The Potential of Games in an English university classroom

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**Abstract**

This report explores the learning potential of games in an English classroom. Books and articles about game-based learning were analyzed and summarized. In addition, original primary research was conducted by creating surveys and analyzing data from the responses. The purpose of the surveys was to determine how students felt about playing games in a university classroom. Findings from both primary and secondary research indicate that games can be an effective learning tool. The report ends with recommendations on how the English department at Old Dominion University might implement games. Special attention is given to how games might be incorporated into various writing courses.

**Background**

When James Paul Gee wrote *What Video Games Have to Teach Us About Learning and Literacy* in 2003, he increased awareness of the potential of video games and greatly influenced research on game based-learning. He was interested in “how the theory of learning in good video games compares to how teaching and learning work in the school” (Gee, 2003, p. 7) According to Gee, many children learned more from the video games they played at home than the classes they attended in school. In the following years, many research reports have been written on the potential of games and their effectiveness in real classrooms.

In the article, “Changing the Game: What Happens When Video Games Enter the Classroom?” (2005), Kurt Squires agrees with Gee that video games have potential in the classroom but is slightly less optimistic. Teachers who expect games to excite and motivate students might be disappointed by the results. Squires compares and analyzes two case studies on game-based learning. Teachers incorporated *Civilization III*, a popular video game, into world history classrooms. Some students enjoyed the experience, while others were frustrated, and Squires found that the game both increased and decreased motivation. The article concluded that the education system needs to be fundamentally changed to support game-based learning.

“Interactive Story Writing in the Classroom: Using Computer Games” (Carbonaro et al., 2007) details a possible application of video games in English writing classrooms. The authors propose that video games are an effective way to teach creative writing. “Interactive story writing” blends creative writing with computer tools, and it teaches communication, critical thinking, and creative expression skills. Students can use computer role-playing games (CRPGs) to create characters, plots, and settings. In 2004 a high school incorporated interactive writing into a Grade 10 English classroom, and the teachers found that it greatly increased motivation and collaboration.

More recent studies show an increase in optimism about the effectiveness of games as a learning tool. Jane McGonigal discusses the power of games in her book, *Reality Is Broken: Why Games Make Us Better and How They Can Change the World* (2011). She asserts that games motivate players and “facilitate cooperation and collaboration at previously unimaginable scales” (McGonigal, 2011, p. 13). For example, the *World of Warcraft* Wiki contains 250,000 *fan-written* articles making it the second-largest wiki next to Wikipedia. However, McGonigal’s book leads to several questions, chiefly what makes a good game and how might the education system can leverage the power of games.

Karl Kapp answers these questions in his book, *Gamification of Learning and Instruction: Game-based Methods and Strategies for Training and Education* (2012). The elements of effective games include reward structures, player motivation, avatars, and player perspective. Moreover, educational games should also include explicit learning objectives and feedback. “The uses of game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning, and solve problems” (Kapp, 2012, p. 9) has a term—“gamification.” Kapp asserts that games are effective for leaning, and teachers can integrate simple game mechanics into their classrooms. For example, to increase engagement he suggests “assigning point values to questions instead of simply seeing them as right or wrong” or using “a ‘count down’ timer to add a sense of urgency to responding” (Kapp, 2012, p. 115).

All these sources agree that one of the goals of game-based learning is increased motivation. In his article, “The Function of Intrinsic and Extrinsic Motivation in Educational Virtual Games and Simulations” (2010), George Konetes supports the claims that motivational forces are the “driving agent[s] behind participation, progression, and retention” (p. 23). Intrinsic motivation is the “internal desire to participate” (2010, p. 23) while extrinsic motivation is the use of external factors, such as rewards or penalties, to promote participation. Effective game-based learning must at least foster intrinsic motivation, although a combination of both types of motivational factors “maximize learner involvement and satisfaction” (Konetes, 2010, p. 24).

**Methods**

This section outlines the methods used to gather and identify participants, collect data, and analyze data. Survey participants were students taking an online Technical Writing course at Old Dominion University. They were motivated to participate since survey completion counted towards their grades.

A six question-survey was created on SurveyMonkey and made available through Blackboard. The survey consisted of quantitative and qualitative questions. For example, students were asked “When have you played games in the classroom [check all that apply],” and the answer choices were: “Elementary school (1st – 5th grade),” “Middle school (6th – 8th grade),” “High school (9th – 12th grade),” “College/university,” and “I have never played games in the classroom.” Another question asked, “How do you feel about playing games in an English writing class at a university? (For example: Are you open to the idea? Do you have any concerns?)” Students were given space beneath the question to type a short response.

The purpose of the quantitative questions was to assess the students’ experiences with and attitudes toward game-based learning. The purpose of the quantitate questions was to determine the feasibility of implementing games in an English composition course. Data visualizations were used to help identify trends in responses to the quantitative questions. Major themes were gleaned from the quantitative questions by comparing survey responses.

**Results**

**Results of Quantitative Questions**

Sixteen students participated, and each spent an average of 1 minute and 48 seconds completing the survey. At some point in their education, all of the students had played games in the classroom, and 56.25% had played them in a college classroom setting. 81.25% of the students have enjoyed their experience with game-based learning (Figure 1). 40% feel that games would have the *greatest* impact in history classes, and none of the students selected psychology/sociology or English classes as the type of class that games would have the *greatest* impact (Figure 2).

**Figure 1.** This graph illustrates responses to the following survey question: “Rate your level of agreement with the flowing statement: I have enjoyed playing games in the classroom. [select one].”

**Figure 2.** This graph illustrates responses to the following survey question: “In which type of class do you feel that games would have the greatest impact? [select one].” Students were also given an option to select “other [please specify].” One survey response was discarded since it was not answered correctly.

**Results of Quantitative Questions**

The first quantitative question was “How do you feel about playing games in an English writing class at a university? (For example: Are you open to the idea? Do you have any concerns?).” Seven responses include the phrase “I am open to the idea.” One student wrote, “I think that games in English would have some effect, I'm not sure how technical writing would be incorporated into a game,” while another simply states, “I don’t like the idea.” Overall, nine responses indicate openness, four indicate skepticism, and three indicate opposition.

The second quantitative question was “How might an English writing teacher at a university incorporate games into the classroom? (For example: What kinds of games could be used? What kinds of reward structures could be used?” One student highlighted the potential of video games in a literature class: “Video games could also be used as examples of literary techniques and tropes, as there can be a surprising amount of depth in a video game narrative.” Another simply wrote, “I’m not sure [game-based learning] fits in a writing class.” Overall, seven responses suggest using games such as Quizlet, Kahoot, or jeopardy to help students with memorization, and six responses suggest using extra credit as a reward structure.

**Discussion**

**Qualification of Survey Results**

Survey participants would have been familiar with the theories of game-based learning from their Technical Writing class. Being aware of the potential of games may have contributed to the overwhelmingly positive results. Although results might not accurately represent the entire student body at Old Dominion University, colleges could spread awareness about game-based learning through infographics and presentations.

**The Potential of Game**

The greatest potential of games is their ability to motivate students to participate in class, progress in studies, and retain information (Konetes, 2010). There are two main ways teachers can incorporate games into a course. The first option is to use commercial-quality video games traditionally played for recreation. For example, in the case study by Squires, students played *Civilization III* in a history class. The second option is to integrate game mechanics into class exercises. For example, many students in the survey suggested using Kahoot, a quiz game, to motivate students to learn vocabulary words. In most cases, the second option is a more feasible and effective way to introduce games into the classroom.

The primary purpose of using non-education-based games is to “immerse students in various simulations relevant to course work and exemplified in various virtual games” (Konetes, 2010, p. 25). In past studies, applying this option has led to mixed results. Designing effective educational games and culturing an educational environment that supports game-based learning is difficult (Squires, 2005). As Squires found, simply having students play *Civilization III* did not produce the level of anticipated motivation. Although some students were motivated and enjoyed the experience, others found the game too challenging and less effective than tradition teaching strategies. In contrast, “Interactive Story Writing in the Classroom: Using Computer Games” found that video games were overwhelmingly successful at increasing motivation and collaboration (Carbonaro et al., 2007). However, such classes focused more on “writing” video games than playing them. According to primary research, at least two students are interested in playing commercial videos in an English class. For example, one survey-taker writes “A class that used video game narratives as course materials/examples instead of classic literature could be very interesting.” In general, most students have overall positive feelings toward the idea of playing games in an English writing class. However, like Squire, some are concerned about the feasibility.

Instead of having students play commercial-quality games, Kapp encourages “gamifying” the classroom (Kapp, 2012, p. 115).. Teachers have greater control when they design their exercises specifically for their class. According to primary research results, most students have enjoyed their experiences playing games in the classroom. They feel that games are *most* effective in classes that place an emphasis on rote learning. Gamification has the potential to make history, science, and math class more memorable and enjoyable. Even though English class was not their first choice, many are open to playing games in composition courses.

**Conclusions**

This report overviewed literature on game-based learning since 2003, and it incorporated primary research on student attitudes toward playing games in the classroom. There are three key findings regarding the potential of games in the English classroom. First, games have the potential to increase motivation in the classroom, although further research is required to determine the best ways to apply games to specific educational contexts. Secondly, motivated students are more likely to have a beneficial learning experience. For example, they are more likely to participate and collaborate, learn, and recall information. Thirdly, people are excited about games. Countless studies have been conducted on the potential of games, and the overwhelming majority of survey-takers enjoy playing games in the classroom. As McGonigal writes, “The most successful games are engineered to provoke…these feelings can spill over, in positive and surprising wats, into our real lives and relationships” (2011, p. 14).

**Recommendations**

Most students at Old Dominion University are open to the idea of using games in writing classes, while others are strongly opposed to playing games in the classroom. To gradually introduce the topic, teachers should incorporate game elements into their reviews. For example, they could use quiz games, such as jeopardy, to help students memorize vocabulary, and they could reward the winners with extra credit.

Games have the potential to play a greater role in the class. However, course descriptions should mention if games will be an integral element, so students are aware before they register. The majority of classes in the English catalog are literature and writing courses. The following paragraphs describe ways teachers can use games as the basis of major class assignments.

There are many ways games could be incorporated into literature classes. For example, video games could be used in conjunction with short stories to teach elements of narrative, such as characters, setting, and plot. For an assignment, students would be tasked with writing a literary analysis about the plot a video game covered in class. Alternatively, video games could be used to teach different genres of literature. For many, the concept of literature is evolving to include song lyrics and graphic novels. Some might say “Choose-your-adventure” style visual novels are a hybrid of video games and novels. For an assignment, students might be asked to write an essay comparing traditional forms of literature to visual novels.

The two major categories of writing are creative writing and professional writing. Games could be seamlessly integrated into creative writing classes. The methods would be very similar to the recommendations for literature classes. For example, students could learn about the craft of narrative through video games. For an assignment, they would write an essay on the relationship between medium and content. Alternatively, in workshop classes, they could learn to “write” a video game. For an assignment, they would create a portfolio of character descriptions, scripts, and plots for the game.

Incorporating games into professional writing classes would be more difficult since teaching basic writing skills poses unique challenges. One of the best ways to learn how to write is through practice. At first consideration, the only feasible option is using game elements to make drills more enjoyable. However, upper level writing courses could explore how games are a form of technical communication. For an assignment, students would compare and contrast the rhetorical devices used in tabletop games, video games, and traditional forms of communication.

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