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RESEARCH ON THE LEARNING EFFECTIVENESS OF BUSINESS SIMULATION GAMES-- A REVIEW OF THE STATE OF THE SCIENCE

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In their classic chapter on research designs in educational settings, Campbell and Stanley [1, p. 2] held that an experiment was "...the only means for settling disputes retarding educational practice, ... the only way of verifying educational improvements, and the only way of establishing a cumulative tradition in which improvements can be introduced without the danger of a faddish discard of old wisdom in favor of inferior novelties. Given the controversy which still hovers around business gaming and the cult quality which many opponents attach to the experiential movement, game proponents should be especially rigorous in the conduct and use of gaming validation studies.

A review of ABSEL's Proceedings issues for the years 1976-1980, however, finds a proliferation of what Campbell and Stanley have termed pre-experimental designs and an almost total absence of true experimental studies. Although pre-experimental studies are necessary and appropriate in the early stages of a developing science, business gaming practice has advanced far past that stage since the late 1950's. All the studies appearing in the ABSEL Proceedings failed to meet the Criteria For external validity, and more importantly for classroom pedagogical purposes, very few of the studies met the criteria for Internal validity.

The use of true experimental designs would control for the invalidating effects of history, maturation, testing, instrumentation, repression, selection, and mortality and would eliminate rival hypotheses for the results obtained. Without the necessary controls, researchers are adding to the confusion regarding the effectiveness of business games while simultaneously losing credibility with those outside the gaming field who review the discipline's work. The conduct of non-cumulative and uncontrolled research also keeps the gaming field from addressing unresolved questions and from clarifying old truths and wisdoms.

My symposium discussion will describe the strengths and weaknesses found in the designs frequently employed by ABSEL members. It will then generate a research agenda for business gaming with the belief that imaginative hypotheses are the prime ingredient for meaningful research and that the research's design is merely the implementation of an experimental ideal. Problems inherent in educational research will also be discussed as will the specific problems faced by business game researchers.

REFERENCES

- [1] Campbell, Donald T. and Julian C. Stanley, Experimental and Quasi-Experimental Designs for Research (Chicago: Rand McNally & Company, 1963).