Chapter 2
“A Spoonful of Game Design Makes the Work–Out More Fun”: Essential Game Design Elements for Use in Gamified Applications

William R. Upchurch
University of Pittsburgh, USA

Susan M. Wildermuth
University of Wisconsin Whitewater, USA

ABSTRACT
Gamification is the concept of infusing elements of gameplay (competition, incentives, story/narrative, collaboration, problem-solving, etc.) into non-game activities in order to make those activities more compelling. Recently, game designers have begun stressing the need for greater “maturity” in the field of gamification with greater focus on the importance of designing applications for optimal user experience. One hurdle to achieving maturity in the field is the fact that even gamification experts question “What exactly are the essential elements of gameplay that optimize user engagement and enjoyment?” Thus, the goal of the current chapter is to provide a comprehensive listing of the elements of gameplay that are essential to user engagement, and to provide examples of how each of those elements has been applied successfully in game design in the past. The chapter reviews 14 essential gameplay elements including: chance, control, creativity, completion, spectacle, status, strategy, unification, rules, narrative, recognition, collaboration, escapism, and enjoyment.

INTRODUCTION
The newest buzz word being tossed around from such diverse groups as marketing professionals, university deans, seasoned politicians, military leaders, and even grassroots activists, is “gamification.” Gamification is the concept of infusing elements of gameplay (competition, incentives, story/narrative, collaboration, problem-solving, etc.) into non-game activities in order to make those activities more

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compelling. The concept of gamification is nothing new. For example, advertising has long used elements of play to attract customers, from the free toys in Cracker Jack boxes beginning in 1912, to the riddles on the Burma Shave signs in the 1930s. What is new is the term itself (the word gamification was first coined in 2002, but did not really catch on until much later in the decade), and the associated systematic study of and application of the individual elements of game design in non-game contexts in order to increase motivation, engagement, positive emotional expression, and social connections among users or consumers.

Gamification has become the “next big thing” in many fields, indicated by the monetary resources being poured into gamified applications in a variety of contexts. For example, in 2012, Badgeville secured $25 million in funding for gamification platform creation, and according to Gartner’s research, 70% of firms on the Forbes Global 2000 list will use at least one gamified application in 2014 (Nelson, 2013). Despite the hype and popularity of gamification as a concept, some argue that current approaches to gamification are poorly executed. This perspective argues that in the rush to “jump on the bandwagon,” bad gamification has become the norm. Rather than focusing on narrative, problem-solving, collaboration and other true gameplay elements that lead to user interest, motivation, and engagement (but are quite complicated to design, implement, and assess), designers have simply added badges, points, and leaderboards to a task or experience and then called it gamified. Experts are arguing that there is a need for greater “maturity” in the field of gamification with greater focus on the importance of designing for optimal user experience (Fitz-Walter, 2013). Academic studies of gamification efforts have yielded mixed results based on both psychological and behavior-based outcomes (Hamari, Koivisto, & Sarsa, 2014).

One hurdle to achieving maturity in the field is that even gamification experts raise the question, “What exactly are the essential elements of gameplay that optimize user engagement and enjoyment?” (Deterding, Dixon, Khaled, & Nacke, 2011). There have been multiple scholarly attempts to locate, analyze, and describe the basic components of gaming in general (Eskelinen, 2001; McCormick, 2013; Nelson, 2013). Additionally, as early as the 1980’s, scholars have worked to derive heuristics from games in order to apply those heuristics in other contexts and increase the enjoyment of other experiences (Dickey, 2007). This work has given rise to studies detailing specific design features of games that afford player enjoyment – including challenge, narrative, goals, and chance. An obvious matter of interest is to what degree these elements can be effectively transferred to the design of gamified systems. One important step toward “maturity” in the field of gamification is a well-developed understanding of such elements. This understanding will allow designers greater ability to identify potential gameplay elements as well as match the right elements with the right setting to maximize the likelihood that their use in a gamified application will be effective.

In sum, a deep understanding of the relationship between the needs of the gamification project and the appropriate choice of game elements to apply is what allows for the development of the best applications (Deterding, Dixon, Khaled, & Nacke, 2011). Additionally, it is an understanding of the pivotal moments and events in the evolution of gameplay that gives designers the knowledge necessary to best apply the gamification process to other aspects of human life in the present. Thus, the goal of the current chapter is to provide a comprehensive listing of the elements of gameplay that experts agree are essential to user engagement, to define and discuss how each element functions, and to provide examples of how each of those elements has been applied successfully to game design in the past. This chapter identifies fourteen essential gameplay elements, stemming from both scholarly work and practice in the field: chance, control, creativity, completion, spectacle, status, strategy, unification, rules, narrative, recognition, collaboration, escapism, and enjoyment.