

# Computer Simulation and Learning Theory, Volume 3, 1976

## Teaching Management Research Through Computer Simulation

by

Dr. Arthur Whatley  
Associate Professor of Management  
New Mexico State University

Exxon Education Foundation funds two types of education innovation programs. The first is a major funding to support the design, development and implementation of an education innovation. Once an innovation is fully developed and functioning Exxon then funds small (not to exceed \$6, 000) implementation grants. The author has received a grant to implement a program called Exper Sim or Experimental Simulation.

In general, Exper Sim entails using the computer to teach research methods, design and procedures. Without the aid of computers research courses usually involve the student designing a research project at the beginning of a semester and then spending the remaining time collecting and analyzing data. As a result the student is able to complete only one research project in a given semester.

Exper Sim changes the traditional way of carrying out a research project. It does so by modeling in the computer all the pertinent variables and data associated with a particular topic. The student formulates research hypotheses but does not have to go into the field or laboratory to collect the data first hand. He simply enters his requests for specific data into the computer and receives instantaneous output. Time is thus created for statistically treating the data, and more importantly, for formulating additional hypotheses. In short, Exper Sim allows the student to complete many research projects in a given semester instead of just one.

Currently, the models available in the management area are: (1) a motivation model and (2) a job satisfaction model. Each model contains the relevant variables (as determined by the literature on the topic) and the data output is designed to reflect the accepted state of knowledge regarding the variable(s) in question. Therefore, the student is able to: (1) explore the relationships between relevant variables without going through the time consuming data collection process and (2) to explore different ways of designing research projects.