingfield-Digby, UK pwdigby@btinternet.com | 1. Ben Paul Mungyereza, Uganda 2. Chun-keung Leo Yu, Hong Kong 3. Art Ridgway with Mary Townsend, Canada Disc: Davaasuren Chultemjamts, Mongolia Disc: Hilary Joffe, South Africa |
| IPM39 | Challenges faced in Statistics Education in African countries | IASE Local Hosts | Delia North, South Africa, northd@ukzn.ac.za | 1. Temegen Zewotir, South Africa 2. Eshetu Woncheko, Ethiopia 3. John W. Odhiambo, Kenya |
| IPM40 | Balancing the training of future statisticians for workplace and research | IASE | Helen MacGillivray, Australia, h.macgillivray@qut.edu.au | 1. Charles Rohde, USA 2. Linda Haines, South Africa 3. Murray Cameron, Australia 4. Pam Arroway, USA Disc: Pieter Verhoeven, Netherlands |
| IPM41 | Exploiting the Progress in Statistical Graphics and Statistical Computing for the benefit of Statistical Literacy | IASE | Juana Sanchez, USA, jsanchez@stat.ucla.edu | 1. Dianne Cook, USA 2. Enrico Giovannini, Italy 3. Naomi Robbins, USA |
| IPM42 | Survey Research in Statistics Education | IASE | Irena Ograjensek, Slovenia, irena.ograjensek@ef.uni-lj.si | 1. Mojca Bavdaž with Irena Ograjensek, Slovenia 2. Paul Fields, USA 3. Natalie Shlomo, UK Disc: Steven Heeringa, USA |

| | | | | |
|-------|---|------|--|--|
| IPM43 | Research on Informal Inferential Reasoning | IASE | Katie Makar, Australia, k.makar@uq.edu.au | 1. Chris Reading, Australia 2. Aisling Leavy, Ireland 3. Peter Johnston-Wilder, UK 4. Jim Hammerman, USA Disc: Siu-Ming Tam, Australia |
| IPM44 | Teaching, Learning and Assessing Statistics Problem Solving in Higher Education | IASE | Neville Davies, UK, neville.davies@ntu.ac.uk | 1. Jenny Freeman, UK 2. Helen MacGillivray, Australia 3. Penny Bidgood, UK Disc: John Marriott, UK |
| IPM45 | Technologies for learning and teaching in developing countries | IASE | Gabriella Belli, USA, gbelli@vt.edu | 1. Blanca Ruiz, Mexico 2. Bettie Basson, South Africa 3. Tae Rim Lee, Korea Disc: Neville Davies, UK |
| IPM46 | Virtual Learning Environments for Statistics Education | IASE | Pieter Verhoeven, Netherlands, n.verhoeven@roac.nl | 1. Dirk Tempelaar, Netherlands 2. Jane Horgan, Ireland 3. Annette Dobson, Australia 4. Paul Darius, Belgium Disc: Irena Ograjensek, Slovenia |

IASE Invited Paper Meetings for the 57th ISI Session, Durban, South Africa

| Session Number | Session Title | Session abstract | Authors and titles of papers |
|----------------|--|---|---|
| IPM37 | The roles of statistical agencies in developing statistical literacy | The session will discuss different aspects and practices by which national statistical agencies and international statistical organisations carry out their strategic task of promoting the use of statistics in society. | <ol style="list-style-type: none"> 1. Gunter Schaefer: Readability and ease of use of the Eurostat Internet 2. <u>Siu-Ming Tam</u>, Nicola Cross: Improving statistical literacy - Statistics Strategies and Experience of the Australian Bureau of Statistics 3. <u>Pedro Campos</u>, Pinto Martins, Portugal: The role of Statistics Portugal in developing statistical literacy |
| IPM38 | Educating the public on how to use official statistics. | In their recent Luanda Declaration of 7 December 2006, the African Union Commission, the United Nations Economic Commission for Africa, and representatives of national statistical offices reaffirmed the substance of an earlier resolution made at the Cape Town 2006 Africa Symposium on Statistical Development. One part of that resolution was a recommendation that a comprehensive capacity building programme should be initiated, including the need for national statistical agencies to take steps to increase the broad public awareness of its role in society and cultivate a culture of learning in mathematics and statistics amongst Africa's youth and the African population in general. | <ol style="list-style-type: none"> 1. Ben Paul Mungyereza: Making statistics attractive through partnerships with the media 2. Chun-Keung Leo Yu: Improving the use of official statistics – How marketing and IT help. 3. Mary Townsend, <u>Art Ridgway</u>: Making official data relevant to students: Statistics Canada's Education Outreach Program |
| IPM39 | Challenges faced in Statistics Education in African countries | Though there are sure to be a lot of common problems experienced in teaching statistics in Africa, there is not enough communication between African statistical associations. This session aims to share information and build links between African countries to develop strategies for raising statistical literacy in Africa. | <ol style="list-style-type: none"> 1. <u>Temegen Zewotir</u>, Delia North: Statistics Education in South Africa: Challenges and Successes 2. Eshetu Woncheko: Challenges faced in Statistics Education in Ethiopia 3. <u>John W. Odhiambo</u>, Silas Onyango: Statistics Education in Kenya- Developments and Challenges |

| | | | |
|-------|---|---|--|
| IPM40 | Balancing the training of future statisticians for workplace and research | As the value and importance of statistics grows across workplaces and other disciplines, so too does the challenge of designing an appropriate curriculum for the training of future statisticians for workplaces or research or both. This session considers just some of the questions of balance across undergraduate and postgraduate curricula; across statistical techniques, theories and paradigms; and across development of supporting skills from the mathematical to the computational. | <ol style="list-style-type: none"> 1. Charles Rohde: The Likelihood Principle in Statistics 2. Linda Haines: Balancing Theory and Application: a South African Perspective 3. Murray Cameron: Training for Statisticians in a Research Organisation 4. Pam Arroway: Training Problem Solvers |
| IPM41 | Exploiting the Progress in Statistical Graphics and Statistical Computing for the benefit of Statistical Literacy | The potential of attractive and colorful graphics thanks to progress in Statistical computing in an age where kids grow up with their fingers at the Gameboy or Nintentos and attached to a video device can not be underestimated. Increasing statistical literacy could benefit immensely from providing those we want to reach with the most modern ways of displaying information and visualization of the data we want them to understand. | <ol style="list-style-type: none"> 1. Dianne Cook : Using R and GGobi to Enhance the Learning of Multivariate Analysis and Data Mining 2. Enrico Giovannini : Wikis, Dynamic Charts, Videos and other Innovative Tools to Transform Statistics into Knowledge 3. Naomi Robbins : How to Avoid Some Common Graphical Mistakes |
| IPM42 | Survey Research in Statistics Education | There exist a clear need to systemize, categorize and critically evaluate approaches to, and applications of, survey research in statistics education. A quick overview of literature in the field of statistics education shows that researchers tend to rely heavily on methods of survey research when dealing with topics such as student course assessment, research of student perceptions of, and attitudes towards statistics (either in general or from a specific angle); knowledge assessment, etc. On the other hand, many lecturers also use surveys as an extremely useful tool for teaching elementary statistics. This session could and should be the means to promote all these various types of survey applications. | <ol style="list-style-type: none"> 1. Mojca Bavdaž, Irena Ograjensek: Methodological problems of survey applications in statistics education 2. Paul Fields: Did It Make a Difference? Evaluating Transformational Change in the Statistics Classroom 3. Natalie Shlomo: Teaching Statistics Through Surveys – Experiences at the University of Southampton |

| | | | |
|-------|---|--|---|
| IPM43 | Research on Informal Inferential Reasoning | Approaches have been tried with school children to build informal conceptual foundations of the processes of drawing inferences from data. This approach, called Informal Inferential Reasoning (IIR), has been used by several researchers to suggest new alternatives to the traditional paths used in schools for introducing formal descriptive statistics | <ol style="list-style-type: none"> 1. Chris Reading: Cognitive Development of Informal Inferential Reasoning 2. Aisling Leavy: Insights into Informal Inferential Reasoning in the Primary Classroom 3. Peter Johnston-Wilder: Learners' awareness of sample size when making informal inference about a random process. 4. Jim Hammerman: Informal Inferential Reasoning About Large Scientific Data Sets |
| IPM44 | Teaching, Learning and Assessing Statistics Problem Solving in Higher Education | This session will explore the extent and form in which problem solving can be used to teach and assess non-specialist undergraduate students statistics in business, science, economics and other key subjects | <ol style="list-style-type: none"> 1. <u>Jenny Freeman</u>, James Crossley, Fergus Hamilton, Molebedi Segwagwe: The application of problem-based learning to statistics education: a case study 2. Helen MacGillivray: Similarities & contrasts in learning problem-solving in statistical data analysis and modelling 3. <u>Penny Bidgood</u>, Neville Hunt: Issues of assessment when teaching through problem solving |
| IPM45 | Technologies for learning and teaching in developing countries | This will discuss on-line course and web-based instruction and how to integrate technology in developing countries, including considerations of the cost of different technologies. | <ol style="list-style-type: none"> 1. <u>Blanca Ruiz</u>, Pedro Ortega, José Luis Torres, and Claudia Flores: Integration of the technology use into statistical classroom through networks of learning activities 2. Bettie Basson: Large group teaching and technology – don't throw the baby out with the bathwater. 3. Tae Rim Lee: Mobile learning for Statistics Education in KNOU |
| IPM46 | Virtual Learning Environments for Statistics Education | Since this area is developing rapidly, statisticians can learn a great deal from each other and use the tools presented before them for the development of their own 21st century teaching and / or make contact for world wide usage of certain packages | <ol style="list-style-type: none"> 1. <u>Dirk Tempelaar</u>, Bart Rienties: Relating student learning preferences in a blended learning environment for learning statistics to student characteristics 2. Jane Horgan: An Introduction to Probability with R 3. <u>Annette Dobson</u>, Gillian Heller, Erica Jobling, Keith Dear: Biostatistics at a distance 4. Paul Darius: Specialized web-based tools for teaching statistical concepts and experimentation skills. |