For seven years, since its inception as a medium of information on statistical education, ISEN has been warmly welcomed by ISI members and other readers. In spite of restrictions on its size, it has developed into a publication with an attractive format and remarkably wide coverage of pertinent material thanks to the efforts of its long-time editor, Professor R. A. Hartley, and to Professor J. Gani who, during his tenure as the chairman of the ISI Education Committee, has made extra efforts to keep up the good tradition. This issue contains an article by Professor B. V. K. Jones, the new chairman of the Education Committee. It also contains the conclusion of Professor O. B. Anderson's article, the last part of which appeared in the October 1987 issue.

From the Chairman

It is with considerable trepidation that I take over any responsibility from Joe Gani, knowing full well his capacity for energetic and innovative direction. This is certainly my feeling in taking over my role as chairman of the Education Committee. It has been no easy task building up the Education Programme to its present vigorous stage, and it will be hard to sustain, let alone augment, the range of activities initiated under the leadership of both the previous chairmen.

At the same time there is still a great gap between the needs of statistical education, particularly in the developing countries, and its actual availability. It is true that financial assistance can, at least, in some way, help to fill a few of the gaps. The uncertain role of the ISI in relation to statistical education in the developing countries was brought home to me rather forcibly in the course of an ESCAP meeting in Bangkok which I attended last May. This should lead me to briefly describe here, leaving until the next ISEN any discussion of the Tokyo meeting with one exception - the gratitude of the Education Committee to Mary Regier for taking over the editorship of ISEN from this issue on.

Returning to ESCAP and Bangkok, the task of the Committee was to survey recent developments in statistical education and training in the ESCAP region (Asia and the Pacific), and to consider ESCAP's future statistical training programme there.

The first statistical requirement of the developing countries is the provision of basic information for government and for various international agencies. Correspondingly, the first educational task of ESCAP has been the training of statistical personnel to fill this need. To this end it has mounted regular training courses, provides support for the training of statistical personnel within government statistical offices, and users of statistics (banks and economic agencies) to assess the current situation and to develop plans for the future.

A number of rather clear impressions emerged from the necessarily brief treatment of this ambitious theme. One, no real surprise to anyone familiar with the region, was of the extraordinary diversity of the countries in the region - from giants to侏儒s. Another was of the rapid increase in the number of students and the small number of local university statistics departments; faced with a department in our host town some four times the size of my own in New Zealand, I began to wonder to which country the adjective "developing" really pertains.

In the rural areas of these countries, however, and in some of the smaller countries of the region, especially some of the tiny Pacific island states, the problem is much greater - the lack of trained personnel and the scarcity of suitable software and training material on statistical methods are the rule. Local politicians often show little appreciation of the value of proper training. A situation has been set up in which statistical training and training in statistical methods are the rule. Local politicians often show little appreciation of the value of proper training in statistical information (a situation not entirely confined to developing countries).

Under these circumstances the group had little difficulty in reaffirming the need for continuing help in the training programme for government statistical staff. They also recommended the revision of the ESCAP training manual and its supplementation by a section on the uses of computers and microcomputers, in statistical offices. The potential, as well as the need, for closer collaboration between statistics and in-house government department training programmes was an important issue discussed in the meeting. Overall, it was a stimulating and instructive session, of which we should all be proud.

The REALITY, present in my mind throughout the meeting, however, was the question of the role of the Statistics Education Committee, the very heart of ISI concerns. Yet what could I offer on behalf of ISI? Small contributions we can and do make, by way of the publication of training courses, the publication of lists of teachers or possible advisors on different aspects of statistics, lists of courses, and of course the regular programme of meetings on statistical education, as well as the substantial areas of statistics.
The basic issue for the Education Committee, at least as I see it, is whether to stick to these relatively limited tasks, and to do them well, or to try to leap more boldly into the educational arena, seeking and undertaking major educational functions. It is not so obvious to me that an organization with the peculiar structure of ISI—partly an academy of distinguished scientists, partly a group of its five professional sections, each with its own particular concerns, and, at the centre, a miniscule permanent office with budget to match—should seek to become a major direct actor in such a field. Yet there are many important educational tasks to be done, and it ought to be that no organization should be better placed than ISI to initiate such activities. At the moment, I tend to feel that there is definite scope for the development of the ISI publishing activities in the field of statistical education, that it could play a particular useful role in the transfer of teaching ideas material from one country to another, but that the long run, rather, than undertaking too much too soon, it should seek to interest others in this, and to consider setting up an international statistical education centre, which would be intimately associated with its principal advisory body.

Whatever of these or of suggestions, I would be delighted to see readers' views, whether by way of letters to the editor of this newsletter or to me personally, and will maintain a friendly, if not constant, contact with readers large through the columns of this newsletter.

David Vere-Jones
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New Zealand

REPORTS FROM ROUND THE WORLD

Statistics Teacher in the U.S.A.: A Personal Perspective
Oliver G. Anderson, Department of Statistics, Temple University, Philadelphia, PA 19122, USA

PART II

A final point. Textbooks of seven or eight hundred pages are common in Business Statistics. Such length seems unacceptable for one semester (15 weeks) course, where a student is typically expected to have 45 hours of class and put in a further 90 hours of study. Rather than expect students to skim through 50 pages as part of their six hours of weekly study, give them something which will force them to think about the material they are studying. Textbooks should be dense in ideas, but short, long, and modest in coverage.

The aim should be to cover selected material briefly and well— the selection consisting of core concepts, filled out and reinforced by examples of their application.

I think most readers will recognize and appreciate the abuses I am trying to denounce, so the remainder of this article will describe the way I think statistics ought to be taught—through an example in the general area of hypothesis testing.

Problem. The following data were collected from students in a statistics class, who were asked then to obtain a 95% confidence interval for the population mean (mean heights (measured in inches) for males and females: male heights (\(m\)) \{72,73,74,73,69,69,70,72,72,67,67,75,69,67,71,71,71,69,69\}; female heights (\(f\)) \{62,67,67,62,60,63,63\}.

Solution. The first step is to calculate the sample mean and variance for each group.

The sample mean for males is \(\bar{m} = 69.5\) and for females is \(\bar{f} = 63.143\) approximately.

The sample variance for males is \(s^2_m = 7.9\) and for females is \(s^2_f = 11.26\).

To find the confidence interval for the population mean (\(\mu\)), we use the formula:

\[\bar{x} \pm z_{\alpha/2} \left( \frac{s}{\sqrt{n}} \right)\]

where \(\bar{x}\) is the sample mean, \(z_{\alpha/2}\) is the critical value from the standard normal distribution, \(s\) is the sample standard deviation, and \(n\) is the sample size.

For a 95% confidence level, \(z_{0.025} = 1.96\) (from the standard normal distribution table).

The confidence interval for \(\mu\) is then:

\[69.5 \pm 1.96 \left( \frac{7.9}{\sqrt{20}} \right)\]

\[69.5 \pm 2.45\]

Thus, the 95% confidence interval for \(\mu\) is approximately \(67.05\) to \(71.95\).

It has been pointed out that the issues discussed in this article could be of mass in education. (Some 40% of the young people in the UK attend college.) But this may be rationalization rather than justification, and I think we are left with the second best, if we accept it as an excuse for what is happening.

As teachers, we cannot escape responsibility for educating the students that attend our classes. Those of us with experience know that students can learn something from the New World philosophy of mass in education. Not only do we have to teach our students; we have to teach them how to use their own initiative, how to reflect on their thought and reflection are beyond the capabilities of students. It is precisely these habits that we should be concerned with passing on to them. We should not settle for merely planting in a mass of stuffed pockets.

I am most grateful for comments from Joe Gani and Jack Hayas which greatly improved this article— reviewing it, I hope improve it, this version of which will be available as a working paper from the author. The views expressed do not necessarily reflect those of anyone other than the author.

NEWS AND ANNOUNCEMENTS

ISI Round Table Conference on the Training of Teachers in Statistics (Hungary, 23-27 July 1987)
Preparations for this conference, previously announced in the February 1987 issue of this newsletter, are well under way. Inquiries should be addressed to the organizer, A.A. Hawkins, at the Centre for Educational Statistics, 20 Bedford Way, London WC1H 0AL, UK.

The conference is being held in association with the meetings of the 6th International Congress on Measurement and Voice Education, Budapest (31 July-3 August). These meetings will include sessions specifically devoted to statistical education and organized by L. Rade, who has been for many years a member of the Education Committee and chairman of the task force on International Conference in Statistics.

International Directory of Short Courses in Statistics
Two issues of this directory have been compiled and distributed by the task force on Tertiary and Technical Education under the chairmanship of R. Loyes. The directory will continue to be revised and updated. Copies may be obtained from the permanent office. Information for inclusion in the Directory (contact date is 6 months in advance of publication date) and copies of the newsletter may be addressed to its editor, Professor R. Loyes, Department of Statistics, University of Sheffield, Sheffield S 71 RH, UK.

International Directory of Workers in Statistical Education Primarily at School Level
An initial draft of this directory has been compiled by the task force on Statistical Education at School Level under the chairmanship of Barnett. Information was obtained by correspondence with individuals in many countries and organisations. Information may be addressed to the present chair of the task force on Statistical Education at School Level, Professor R. Loyes, Department of Statistics, University of Connecticut, Storrs, 06269, USA.