Developments in Business Simulation and Experiential Learning, Volume 25, 1998 THE SIMULATION AND CLASSROOM ASSESSMENT TECHNIQUES

Denise R. Markovich University of North Dakota

ABSTRACT

BankExec, an interactive bank simulation, is used to illustrate how a simulation may be adapted to assessment. Based on Classroom Assessment Techniques and feedback from students and practitioners it appears the *BankExec* experience contributes to student learning more so than quantitative measures indicate.

INTRODUCTION

Simulations require students to apply concepts they have learned and often they serve an integrative function. In capstone courses they are holistic and inclusive of learning across disciplines. How effectively simulations enhance learning is subject to some debate. Richard L. Dukes (1994) describes gaming as "a masterpiece of teaching, learning, and scholarship" whereas Malik, Howard & Morse (1996) challenge the effectiveness of simulations as a learning tool.

To assess student learning, most studies rely on objective measures such as stock price; however, this paper explores Classroom Assessment as a way of evaluating student learning.

CHARACTERISTICS OF CLASSROOM ASSESSMENT

Classroom Assessment is an individualized approach to evaluating student learning which is directed by the teacher, involves student participation and evaluation, is typically brief, ongoing, anonymous and ungraded. According to Angelo and Cross (1993), to qualify as a good CAT, a technique should be context sensitive, be an appropriate technique in many disciplines, provide information on ways to improve learning during the semester, be easy to administer, provide feedback that is easy to organize and use, and enhance learning.

CLASSROOM ASSESSMENT PROJECT CYCLE AND TECHNIQUES

The project cycle for Classroom Assessment consists of planning, implementing and responding. The first table provides examples for each cycle and illustrates how *BankExec* satisfied each of the stages of the cycle. The second table lists several CAT's and corresponding applications from *BankExec*.

Planning Focus on an assessable goal Plan a CAT based	Evaluated four areas of bank risk Decision
on that goal	exercise
Implementing Direct lecture towards the goals Collect and analyze data	Focused course content, lectures, and reports on risk Output & reports were critical sources of information
Responding Interpret results and formulate appropriate response Communicate results Evaluate effect on teaching and learning	From output & reports, evaluated performance of each team; reviewed relevant financial concepts. Class & team debriefing: compared and contrasted specific areas of financial performance. Distributed an evaluative questionnaire Requested evaluations from bank examiners. interviewers, & employers.

Classroom Assessment Technique	Student Activity
Focused Listing	Listed knowledge of a specific term (spread, gap etc.)
Memory Matrix	Categorized kinds of loans and investments
Pro and Con Grid	Compared conservative and aggressive strategies
Class Modeling	Presented Shareholders' Report to FDIC examiners
Minute Paper	Outlined a Strategic Plan
Analytical Memo	Wrote a Strategic Plan & a BankExec Paper
Group-Work Evaluations	Evaluated all team members
Exam Evaluations	Essay questions related directly to BankExec

CONCLUSIONS

BankExec. an interactive simulation, gave students insights into the dynamics of managing a bank, and also enhanced basic academic skills. The simulation also contributed to higher-order thinking skills. Students learned to apply principles to problems, to draw inferences from observations, to synthesize and integrate information, and to think holistically. With each decision, their systematic completion of reports, and the classroom and team discussions, students began to think comprehensively as they evaluated output, discussed various "what if' scenarios, and reviewed competitors' performances. By the end of the semester, decisions which initially took teams several hours to make were made in

REFERENCES

- Angelo, Thomas A. & Cross, K. Patricia (1993). *Classroom Assessment Techniques*, 2nd. Edition, San Francisco: Jossey-Bass.
- Dukes. Richard L (1994), "An Appraisal of Simulation and (laming on the 25th Anniversary of S&G," *Simulation and Gaming* (June 1994), p.' 96.
- Malik, S. Dolly, Howard, Barbara J., & Morse, Kenneth, O. (1997). Business plans, case studies and total enterprise simulations: As

minutes. Most importantly, during bank examinations and job interviews students were able to discuss financial management of banking confidently, articulately, and precisely. In sum, *BankExec* helped develop all skills important to learning.

The *BankExec* experience suggests that the quantitative evaluations of simulations provided by authors such as Washbush & Gosenpud (1993) and Peach (1996) which focused on decision output. may overlook some aspects of student learning Identifying different objectives, examining qualitative measures, and accumulating evidence from CATs would provide an additional way of evaluating simulations as a learning tool.

natural co-existence. Developments in Business Simulation and Experiential Learning, 24, 158-163.

- Peach, E. Brian (1996). Enhancing simulation learning through objectives and decision support systems. *Developments in Business Simulation and Experiential Exercises*, 23, 6 1-67.
- Washbush, J. & Gosenpud, J. (1993). The relationship between total enterprise simulation performance and learning. *Developments in Business Simulation and Experiential Exercises*, 20, 141.