

## Session A4

# Projects, Practical Work and Competitions

- Organiser:* Russell Dear (Invercargill, New Zealand)
- Invited Speakers:* Russell Dear (Invercargill, New Zealand)  
David Green (Leicestershire, England)  
Anne Hawkins (London, England)  
Gordon Knight (Palmerston North, New Zealand)
- Contributed Papers:* Paul Bungartz (Euskirchen, Germany)  
Peter Petocz (Sydney, Australia)  
Mary Rouncefield (Chester, England)  
Shir-Ming Shen, Kam-Yuk Li and K Lam (Hong Kong)
- Abstract:* Steve Krevisky (Middletown, Connecticut, USA)

### Introduction

Practical work is being emphasised in schools in a number of ways and all have their merits and problems associated with them. Traditional tests and examinations present a major barrier to the teaching of statistics through experiment but, unfortunately, significant changes in classroom practice do not occur until work is explicitly assessed. The introduction of course work, particularly that involving projects and practical work, is an attempt to overcome these problems. The various ways of introducing projects and practical work provided the central theme for these sessions at the conference.

The first A4 session concentrated on the work submitted to statistical competitions in the UK, the USA and Hong Kong. These and other competitions successfully motivate students and teachers in applied statistics. At the same time they indicate some of the issues involved with

- (i) group work as opposed to individual project work;
- (ii) cross-curricular data handling;
- (iii) assessing project work.

To overcome some of the difficulties that external examinations present for the teaching of statistics, a number of countries have introduced course work into their assessment. The second of the A4 sessions looked at how this is done in New Zealand and the UK.

The final A4 session described examples of project and practical work carried out in classrooms in England, New Zealand and West Germany. The emphasis was on moving away from contrived experiments with dice and coins to real situations more relevant to students. An additional paper from Australia, originally in Session B1, has been included with this session because of its potential interest for teachers at schools as well as tertiary institutes, together with an abstract originally from B8.