



INTRODUCTIONS TO THE PROCEEDINGS OF THE ICMI STUDY 18 CONFERENCE AND IASE 2008 ROUND TABLE CONFERENCE

INTRODUCTION FROM THE ICMI PRESIDENT

Michèle Artigue, President of ICMI
Université Paris 7, France

The first ICMI Study was launched in 1985 under the Presidency of Jean Pierre Kahane. Since that time, sixteen Studies have been completed, three are in progress, and two more will be launched soon. The tradition is thus well established, but ICMI Study 18 is especially challenging for several reasons: it is the first Study organized jointly with another institution—the International Association for Statistical Education; it concerns a domain which, not such a long time ago, was considered by many mathematicians at the margins of their field, and has progressively emerged as an essential dimension of the mathematical culture to which anyone must have access. All over the world, the place given to statistics in mathematics curricula quickly increases; more and more it is considered that students have to become familiar early enough with the specific forms of statistical thinking. This is a real challenge, all the more as most mathematics teachers have themselves a limited familiarity with the field.

This Study focusing both on how to better incorporate the teaching of statistics into school mathematics and how to better prepare teachers for that challenge, is thus especially welcome. I have no doubt that, thanks to the joint efforts of ICMI and IASE, it will offer a major contribution to statistics education, insightful and useful for all those who are concerned about these important issues, beyond the sole community of researchers in mathematics education. The ICMI Study and IASE Round Table Conference, and the associated proceedings constitute an essential step towards this goal.

On the behalf of ICMI, I would like to thank all those who have contributed to the Study up to now, and wish them an excellent Conference. I would like also to add my special thanks to the International Program Committee for this Study and its chair: Professor Carmen Batanero, to IASE and its President: Professor Allan J. Rossman with whom collaboration has been exemplary, and last but not least, to the local organizing committee of this Conference and its chair: Professor Blanca Ruiz. I am aware of all the efforts they have made for the success of this event and also for having Mexican teachers benefit from it thanks to a specific workshop.

INTRODUCTION FROM THE IASE PRESIDENT

Allan J. Rossman, President IASE
California Polytechnic State University, United States of America

Data are everywhere. Information from around the world is at our fingertips every minute of every day. As a statistician, I am thrilled with this development. But the ubiquitous availability of data makes all the more important the need to train all citizens in how to use data for sound, evidence-based, decision making.

This conference is addressing two very important issues: how to better incorporate the teaching of statistics into school mathematics, and how to better prepare teachers for that challenge. The issue of teacher training is paramount. The impact of school teaching of statistics will be minimal until we statistics educators help prospective teachers to appreciate the benefits of statistical thinking. Once we develop that enthusiasm on the part of prospective teachers, and support it by providing a solid understanding of statistics ideas, then those teachers can convey to their students an excitement for learning statistics.

I am delighted that IASE and ICMI are collaborating on this conference and on the broader study of which this conference is a part. ICMI's interest in statistics education will help to bring more attention to this important issue, and IASE is very pleased to work collaboratively with ICMI on this study. The timing has worked out wonderfully for the 2008 IASE Round Table Conference to coincide with the ICMI Study Conference.

Every four years IASE organizes a roundtable conference that brings together statistics educators from around the world to share findings and discuss a particular topic. These conferences are much smaller than the ICOTS (International Conference on Teaching Statistics) meetings, and they also focus on one particular topic. The roundtable format allows for much more back-and-forth exchange of ideas than a typical conference. Recent IASE roundtable conferences have focused on curricular development, training of researchers, and role of technology in statistics education. The issue of teacher training and the role of statistics in school mathematics is extremely appropriate for the topic of this roundtable conference.

I thank all of the conference participants for their valuable contributions. Special thanks to Carmen Batanero for chairing the International Programme Committee and to Blanca Ruiz for chairing the Local Organizing Committee. I also appreciate very much the support and collaboration provided by Bernard Hodgson and Michele Artigue of ICMI.

I trust that all of the participants will enjoy and learn from the discussions at the conference, and I hope that all who read articles in this Proceedings will also benefit. Moreover, I respectfully ask that you find a way to extend those benefits to school teachers of statistics, so they can in turn influence their students.

MESSAGE FROM THE LOCAL ORGANIZING COMMITTEE CHAIR

Blanca Ruiz, Chair Local Organizing Committee
Instituto Tecnológico y de Estudios Superiores, Monterrey, Mexico

It is a pleasure to welcome you to Monterrey and the Joint ICMI/IASE Study Conference, where the Study 18 Conference and IASE 2008 Round Table Conference are being held.

The Joint ICMI/IASE Study is a concerted effort by the International Commission on Mathematical Instruction (ICMI) and the International Association for Statistical Education (IASE) to analyze problems in the teaching of statistics within school mathematics. Hosting this first collaboration is a pleasure for Monterrey and the Instituto Tecnológico y de Estudios Superiores (ITESM) and also a big challenge and a great opportunity for us.

The Conference will let us know the newest and most significant investigations on the theme. The gathering of so many international colleagues will provide México and Latin America with a unique opportunity to discuss and exchange ideas on the teaching of statistics with members of the two most important international institutions in Statistics and Mathematics Education.

The focus of this Study, *Statistics Education in School Mathematics: Challenges for Teaching and Teacher Education*, captures the crucial concern that current instruction has not focused on developing statistical reasoning in students and emphasizes that the specific training of teachers in statistical education is an important issue that requires our attention. We are sure that the joint effort by ICMI and IASE will be a success in defining some essential elements for improving teacher training.

We hope you enjoy staying in Monterrey and participating in friendly and fruitful work sessions. The Local Organizing Committee will do its best to make your stay a most pleasant one.

Thank you for being here, in Monterrey, México and participating in the Joint ICMI/IASE Study Conference.