

Chapter 17

Level Up: Multiple Player Professional Development

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ABSTRACT

Gamification is becoming increasingly popular in both K-12 and higher education settings. By infusing game elements into learning environments, educators believe that students will be more engaged and more motivated to learn (Bowman, 1982, Deterding, 2012, Dominguez et al, 2013). But what about the use of gamification to support the professional development of educators? What impact would gamification have on the participation and motivation of professors and faculty involved in an intensive professional development experience? This chapter describes the creation and implementation of Level Up, a two week long professional development game involving twenty faculty member participants. The chapter outlines the process of designing the game and the game elements used throughout its implementation. The chapter also examines some challenges the designers and participants experienced during the game implementation and provides several design considerations for professional developers who wish to gamify their faculty programs.

INTRODUCTION

Why do we play games? Some people may be attracted to the competitive environments that games create. Others may enjoy the intellectual involvement or the emotional arousal that occurs from game play. In education, debate continues about the potential for increased student motivation, participation and engagement via gaming (Hanus and Fox, 2015, Filsecker and Hickey 2104). Over the last decade, there has been an increased focus on the incorporation of games and game elements in learning environments. Educators are exploring the use of serious games to teach complex and challenging content through interactive simulations. Additionally, teachers have begun to incorporate game elements such as challenges, leaderboards and Easter eggs into more traditional educational settings to increase student

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involvement. This process is more broadly defined as “gamification” and involves the use of “game based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning and solve problems.” (Kapp, 2012, p. 10) Outside of education, gamification has been used to promote customer loyalty programs, support weight loss and exercise programs and a multitude of other activities. (Bittner and Shipper, 2014, Keller, 2015)

While the use of gamification in education has spanned both K-12 and collegiate settings, the use of game elements has been mostly limited to fostering student involvement and learning. Although educators often create the learning environments and opportunities for students, they also routinely participate in professional development activities to expand their content area knowledge and their pedagogical approaches. The success of professional development for faculty has been tied to extended involvement and focus in collaborative environments (Chong and Kong, 2012). Could gamification be used to promote faculty involvement in professional development activities? Looking at existing research, few in-depth studies have examined the use of gamified learning environments to support the professional development of instructors. This gap in research motivated the creation of the *Level Up* pilot workshop.

In Fall 2014, twenty faculty members participated in *Level Up*, a two-week professional development online workshop on the use of gamification in education. The workshop was unique in that it used game elements to teach concepts and implementation of gamification. Faculty members participated in challenges, accumulated points and were ranked each day on an overall leaderboard. During the workshop, the participants not only learned how game elements could be used in educational settings but also experienced firsthand how the elements impacted their own learning.

BACKGROUND

Though difficult to characterize, *Level Up* could be described as an adventure game. Participants in the *Level Up* game, learned about gamification by completing challenges (quests) tied to learning objectives. Additional game elements were used to enhance the experience and motivate participants. *Level Up* was created in the D2L™ (Brightspace) learning management system. Though custom gaming and badging systems are available, a learning management system is readily available and well known to faculty and staff at many higher education institutions. It can serve as a reasonable, if not fancy gaming platform.

MAIN THRUST OF THE CHAPTER

Designing the Level Up Workshop

To build the *Level Up* professional development workshop, game designers followed a five step process outlined by Huang and Soman (2013). Each of these steps provided critical information for the creation and implementation of the *Level Up* game and helped the game run smoothly as a comprehensive learning program.

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