The Effect of Gamification on Students’ Engagement and Motivation in Three WSU Courses

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The purpose of this mixed-method study was to explore the effects of the use of gamification on students’ motivation and engagement in the college environment. The study drew from three theoretical principles: Self-determination theory, new literacy studies, and behaviorism. The study was conducted at Washington State University on two English writing courses and one integrating technology into the curriculum course. Forty-four students and three professors participated in this study over the course of six months.

The study followed the guidelines of convergent mixed-method design where qualitative and quantitative data sources were used to ensure triangulation. A total of fifteen participants were interviewed including twelve students and the three faculty members. The qualitative components of the mixed-method design were supported with the selected evidence based on interviews, observations, documentary, and artifactual data. The quantitative data were supported through multiple regression results based on survey in addition to frequency results which were worked in discussion side by side with qualitative components. Game metrics and game scores were incorporated where they were deemed relevant.

The main findings of this study were that gamification positively affected students’ learning in their perspective courses. This was demonstrated through their increased motivation to learn, their promoted engagement to participate and collaborate, meeting their psychological needs of competence and autonomy, and their improved appreciation of the task value in addition to task completion. The study showed avatars, quests, and the fun components to be the most effective gamification elements in fostering motivation and enhancing engagement. However, the findings showed that some game features, such as points and badges, had either no influence or a negative effect on students’ motivation and engagement.

Gamification, based on this study, facilitated a learning environment supportive of reading and writing literacy skills. Additionally, it fostered a number of desirable behaviors and attitudes in the learning environment such as increased participation, altruism, the desire to try multiple times, and the positive change of beliefs. The study highlighted the need to consider contextual differences among students and professors when applying gamification, specifically in the college environment.