

Session C4

Statistical Literacy in the Community

Organiser: David Moore (West Lafayette, Indiana, USA)

Invited Speakers: David Moore (West Lafayette, Indiana, USA)
Liang Zhishun (Guangzhou, China)

Contributed Paper: Jean Thompson (Wellington, New Zealand)

Introduction

The two invited papers in this session offer an interesting contrast between two approaches to the problem of increasing the "numeracy" of society as a whole. Liang Zhishun writes from the perspective of a developing society. The emphasis in his account of statistics in China is very much on centrally organised provision of the basic structure of statistics for social development, on the training of technical personnel to operate the structure, and on educating managers and planners in the importance of statistics and the use of data.

David Moore concentrates on the needs of all citizens in a developed democracy. In such societies, both the economic prospects of individuals and their ability to participate wisely in democratic processes increasingly depend on their quantitative literacy. The two papers share a common concern that statisticians and statistics educators face the social responsibilities imposed on them by the needs of their society.

A contributed paper by Jean Thompson, which has been added to this session, raises the parallel between literacy and numeracy, and asks what the school teacher can do to help ensure that numeracy is treated with the same conviction as literacy.

In addition to the invited papers, Session C4 presented a discussion of the issue of "statistics for all citizens". The discussion was initiated by a panel, then continued with vigorous audience participation. The panel members were: Professor Paul Bungartz of Bonn University, Germany; Professor Toby Lewis, retired from the Open University, England; and Professor Jagdish Rustagi of the Ohio State University, USA.

Each panel member began with a provocative comment. Professor Bungartz pointed to the importance of mathematical facts such as the influence of sample size and urged that mathematical foundations not be neglected as we attempt to reach a wide audience. Professor Lewis emphasised the distinction between addressing students, who are voluntary listeners, and the general public. We must compete for the public's attention and so should not hesitate to build on, for example, sports statistics. Professor Rustagi noted that lotteries and other games of chance are now widespread. They are

interesting and accessible to the public, and so offer an opportunity to illustrate the principles of chance. A lively discussion followed. Insurance was offered as another topic of public interest. Members of the audience cited many specific efforts, in schools and elsewhere, to advance the quantitative literacy of all citizens.

