Chapter 10
The Experience of an Online Management Simulation Game to Foster Collaboration and Teamwork

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ABSTRACT

With a new degree on Management, a new course called Management Simulation Project was created and started in the summer semester of 2006-2007 at the Lisbon School of Accountancy and Administration (ISCAL). The teaching team wanted to explore ways to bring the realities of business decision-making and action into the curriculum. This chapter reflects on the concept of educational simulations and games and aims at describing how a web-based competitive management game helped to achieve that. The authors discuss their objectives and those of the game and outline their reasons for choosing it. They describe the context at ISCAL and the game’s main features, showing how it is played over a semester. The authors consider, as online simulation facilitators of what is predominantly a student-led learning process, that the game helps students to gain a real ‘feel’ for collaboration, managerial decision-making and teamwork. An exploratory study was carried out. A questionnaire was designed to tap students’ perceptions of the effectiveness of the use of a simulation/game as a new teaching method in five areas: career preparation, traditional educational goals, use of time, involvement and satisfaction, and a set of specific skill competencies. The results of the authors’ empirical study show that students perceive the simulation course as superior to the lecture-centered method. On the overall dimensions, the simulation course was seen as a better vehicle in helping students make career preparations, achieve educational goals, and utilize time. The results are presented and discussed.

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INTRODUCTION

There has been a shift in business education. “Under the new learning ‘paradigm’, learning is student-centered and controlled, and essentially experiential, replacing the old ‘instruction paradigm’ where learning is instructor- and content-centered” (Saunders 1997:98, citing Barr and Tagg). This shift emphasizes student participation and involvement in the learning process, and places lecturers in the position of acting not only as knowledge creators and disseminators, but also as learning process facilitators.

When the online business simulation game Marketplace was introduced into the curriculum, the teaching team had two objectives: first, to emphasize to students the interconnectedness of the business disciplines and, second, for them to link the content of individual management disciplines to managerial decision-making. As Chapman and Sorge (1999) point out, of particular concern in management education is development of the students’ analytical, problem-solving and decision-making abilities. Students need to know not only theories and concepts but also how to apply these, and their acquired skills, to business problems. This extended web-based business simulation was chosen, set in a high-tech industry, because it requires students to tie together a series of related decisions and outcomes over time. This game gives students experience of applying new technology for group decision-making. In it, subject matter is delivered ‘just-in-time’, to support students’ decision-making in an extended case.

The online simulation Marketplace is expected to acquaint students with the challenges of real business decisions and leadership in a complex and uncertain environment. Cadotte (1995) in advocating the use of virtual business simulations in business and management education and training stated: ‘Reality simulations have unique training capabilities that foster personal transformation. Moreover, they can help students develop an almost intuitive understanding of business, including a seamless perspective of its functions and elements, and knowledge of how these elements can be coordinated to achieve a strong and profitable position in the market. Another distinctive feature of simulations is their emphasis on management – of the firm, of its strategy, and of its resources.’

This specific online management simulation was chosen because its main intended learning outcomes are the integration of knowledge and action. By the end of the game the student should be able to:

- Continuously apply strategic planning and execution skills within a rapidly changing environment;
- Demonstrate a persistent focus on bottom line profitability while simultaneously delivering customer value in running a simulated business;
- Repetitively practise budgeting and cash-flow analysis in management of an enterprise;
- Demonstrate a developed practical knowledge of marketing, accounting, finance and manufacturing functions;
- Display leadership, teamwork and interpersonal skills.

The game also fosters many key skills. By the end of the game the student should be able to demonstrate:

- Critical thinking and creativity;
- Problem solving and decision-making;
- Information and knowledge;
- Numeracy and quantitative skills;
- Effective use of information and communication technology;
- Two-way communication;
- Personal effectiveness;
- Effective performance within a team environment and the ability to recognize and utilize individuals’ contributions in group processes;