Gamifying the Media Classroom: Instructor Perspectives and the Multidimensional Impact of Gamification on Student Engagement

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ABSTRACT
Gamification, or the use of game elements in non-game contexts, has become a popular and increasingly accepted method of engaging learners in educational settings. However, there have been few comparisons of different kinds of courses and students, particularly in terms of discipline and content. Additionally, little work has reported on course instructor/designer perspectives. Finally, few studies on gamification have used a conceptual framework to assess the impact on student engagement. This paper reports on findings from evaluating two gamified multimedia and social media undergraduate courses over the course of one semester. Findings from applying a multidimensional framework suggest that the gamification approach taken was moderately effective for students overall, with some elements being more engaging than others in general and for each course over time. Post-term questionnaires posed to the instructors/course designers revealed congruence with the student perspective and several challenges pre- and post-implementation, despite the use of established rules for gamifying curricula.

KEYWORDS
Game-Based Learning, Gamification, Gamified Learning, Instructor Perspectives, Student Engagement

INTRODUCTION
Gamification is an approach that uses game elements, such as leaderboards and in-game economies, to improve human engagement and motivation to participate and perform well in non-game contexts, such as education (Deterding, Björk, Nacke, Dixon, & Lawley, 2013; Deterding, Dixon, Khaled, & Nacke, 2011). Indeed, it has captured the interest of educators as a pedagogical tool for engagement and rich learning experiences (Kapp, 2012). Given that the educational system is arguably a kind of game itself—invoking rules, structured (intellectual) play, goal-setting, and levelling, to name a few gameful characteristics (Kapp, 2012)—the use of gamification as an approach to pedagogy seems appropriate. However, the study of gamified learning experiences is still relatively underdeveloped. In a review of the literature, Seaborn and Fels (2015) showed that there remains some contention over the effectiveness of gamification in learning contexts. Further, there is much room for expansion of the literature in terms of comparisons between course disciplines (e.g., business versus media), course content (canonical versus contemporary topics), and pedagogical approach (readings-based versus exam-focused versus hands-on activities, or some combination of all three). Finally, although

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gamified course design is essential to the process of implementing a gamified approach to pedagogy, there has been little reported on the impact of this process for instructors and course designers. Such knowledge would give those interested in gamified pedagogy a clearer sense of feasibility, particularly in terms of the amount of preparation and maintenance involved, as well as the quality of experience implementing gamified pedagogy affords.

With these issues in mind, the goal of this project was to understand the effect of gamifying a course from the perspectives of key stakeholders: students, who experienced the gamified course, and instructors/course designers, who carried out the process of gamifying the course as well as teaching the gamified version. The objectives were thus threefold: (1) to understand diverse yet comparable student perspectives by evaluating student engagement over time in two undergraduate courses that were gamified in similar ways and featured similar content (i.e., media-related) and approaches (i.e., hands-on activities) but different cohorts of students (i.e., business and communication majors) in two different disciplines (i.e., multimedia and business programs); (2) To do this, we captured mid- and post-term student perceptions of the gamification aspects and gathered instructor perceptions through a post-term questionnaire. A mixed methods analysis was applied, resulting in findings for each perspective as well as a synthesis of perspectives.

Initial descriptive statistics were reported in Bajko et al. (2016); in this paper, we report on: the full student survey results (items not covered in the earlier article); the application of de Byl’s (2012) multidimensional framework of gamification engagement to the corresponding questionnaire items mid- and post-term; and instructor/course designer perspectives pre- and post-implementation. This work contributes to the area of gamified pedagogy by providing a rich mixed methods description of diverse student perspectives on gamified engagement in media courses using a framework designed for gamified learning contexts, qualitative findings on the impact designing and teaching gamified curricula from an instructor/course designer perspective, and a synthesis of student and instructor/course designer experiences, impressions, and insights to inform future efforts in gamified course design.

BACKGROUND

Gamification in Education: Impact on Students

Seaborn and Fels (2015) reviewed the gamification in education literature as part of their meta-synthesis on gamification. They identified two slightly different uses and conceptualizations of the term “gamification” and offshoot terms (e.g., “gamify”): one where gamification means to make a fully-fledged game for a non-entertainment topic or pursuit (in effect, what the education field would call a “serious game”), and one where gamification refers to selectively including game elements and features, such as leaderboards and quests, in an existing system or service, without creating a full and complete game, which we are calling gamification-as-piecemeal. The gamification approach reported on in this paper lies at the intersection of these two conceptualizations: a game in the traditional sense of a full and complete serious game was not created, but so many game elements were used that to call it gamification in the second sense would be too limited. We are not aware of literature that has reported on liminal cases like ours; as such, we report on gamification in both senses here.

The serious games in education literature has a rich and dense history. A recent survey by Boyle et al. (2016) indicated that most studies on serious games featured high quality designs and addressed the key student impact need of knowledge acquisition (i.e., students sufficiently learned the material that the game intended them to learn). Several studies involved comparisons of traditional learning
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