

**Autumn, 1997** 

This issue contains information on the new Executive Committee for IASE, on ICOTS-5, and on two new publications on statistics education supported by IASE.

### **NEW EXECUTIVE OFFICERS FOR 1997-1999**

The newly elected IASE Executive Committee is as follows:

President: Maria Gabriella Ottaviani (Italy)

President-Elect: Brian Phillips (Australia)

Vice Presidents: Carmen Batanero (Spain)

Joan Garfield (USA)

Michael Glencross (South Africa) Lionel Pereira-Mendoza (Singapore)

Congratulations, and all the best for the years to come!

#### **ICOTS-5 UPDATE**

The Fifth International Conference on Teaching Statistics, ICOTS-5, will be held in Singapore, June 21 - 26, 1998. The 2nd announcement can be obtained from the ICOTS-5 Secretariat, e-mail ctmapl@singnet.com.sg or fax 65 299 8983. This contains all the conference and registration details. Information about the conference can also be found on the Web at http://www.nie.ac.sg:8000/~wwwmath/icots.html and information about the program can be found at http://www.swin.edu.au/maths/icots5/intro.html

There is still time to submit abstracts for contributed papers, but they should be submitted as soon as possible to Brian Phillips, whose address is on page 4. Hope to see you in Singapore next year!

## NEW PUBLICATIONS ON STATISTICS EDUCATION

Two new publications sponsored in part by IASE are now on the market, with details on their contents supplied below. Those interested in teaching statistics will want to check them out.

## THE ASSESSMENT CHALLENGE IN STATISTICS EDUCATION

Edited by Iddo Gal and Joan Garfield

Jointly published by the International Statistical Institute and IOS Press. "this book discusses conceptual and pragmatic issues in the assessment of statistical knowledge, reasoning skills, and the disposition of students in diverse contexts of instruction, both at the college and pre-college levels." Written by internationally known researchers and educators for academic involved audiences in teaching statistics and in teacher education, the book's 19 chapters are organized as follows:

1. Introduction: Curricular goals and assessment challenges in statistics education. Iddo Gal, & Joan Garfield

Part I: Curricular goals and assessment frameworks

- 2. Some emerging influences underpinning assessment in statistics. Andy Begg.
- 3. Authentic assessment models for statistics education. Shirley Colvin, & Kenneth Vos.
- 4. Monitoring attitudes and beliefs in statistics education. Iddo Gal, Lynda Ginsburg, & Candace Schau.

Part II: Assessing conceptual understanding of statistical ideas

- 5. A framework for assessing knowledge and learning in statistics (K-8). Susan Friel, George Bright, Dargan Frierson, & Gary Kader.
- 6. Using "real life" problems to prompt students to construct conceptual models for statistical reasoning. Richard Lesh, Miriam Amit, & Roberta Schorr.
- 7. Simple approaches to assessing underlying understanding of statistical concepts. Anthony Kelly, Finbarr Sloane & Andrea Whittaker.
- 8. Assessing students' connected understanding of statistical relationships. Candace Schau, & Nancy Mattern.

Part III: Innovative models for classroom assessment

- 9. Assessing statistical thinking using the media. Jane Watson.
- 10. Assessing students' statistical problem-solving behaviors in a small group setting.

Frances Curcio, & Alice Arzt.

- 11. Assessing student projects. Susan Starkings.
- 12. Assessing project work by external examiners. Peter Holmes.
- 13. Portfolio assessment in graduate level statistics courses. Carolyn Keeler.
- 14. Technologies for assessing and extending statistical learning. Susanne Lajoie.
- 15. Issues in constructing assessment instruments for the classroom. Flavia Jolliffe.
- 16. Assessment on a budget: using traditional methods imaginatively. Chris Wild, Chris Triggs, & Maxime Pfannkuch.

Part IV: Assessing understanding of probability

17. Dimensions in the assessment of students' understanding and application of chance and probability. Kathleen Metz.

18. Combinatorial reasoning and its assessment. Carmen Batanero, Juan D. Godino, & V.Navarro-Pelayo.

19. Probability distributions, assessment and instructional software: lessons learned from an evaluation of curricular software. Steve Cohen, & Richard Chechile.

For more information or for ordering instructions, check the IOS Press homepage at <a href="http://www.iospress.nl">http://www.iospress.nl</a>, send e-mail to: <a href="mailto:market@iospress.nl">market@iospress.nl</a>, or contact the IOS Press main offices: IOS Press, van Diemenstraat 94, 1013 CN Amsterdam, The Netherlands,

Tel: +31 20 638 2189, Fax: +31 20 620 3419. IASE members receive a discount of 20% off the list price of \$65(US). Any new member of IASE in 1997 will receive a complimentary copy of the book. Contact the ISI Permanent Office, 428 Prinses Beatrixlaan, 2270 AZ Voorburg, The Netherlands [isi@cs.vu.nl] for more information on these offers.

# PAPERS ON STATISTICAL EDUCATION presented at ICME-8

Edited by Brian Phillips

A Topic Group on Statistics and Probability at the Secondary Level, a Working Group on Linking Mathematics With Other Subjects and a Forum contained papers devoted to issues on statistics education. Authors and titles are listed below.

Moore, David S. New pedagogy and new content: The case of statistics.

Starkings, S. An international overview of data analysis within the mathematics curriculum.

Burrill, G. Curriculum issues in United Sates schools.

Shen, S.M. Data analysis in secondary education in Hong Kong - curriculum, examination and project.

Teran, T. An Argentinian experience of statistics teaching for masters of high school.

Shaughnessy, J. M. Emerging issues for research on teaching and learning probability and statistics.

Gal, I. Assessing students' interpretations of data: Conceptual and pragmatic issues.

Hawkins, A. Teachers of statistics: Needs and impediments.

Lipson, K. Technology and the teaching of statistics.

Nemetz, T. An overview of the teaching of probability in secondary schools.

Truran, J. & Truran, K. Statistical independence: One concept or two?

Peard, R. A summary of chance and data research activities from PME 20.

Holmes, P. Forum: How statistics and probability can best be incorporated into the overall school program?

Gordon, S. Teaching statistics to reluctant learners.

Forbes, S. Bringing the real world into statistics?

Watson, J. & Moritz, J. Student analysis of variables in a media context.

Copies may be ordered directly from the editor at \$20(US) per copy.

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Sessions on Statistics Education at the 51ST SESSION OF THE INTERNATIONAL STATISTICAL INSTITUTE,

18-26 August 1997, Istambul

Invited paper sessions related to statistical education:

- 36. Research on teaching and learning statistics. (Organizer: J. M. Shaughnessy, USA)
- 37. Research and teaching of probability and statistics in the physical sciences. (Organizer: D.Vere-Jones, New Zealand and Ed. Waymire, USA).
- 38. Teaching and training in statistics with sampling and sample surveys. (Organizer: G. Cichitelli. Italy).
- 39. The role of Bayesian methods in statistical education. (Organizer: Jeff Witmer, USA).
- 40. Data centered versus mathematics centered training in statistics. (Organizer: Shir Ming Shen, Hong Kong).
- 41. Assessment and measurement in education. (Organizer: A. Bazarghan, Iran).
- 51. Computational statistics, electronic publishing and access to research data. (Organizer: T. Arnold, USA).
- 52. Technology in teaching statistics ("teachware"). (Organizer: E.M. Tiit, Estonia)..
- 88. Roundtable on "What is Statistical Literacy" International Literacy Institute. (Organizer: D. Wagner).

More information is available from either ISI97@die.gov.tr or the Internet at http://www.die.gov.tr/ISI/isi ~ i.html

#### ROUNDTABLE CONFERENCE

IASE is beginning to plan for the Roundtable Conference to be associated with ICME-9, scheduled for Japan in the year 2000. Suggestions for topics, times and venues are welcomed. The Roundtable should be scheduled so that participants can conveniently attend ICME-9 as well. Please send suggestions to:

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