

Simulations, Games and Experiential Learning Techniques: Volume 1, 1974

SUMMARY COMMENTS QUANTITATIVE APPLICATIONS OF GAMES

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If one thread ran through the presentations on quantitative applications of games, it was the effectiveness of the well-designed, well-utilized game as a propaganda device. Note that the term “propaganda” is being used here in the denotative sense of propagation of principles, rather than in the connotative sense of the big lie technique. Another aspect of the same point is that the quantitative applications presented showed games being used as a linking pin, an interface, between the elegance of theory and the chaos of reality.

Given the context of propagation of a connection between theory and reality, it becomes possible to see the individual projects presented as a variety of routes to very comparable ends. Kyle Reed uses Production Scheduling Simulation to bring students down from the compact scheduling theory of textbooks to the hard and dirty work of producing viable, implementable production schedules. At a much lower level of quantitative sophistication, Jeff Churchill stressed the use of Decision mathematics operational Game in such a way as to bridge the theory-reality gap without overburdening either student or instructor. Arthur Nichols uses a SINQ assignment set to focus attention on critical modeling applications issues such as parameter development and sensitivity testing. Henry Sims also uses SIMQ, but shifts the focus toward helping students to discover an appropriate intermixture of quantitative models and heuristic reasoning. Roscoe Davis, in the only industrial application presented, showed how games were used to gain acceptance for improved scheduling and line balancing procedures in a plant situation where resistance had previously been encountered. As can be seen from reading the papers, all of these applications stress a move in the quantitative area from mathematizing toward decision aids in complex environments.