

962-E1-507

Hunter D Ellinger* (ellinger@io.com), 1622 Waterston Avenue, Austin, TX, and **Mary R Parker** (mparker@austin.cc.tx.us). *The Source of Significance: Using Cost To Illuminate Statistical Decision-Making.*

Student difficulty in mastering hypothesis testing and related topics is held to stem in large part from the omission from elementary-statistics instruction of the considerations of cost and benefit that underlie real-life decision processes. Previously, such omission was understandable because solution of such problems requires iterative methods impracticable by hand, but this is yet another place computer-based instruction offers new opportunities. We report on our experience developing and testing computer programs to enable students to learn about constructing cost-minimizing decision methods using statistical concepts. Rather than training for accept/reject critiques of fixed sets of data using abstract criteria (such as 95 (Received September 15, 2000)