Chapter 14
Beyond the Fun:
Games and Gamification Under the Pedagogy for Liberation

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ABSTRACT

Many studies approach the relationship between games and education, linking them with pedagogical theories, such as the constructivism, the social interactionism, and the early child development theory, respectively. Games are particularly well suited to one of these theories, the pedagogy of liberation, since it may help developing autonomy and critical thinking. However, there is apparently a lack of studies relating the use of games and gamification in education from this perspective. This chapter reports some case studies of using commercial games and gamification methods in a Brazilian school, relating the experiences to concepts from the pedagogy of liberation.

INTRODUCTION

Despite the number of researches attesting how games are worthy for education (Kishimoto, 1998; Rau, 2011; Castro, 2010), there is still a large group of parents and educators who resist or even refuses to use games in the educational context. Games are accused of promoting sedentarism, competitiveness, aggressiveness, and the objectification of the human being. Most arguments rely on personal observation, painting a picture of a youngster lying down on the couch for hours, not eating, nor sleeping, obsessed by some virtual world, screaming and cursing at each frustration experienced in a game.

But, we bet that who makes these accusations never felt the emotion of playing *The Last of us* or *Chrono Trigger*, never knew the altruism of the veterans in *Journey*, never broke a sweat dancing with friends with *Just Dance* or playing *Wii Sports*, and probably never participated of an epic winning on *Dark Souls*, *Halo*, *DotA* or *League of Legends*. These are some cases were players engage based on cooperation, empathy, or physical activities.

Marc Prensky (2006) did an impassioned defense of digital games in his book *Don't bother me Mom - I'm learning* taking risks by defending even violent games, such as *Grand Theft Auto* (GTA). One of Prensky's points, however, is undeniable: video games teach valuable abilities. In many cases, they are the most useful in this sense, more than analogic games or other media. Macedo (2009) defends that attitudes which favor learning are essential to be a good player, such as being aware, organized, and know how to coordinate different points of view. He affirms that this happens because children have a more active participation, and become more cooperative and observer. Furthermore playing requires to classify, interpret, and manage information. And these abilities are also very requested in school.

This vision is reinforced by theorists such as Kishimoto (1998), Rau (2011), Castro (2010) and is based on classical theories about cognition and human development, such as those from Piaget, Vygotsky e Wallon. But we can go beyond this vision, defending games not only as tools to stimulate motor and cognitive development but as instruments of empowerment, autonomy, and protagonism. Here, we defend that games and gamification contribute to the autonomy of the individual, a precondition to an education as defended by Paulo Freire's pedagogy for liberation.

In following sections, we present a justificative of using games in education under traditional game design and educational points of view. Section 4 explains games relate to Freire's theory. Section 5 brings concrete experiences we performed, both about using games in the context of school classes and about gamifying the classes of a group of teachers. The final section discusses the lessons learned, trying to shed some light on the difference between using games under more common educational theories and under the pedagogy for liberation.

RELATED WORK

The topic gamification gained momentum during last years. We describe here the main works related to gamification applied to education. A portion of our references is from Brazilian sources, as a result of specific studies that derive from Freire's work. We believe that these particular cases are specifically Brazilian because Freire's work had more influence there, given that, Brazil is his birthplace and the base-ground for his entire research. Among the works considered, three kinds of research were revised: surveys, synthesizing findings from many different works; theoretical research, discussing the use of concepts from gamification in educational contexts; and empirical research, reporting experiments about using gamification with students and teachers in different learning environments. They are presented in the following sections.

Surveys

We found two surveys about researches about gamification of education, which served as a starting point to the related work. Fiona Fui-Hoon Nah et al. (2014) analyzed 15 papers, highlighting the following:

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