Playing with Gameful Activities and Assessments: Avatars and Experience Points in a Graduate Course

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Abstract: The community of learning scientists is increasingly valuing games and game-based learning environments to engage players and learners in their pursuits. In higher education, instructors, especially those who teach game-related topics, attempt to incorporate game principles into the course activities and assessments, and found their efforts motivational for students. I argue that participating in gameful assessments and activities are important for teachers, not only to explore new ways of designing learning experiences, but also to better understand the gaming context of young people they work with. This paper introduces the design of a course that engaged graduate students in the concepts and practices of game-based learning. Specifically, I discuss the design of using avatars and gaining experience points as part of their course activities and assessments mediated by a social media technology, and how learners were engaged in the course in a gameful manner.

Keywords: gameful assessment, graduate course, avatar, game-based learning

> *I do not play video games and to be honest, I feel a high level of anxiety whenever I use the controllers of consoles such as the ones for the x-box and PS3 although my children are able to use them flawlessly.*
>
> *Ms. Pacman, Reflection Paper*

Introduction

Concerned about providing meaningful learning, many higher education instructors strive to provide authentic contexts analogous to the knowledge usage outside of academia in preparing future practitioners in their disciplinary practices (Herrington & Herrington, 2006). One important and authentic practice in teacher education should be about playful and gameful learning: teachers' practices involve young people who are apt learners in their social worlds, invent new ways of doing things, and examine their own practices, including their game play (Thomas & Brown, 2011). Some instructors incorporated game principles into the course activities and assessments, and found their efforts motivational for students (Fishman & Aguilar, 2012; Sheldon, 2011). It is acknowledged that many behaviours and efforts involved in gameplay (e.g., risk-taking, persistence, problem-solving, concentration) are highly valued in many life situations. On the other hand, many perceive that time spent in playing games in all ages is wasted and could be used elsewhere. Similarly, teachers may not identify with today's generation of young students as gamers, as seen from Ms. Pacman's (screen name of a student) reflection above. I argue that participating in gameful assessments and activities should also be valued for its authenticity in the context of in-service teacher education (i.e., facilitating learning for young people). In the past years, using game-like elements in (or gamification of) higher education courses has gained attention to support students' meaningful experience (Johnson, Adams Becker, Estrada, & Freeman, 2014; Sheldon, 2011). Borrowing the term 'gameful' used by McGonigal (2011), this paper introduces the design of a summer course in the Master of Education program on Digital Game-Based Learning at a Western Canadian university and describe how the participating students interacted with course activities in a gameful manner.

Perspective on gameful learning

The efforts to incorporate gameful activities and assessments in higher education are growing not only for the courses related to games (e.g., Sheldon, 2011) and game-based learning (e.g., Fishman & Aguilar, 2012), but also in other science and engineering areas (e.g., Barata, Gama, Jorge, & Gonçalves, 2013). Sheldon's (2011) multiplayer classroom experimentation initiated in 2009, set out a prominent example. The course was designed with the assumption that students would earn their points by embarking on quests and participating in guilds (collaboration) in order to eventually receive grades above F. The authors and researchers mentioned above equivocally argue that simply mapping the game elements to course activities does not necessarily make students' learning gameful. McGonigal (2011) used the term 'gameful' to emphasize on the seriousness of game play, which may not be captured from the word 'playful.' Building on this notion, Holden and colleagues (2014) provide a useful framework in conceptualizing the experience of gameful learning. They suggest three elements,

including attitude, identity, and ignorance, as dynamic influences that bring about gamefulness. The activities and assessments are not in and of themselves gameful; conversely, gameful learning happens through the learners' interactions with them. The element of attitude considers what Suits (2005) calls 'lusory attitude,' with which players accept rules and constrains of a game and make efforts to achieve its goals. The element of identity is also played out by the learners: they negotiate identities in and out of the game and the learning setting (Holden et al., 2014). The element of ignorance can also be found from Salen's (2011) account on Quest to Learn, where the community of questers (i.e., learners) constantly identifies and embraces its lack of knowledge and a need to share and provide feedback.

Methods

The course, Digital Game-Based Learning, incorporated some game elements, with the intention that the participants would immerse into the concepts and practices of game-based learning. The author designed and initially taught this course during the summer 2013 two-week residential period for an online Master of Education program. In order to foster a community of players, the course design used game concepts, such as experience points (XPs) and multiple battles for students' learning tasks (Johnson et al., 2014; Sheldon, 2011). XPs were to be earned in everyday activities during the two-week intensive course. The 3-hour class sessions allowed the students to collectively develop and articulate design principles for learning and games, informed by theories and practices. They also participated in the community of designers (teachers) to exchange and develop ideas. This happened both face-to-face and online using Google+ community page to share, accumulate, and trace evolving ideas and digital resources (see Figure 1). However, an apparent tension surfaced between the university-credit course evaluation and social practices common in playing games (Kim, 2014). Many game-like elements were directly associated with assessments (i.e., everyday XPs), and students were not comfortable with sharing the accumulation of those points (i.e., leaderboard), which is a common practice in many social games.
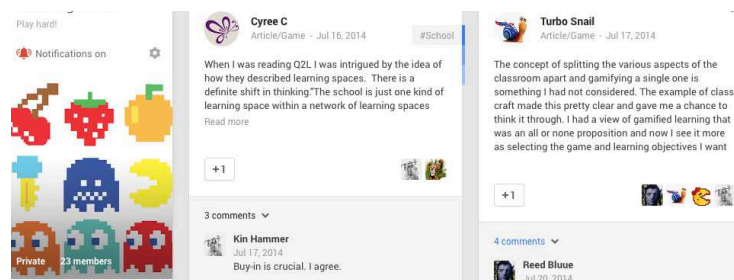

Figure 1. Google+ group page for microblogging as avatars

This paper reports on the second iteration from the two-week intensive course offered in Summer 2014. A new element required students to create their avatars for anonymity and to self-score their XPs for the leaderboard everyday. Another prominent element of games that is often lacking in higher education is immediate feedback. We reviewed activities daily and reflected on self-scored XPs for selected avatars (e.g., microblogging on games they reviewed). A researcher took observation notes everyday during the course. The instructor took occasional reflective notes and conducted an informal survey about microblogging using students' avatar identities. The assignments and the electronic artifacts posted online were collected from the 15 students out of 17 enrolled students who agreed to share their work (ages between 25 and 55). The aim of the course design was to create engagement and a playful culture in a graduate classroom, through which students experience the benefits (and/or pitfalls) of gameful learning activities and assessments. In the following, I present the preliminary findings on one aspect of the course, i.e., microblogging through avatar identities, to understand how students worked (or played) with this particular activity in a gameful manner.

Findings

The use of avatars and a self-reported XP leaderboard was an important design change implemented from the previous course. In a typical university classroom, points or numbers associated with a student's performance are private between the instructor and a student, even though each other's participation and contribution are easily visible to all students. Adopting game concepts, as XPs and a leaderboard, would inevitably challenge the exiting rules and structure of a graduate course. The self-reporting of XPs as avatars, therefore, was intended to provide some level of privacy, to eliminate the surprises of finding out their XPs from the instructor, to encourage learners' agency in their own performances, and to possibly provide an opportunity to express their

opinions from different perspectives. The instructor conducted an informal online survey at the mid-point of the course, to find out whether or not all students were comfortable to reveal their identities on the last day and to hear their thoughts on this practice. All agreed to reveal their avatars. Names mentioned below are either pseudonyms or their actual or pseudo avatar screen names depending on participants' indicated preferences.

Gameful learning with the new rules of a graduate course

In the open-ended question to comment on using avatars, 10 out of 17 students mentioned that they enjoyed figuring out who the person was. Doc Claw, for example, mentioned, "I thought the avatar thing was a great idea! It is fun trying to figure out who everybody is just by their comments online." Interestingly, using avatars as a protective measure for the XP leaderboard was not much of a concern once they became familiar with the routine practice. In fact, they showed their 'lusory attitude' of accepting this new rule of using avatars, which is different from typical threaded online discussions. At the same time, they engaged in reflective practices in action (Salen, 2007) in the game of 'figuring out,' not only as they read the posts online but also as they attended to what their classmates discussed in the classroom. At the same time, students made different types of moves in their use of avatars. For example, some students found themselves focusing more on ideas rather than associating the opinions with particular classmates. James mentioned, "I think that the use of avatars was an innovated teaching strategy that encouraged me to construct understanding through a more candid and open communication and (reducing potential for bias)." Other students, on the other hand, mentioned that they tried not to say something similar in class so that they would not accidently reveal their identities to others. There were, of course, few students who did not see the value of logging into a different Google account (or changing their names/photos) as they appreciate connecting online posts with face-to-face conversations. Most of the students were part of a Master of Education program cohort, and many thought they figured out everyone. However, there was a general element of surprise on the last day when everyone revealed their identities.

Gameful learning and identities

Students in the course constantly navigated their identities as gamers, non-gamers, teachers, parents, graduate students, and so forth, in discussing what they were reading and experiencing and in trying out different games online or during the class time. The names and looks of their avatars did not necessarily affect their own (or projected) identities, but some made a connection with how they liked to act. Introducing themselves as avatars might have given a chance to see themselves as protagonists who embark on a quest as gamers and designers of learning. Birdie Bee discussed how she related to games, when she introduced herself online in Figure 2. Happy Face also posted on the first day, "Day one. Excited and anxious. I haven't played video games for about 7 years. I have however used a lot of ed. games in the classroom and had a serious look at what they offer in context to what I need. I'm very curious."
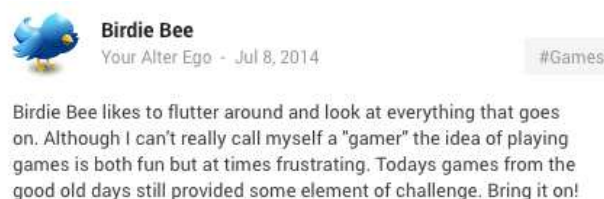

Figure 2. Birdie Bee's post on introducing herself

Students' identities as gamers, past-gamers, or non-gamers played out when microblogging about games they played in relation to each day's topic. Turbo Snail in his discussion of violent games posted, "As a product of these early shooters I personally do not feel they have made me a more violent person and am very curious as to why these games seem to affect different individuals differently." He, as an in-service teacher, reflected on his own identity as a gamer in relation to the day's reading assignment about violent games.

Embracing ignorance in gameful learning

Students seemed to be much more open about their ignorance or critical to what they were reading when microblogging online. On day five, Angel of Life shared 15 game-related acronyms she found while reading an article. In response, two other students acknowledged that they had to look up what COTS (commercial off the shelf) stands for, and another questioned why no one asked what CI (collective intelligence) meant during the class. In fact, some students thought there could be more open communication using avatars. Ms. Pacman questioned, "I wonder whether having the avatar made people feel safer when they were posting and enabled

them to write more freely." In requiring each team to share their progress everyday, the instructor as an avatar, Bumble Bee, posted their work on behalf of the teams in order not to reveal their membership to particular teams. At the beginning of this process many teams seemed to send their typed up notes for the sake of fulfilling a requirement. This started to change when all the teams had short presentations and clearer needs and value of sharing and receiving feedback were established in day five. This is similar to the account by Salen (2011) on the conditions of student learning. The teams identified the aspects of their designs that required particular attention from their peers and sought feedback. Some students started posting their group work using their own avatars, giving others a clue that they are members of particular groups. At this point, the game of hiding behind an avatar became less important than receiving feedback from peers.

Conclusions and implications

In the NMC Horizon Report: 2014 Higher Education Edition, games and gamification are highlighted as digital strategies, which transcend conventional learning activities and are likely to drive technology-related decision-making in higher education in the next two or three years (Johnson et al., 2014). The tensions exist in incorporating structurally different concepts into the university course: even though we position the course as a game, one does not have infinite chances to fail and repeat like a game for a university credit course (Kim, 2014). The course redesign described in this paper, using avatars and self-reporting of XPs, was an attempt to navigate and mitigate such tensions and to explore how to bring about the gamefulness in a graduate level course. The gameful learning practices and creative engagement with avatars came from students who accepted the new rules of a graduate course, navigated their identities as gamers, non-gamers, teachers, and students, and embraced and created a need to share their work and learn from one another. The future design iteration may pay more attention to how to facilitate students' establishing the needs to share as well as accepting and creating new rules for the course to better bring about the graduate students' gamefulness into their learning. This research provides implications for ways in which we deliver instruction in higher education, especially in the context of educating in-service teachers. I again argue that engaging in a course in a gameful manner should be valued for its authenticity in the context of in-service teacher education: they facilitate learning for young people and at the same time, many of them may not identify with young people's gaming practices. The practice introduced in this paper provides a strong connection between the course pedagogy and its content, and positions the course as an opportunity to deconstruct their current learning, teaching and gaming experiences.

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