Simulation-Based Learning in Management Education: a Longitudinal Quasi-Experimental Evaluation of Instructional Effectiveness

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Abstract

Over the past 25 years, the demand for graduate education in the professions to meet increasingly ambitious goals has led to increased experimentation with different approaches to teaching and learning. Among these, simulation and games, used as long ago as the 1950s, have become increasingly common in management education programs.[1] While proponents continue to offer a strong conceptual rationale for the use of simulation-based learning (SBL), high quality empirical studies that examine its efficacy in management education settings remain limited both in number and quality.[2]

This report describes a longitudinal quasi-experimental evaluation of simulation-based learning at a graduate school of business (GSB) in Thailand. The 'intervention' consisted of three courses in the GSB's Master of Management program that incorporated computer simulations. These courses were taught 202 times by 22 different instructors over a period of 20 consecutive trimesters between 2001 and 2007. This report compares student perceptions of instructional effectiveness in the SBL courses with courses that employed a variety of other instructional approaches.

The study's hypotheses were supported by the empirical findings.

1. Students rated instructors as more effective in SBL courses than in comparison courses.

2. Students consistently perceived SBL as more action-directed and engaging than comparison courses.

3. SBL courses provided more useful and timely feedback and assessment information to students than did comparison courses.

4. There might be no significant differences in perceived Instructor Effectiveness between SBL courses and other courses. This finding should be interpreted in light of improvements in levels of Instructor Effectiveness ratings consistently demonstrated in both sets of courses over time. Thus, the finding of 'no differences' implies that effects on the other dimensions of instructional effectiveness noted above were probably not due to differences in instructor capability.

5. SBL courses yielded a pattern of significantly higher evaluations with less variability on Instructional Effectiveness over time than comparison courses.

This study seeks to make three contributions to the literature. First, the research provides empirical insights into the implementation of simulation-based learning in management education. Second, although the study does not measure impact on student learning outcomes, the results speak to the efficacy of SBL with respect to dimensions of teaching and learning that both mediate learning and are valued by management students. Finally, we note that this research on SBL was conducted at a management education program located in East Asia, a context in which many instructors in the region remain skeptical as to whether active learning methods imported from Western contexts (e.g., simulations, problem-based learning etc.) are suitable for Asian learners.[3, 4] The study addresses this issue in the light of data that describe one institution's sustained attempt to employ computer simulations in its graduate management education program.

References

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