

## USE OF COMPUTERS IN TEACHING STATISTICS

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Following the enthusiastic response to Lennart Rade's ICOTS I session, "Use of Calculators and Computers in Teaching," I suggested an expanded set of sessions on the use of computers for ICOTS II. The original idea was to emphasize two areas: (1) use of commercial statistics packages on mainframe computers, and (2) use of microcomputers. The latter was to involve actual demonstrations of software developed by the authors, through projection of video mages, driven in real time by microcomputers. The first area was incorporated into an ICOTS II tutorial, "Use of Statistical Computer Packages", presented by Dr. Pendergast. The second area evolved into the sequence of four invited paper sessions under discussion here.

Ultimately, not a single author in these sessions chose to use the micro-computer/video projection system made available. The main concerns with using this system, I believe, were centered around the reliability of transporting software to a "strange system" on short notice, and the short length of time (25 minutes) made available to each speaker. It is also probably true that "hands-on" demonstrations, wherein individual attendees can experiment with software on individual micros, is the most effective way to present many such software packages. This was done at ICOTS II, with somewhat limited success, with the demonstrations available in the E Hut laboratory.

One of my goals for the series of sessions 4A - 4D was to provide a slate of papers representing a broad spectrum of work involving use of computers in teaching statistics. I deliberately tried (and I believe succeeded) to make the variance in presented topics large. The resulting dozen "snapshots" of work with computers give some idea of what is being done in this area at the present time. Of the 12 papers delivered, four deal directly with microcomputers. Seven papers report work on mainframe computers, and six papers concern major mainframe statistical software such as SAS, GRAFSTAT, MINITAB, and KONSTA.

These papers provide more than a glimpse of the variety of computer uses in teaching statistics. They also give concrete examples for us to try in our courses. This was my second goal for the sessions - to provide specific ideas which could be developed and modified by attendees to fit their own teaching requirements. Perhaps in ICOTS III we will hear of the results of these efforts and their extensions.