

THE STATISTICAL CONSULTANT

Committee on Statistical Consulting Education
Section on Statistical Education
American Statistical Association

Janice Derr, editor

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ASA SAN FRANCISCO MEETINGS August 17-20, 1987

On Monday, August 17 at 5:30 p.m., there will be an open meeting of the ASA Committee on Statistical Consulting Education. At that time, the draft of the By-laws, presented in the Spring issue of this newsletter, will be discussed with the intent of producing a final version for the proposed change in status from committee to subsection.

IMPROVING THE EFFECTIVENESS OF STATISTICAL CONSULTANTS: A LIVE DEMONSTRATION

On Tuesday, August 18, from 10:30 a.m. to 12:20 p.m. there will be a special session sponsored by the Statistical Division of the American Society for Quality Control, and the ASA Section on Statistical Education. The purpose of this session will be to give people a live demonstration of how to use videotaped sessions and coaching in an educational setting to improve the effectiveness of statistical consultants. The audience will receive a written description of a consulting "vignette", which will then be acted out in a role play by Sandra Stinnett (North Carolina) and Walter Stroup (University of Nebraska). The role play will be videotaped, and Dan Boroto (Florida State University) will provide coaching based on the videotape. Doug Zahn (Florida State University) is the discussant and J. Terry Smith (Queen's University) will chair this special session.

We hope to see you in San Francisco!

CONSULTING PROBLEM/SOLUTION CONTEST

In this issue of **The Statistical Consultant**, we begin a section devoted to actual experimental design or data analysis problems confronted by statistical consultants. The success of this section will require the help of our readers. We need your help in two areas:

- (1) We are looking for consulting problems that you have found particularly interesting or unusual. The problems need not be exceptionally difficult; in fact, the level of the problem should be such that it can be attacked by, say, a second-year graduate student in statistics (for reasons that become evident below). The ideal problem for this section can be solved by clever application of existing methods. In each issue a problem will be published, with the contributor identified.
- (2) Of course, we also need solutions, with the following restriction: any undergraduate or graduate student may submit a proposed solution to the problem. The best solution (in our judgment, in conference with the problem contributor when possible) will be printed in the subsequent issue.

To submit a problem, send a description of the problem to:

Dr. Ron Wasserstein
Department of Mathematics and Statistics
Washburn University
Topeka, Kansas 66621

The description should be brief yet sufficiently complete to make a reasonable solution possible. Solutions are likewise submitted to the same address.

The following problem is given to "kick off" the section. It is not meant to be a model problem; I just found it interesting and thought someone else might also. For consideration in the next issue, please submit a solution by September 15, 1987. The same date applies to submission of problems.

Problem: Each year the State of Kansas has a high school poetry contest. Students submit a poem of any type or style that they desire, and the best poems are published in a small collection. An English professor (statistical problems are everywhere!) at Washburn University, having considerable experience with these poems, believes that they can be readily classified into fifteen categories (such as nature poems, love poems, etc.) Nine hundred and forty-three poems received in the 1985 contest were reviewed by three judges who were asked to determine to which category (1 through 15) each poem belonged. The English professor then approached me (alas, for the first time) and asked me to determine if the data indicated that, indeed, these fifteen groupings were sufficiently distinct and complete to categorize the types of poems submitted. The answer, apparently, had some bearing on how future contests might be conducted. What are some ways I could have used to answer this question?

THE CONTINUING EDUCATION OF STATISTICAL CONSULTANTS: A survey of resources

The field of statistics is always growing, and one of the challenges facing a statistical consultant is the need to stay current with developments in statistics. In the Spring issue of **The Statistical Consultant**, several contributors discussed resources available to provide training in non-statistical aspects of statistical consulting. In this issue, Ron Barnes (University of Houston) presents a review of educational resources available for continuing education in statistics.

A wide variety of continuing education alternatives are available to statistical consultants and those wishing to enter the field.

The ASA offers a number of continuing education events at the annual meetings. Last Winter in Orlando, two courses were offered and this August, 16 short courses, tutorials and workshops will be offered in San Francisco (August 15-19) on topics including a workshop on "How Statistics Can Be Made More Effective in Business and Industry", "Measuring Software Reliability" (tutorials) and "Introduction to Artificial Intelligence in Statistics" (a televised short course). Pre-registration fees range from \$0 (free) to \$250 and many courses are 1 or 2 days (8-16 hours) in duration. Most courses are scheduled in the days just preceding the ASA meetings.

Some of the ASA short courses (10) and lecture-discussions (15) are now available on videotape with mimeo handouts and may be rented or purchased from the ASA national office. Local ASA chapters and/or industry have sponsored the cost of putting on such short courses as part of the local chapters' continuing education activities. For more information, contact Ms. Jill Stormer, Associate Director for Education and Program Development at the ASA national headquarters.

Roundtable luncheon discussions on statistical consulting have occasionally been in the ASA Roundtable Luncheon Programs at the national meetings.

In addition, the AMSTAT NEWS contains a listing, in each issue, of "Forthcoming Conferences, Seminars". A number of these annual conferences also include short courses. Brief descriptions of the contents of each conference are contained in these listings. Such conferences range from the "Conference on Applied Statistics" (the 43rd will be held Dec. 7-9, 1987 in New Jersey and will include 6 three hour tutorials in the areas of quality control and pharmaceutical applications), to the newer Winter Simulation Conference (Dec. 14-16, 1987 in Atlanta which will include a number of introductory tutorials in simulation). The third "OTT Conference on Quality Management and Applied Statistics in Industry" (April 1987) included Pre and PostConference Seminars on topics ranging from "What Chemists Should Know About Statistics" to "A Complete Statistical Trainer - Improving the Quality of Industrial Statistical Education" and "Robust Designs: The Taguchi Approach".

A number of related journals in areas ranging from Quality Control to Biometrics and Business Statistics also publish listings of upcoming conferences and workshops which often are of interest to statistical consultants.

The major Statistical Software Computer packages including SAS, SPSS, BMDP and SIMSCRIPT (simulation) offer training seminars and short courses on the use of their program packages which may be of interest.

Finally, a number of professional continuing education organizations have developed over the past decade, most originally affiliated with universities, which offer courses with continuing education credits. These include:

- (1) Continuing Engineering Education Program
George Washington University
Washington, D.C. 20052

- (2) The Institute for Professional Education
1515 North Court House Road
Suite 303
Arlington, VA 22201

- (3) University Associates
P.O. Box 541
Princeton, N.J. 08542

- (4) Multivariate Analysis and Statistical Analysis Workshops
Ohio University
Athens, OH 45701-2979

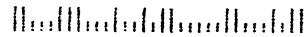
These organizations offer a considerable variety of short courses, tutorials and workshops, at a number of geographical locations throughout each calendar year. For further information and a catalog of their latest offerings, contact them at the above addresses.

This article was just an attempt to highlight some of the continuing education resources available to statistical consultants. No doubt many fine programs have been overlooked. The author would greatly appreciate any additional information on programs and resources available.



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Topics for future issues of The Statistical Consultant:

Summary of ASA in San Francisco--Consulting Education sessions and committee meetings.

Support for statistical consulting activity from University central administrations.

"Non-standard" statistical consulting problem solving contest for graduate students in consulting.