Chapter 25
Learning with the Support of a Digital Game in the Introduction to Finance Class:
Analysis of the Students' Perception of the Game's Ease of Use and Usefulness

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EXECUTIVE SUMMARY

This chapter aims to introduce the case of the eFinance Game (eFG), from the Serious Games' design to an analysis of the learning experience resulting from the use of the game, as well as its use in the context of the Introduction to Finance course in ESADE Law and Business School. After an overall description of the game, the chapter turns attention to the Serious Games (SG) learning experience, considering students' perception of both ease of use and usefulness, but also the implications for teaching and learning assessment that arise with the utilization of this game. Considering the students' performance and their perception of the game, the chapter then analyzes the current challenges and transfers the knowledge generated by this case to practitioners aiming to design, develop, and use digital games in their schools.

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OVERALL DESCRIPTION

Practicing the basic concepts through a finance game could be perceived as a challenge for most students without a previous knowledge of the field. Considering the diversity of the post-secondary students' profiles and their different levels of literacy in finance, the identification of their previous knowledge level and the monitoring of the learning progression should be among the major objectives of the teacher, whilst taking into account the fact that students don't make their prior knowledge explicit in a lecture-based class in a natural way. In addition, it could be a challenge to monitor the students' learning progression over the course of a lecture-based class as, in this kind of environment, the interaction between teacher and students does not properly ensure the participation of every student in the class; more active students tend to participate to a greater degree, while others only play a very limited role, for the most part remaining passive and merely listening to the lecture. In order to ensure that students are learning, teachers should reconsider their lecture-based classroom in favour of an activity-oriented class (Foreman, 2003; Lederman & Abd-El-Khalick, 1998) where students play a central role. From the teacher's perspective, it is necessary to design learning activities that allow students to make their prior knowledge explicit, but which also assess the students' knowledge progression over the course of the session to allow the teacher to better-adjust their teaching activity. In order to achieve these requirements and propose engaging situations which constitute a challenge for all the students, the methodology chosen for the instructional redesign of the activity was that of Game Based Learning (GBL).

The Game Based Learning (GBL) methodology has been of particular interest in recent decades, and is still a prolific field of research in education (Pivec, Koskinen & Tarín, 2011). Researchers and educators have observed that GBL can be defined as the use of pedagogically designed or adapted games for learning purposes. It has been asserted that game scenarios can help players in the active construction of understanding (Klopfer & Yoon, 2005), while well-designed games could allow for both individual and group interpretations of given information, thereby permitting students to collaborate (Jacques, 1995). According to Prensky (2001), effective Serious Game (SG) design must achieve a balance between fun and educational value. GBL is a pedagogical methodology enhancing the engagement of students in active learning situations where they have to apply their knowledge and competencies in scenario-based problem-solving and decision-making environments (Gee, 2007; Kiili, 2005; Prensky, 2001).

We chose to situate our experience of the GBL methodology, and especially the collaborative GBL approach, in an environment where students play in small groups or dyads in order to try to reach their objectives. This, together with the opportunities generated by computer-based environments for collecting data concerning the stu-