Rethinking extra credit: How gamification can reduce grade inflation and strengthen soft skills

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Abstract. Gamification, the use of game-based principles to promote learning (Kapp 2012), allows instructors a pathway through which they can maintain curricular rigor while simultaneously fostering strong work habits and soft skill development. In this paper I describe my own experience of gamifying an online linguistics undergraduate course as I sought to combat engagement challenges such as spotty attendance and assignment procrastination. By implementing a gamified bonus level in the course, I was able to reimagine the traditional notion of extra credit in a way that incentivized self-regulation and engagement without creating a high amount of grade inflation in the process. Unlike traditional extra credit which advantages high-performing students, the bonus level sought to provide equity to the lower-performing students at a regional university with a predominant first-generation population.

Keywords. gamification; extra credit; grade inflation; soft skills; undergraduate linguistics courses; intro to linguistics; JEDI

1. Introduction. A common concern when teaching college courses is the extent to which a students’ grades should reflect mastery of the content as compared to their work habits, professionalism, and effort. For instance, teachers often grapple with whether students should be penalized for turning in a late assignment even if they demonstrated complete knowledge of the content. Conversely, they may wonder: if timely assignment submission is not reinforced, am I adequately preparing students for success in the professional world? This problem is compounded when we consider that some students are unaware of the “hidden curriculum” in higher education, which is heavily comprised of soft skills such as knowing how to ask a professor for an extension on an assignment deadline (Giroux & Purpel, ed. 1983).

Gamification, the use of game-based principles to promote learning (Kapp 2012), offers a solution that enables instructors to maintain curricular rigor while simultaneously fostering strong work habits and soft skill development. In this paper I describe my own experience of gamifying an online linguistics undergraduate course as I sought to combat engagement challenges such as spotty attendance, reluctant participation, and assignment procrastination in an online undergraduate linguistics course. By implementing a gamified bonus level in the course, I was able to reimagine the traditional notion of extra credit in a way that incentivized strong work habits, without creating a high amount of grade inflation in the process. The gamified design not only had a positive impact on timely assignment submission as compared to a non-gamified section of the same course, it also provided a more equitable experience since the bonus level provided students with multiple pathways to course success.

2. Soft skills. While teaching an online undergraduate linguistics course at a regional university in Texas with over 75% first-generation students, I found myself struggling with questions about how to ensure my grading policies were equitable. Like many of my colleagues, I would occasionally offer extra credit opportunities for attending linguistics-related conferences or for

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participating in other “not-on-the-syllabus” activities. The problem with these types of opportunities is that they tend to be utilized by already-succeeding students (Hardy 2002) and leave the struggling students begging for end-of-semester bailouts. My late work policy changed every semester, as I was constantly trying to find a balance between wanting to be flexible for students with many demands on their time as single parents and full-time workers, while also wanting to instill in them a healthy respect of deadlines.

Regarding late work, I ultimately decided to make the covert overt and reveal the hidden curriculum by using the first day of class to explain what an extension request was and giving them procedures for how to request one on any assignment for any reason. I even had a Google Form that they could fill out letting me know which assignment they needed more time on and when they would be turning it in. This form optionally requested a reason the extension was needed, and based on the response, the form directed them to on-campus resources that might be helpful. For instance, if the student indicated that they were ill, the number to the campus clinic was given. Interestingly, the most commonly selected option was “poor time management,” indicating that many of the students were having difficulty juggling their responsibilities. This was not particularly surprising, given that, for most of them, my linguistics class was their first fully asynchronous online course, a format which typically requires more developed study habits and stronger self-regulation (North 2019).

In looking at the student responses, I realized that providing an equitable classroom experience meant not only offering more flexibility with deadlines but also needed to include proactively helping students build the soft skills needed to be successful in an online course—things like logging in to the course often, staying on top of the assignment schedule, engaging with non-graded course material, and attending office hours. However, I was also mindful that equity for these students did not equate to simply offering lots of extra credit opportunities for these behaviors because this would likely lead to tremendous amounts of grade inflation (Pynes 2014), making their grades no longer an accurate reflection of their linguistic knowledge.

I began reading about the benefits of gamification in educational contexts and decided to gamify my course in 2016. I have since made gamification a mainstay of my course design.

3. Gamification. In its simplest form, gamification is a rewards-based system similar to Skinner’s (1963) concept of operant conditioning. We perform a certain behavior and are offered a reward in return, which incentivizes us to repeat the behavior so long as the rewards keep coming. The classroom grading system itself can often mimic this pattern, with students being given points on assignments as a reward for their work. The danger with gamifying a course by simply rebranding the experience through the addition of leaderboards, opportunities to “level-up”, badges, etc. is that the mechanism driving participation is still students’ pursuit of rewards. It’s just in fancier, video-game-like packaging. Utilizing this type of rewards-based gamification means that students must deem the rewards as worthwhile for them to participate.

Nicholson (2015) makes the distinction between reward-based gamification and meaningful gamification, emphasizing that meaningful gamification builds intrinsic motivation by tapping into other aspects of gaming beyond just the points, things that make learners want to play the game for the game’s sake. In a meaningfully gamified situation, the goal is to have gamers so immersed in the narrative of the fantasy world that they are no longer thinking about the real world. It’s the reason we go to an arcade like Chuck E. Cheese and engage in a bunch of activities to accrue tickets without giving much thought to the fact that those tickets will ultimately be redeemed for a small trinket, such as a temporary tattoo or a plastic ring. We find meaning and joy in the game itself.
Once I realized the potential of meaningful gamification, I set about creating a game for my students, which I later named the bonus level. The bonus level became “unlocked” in the fourth week of our 16-week semester, at which time this previously-hidden portion of the course became available for students to participate in, if they so chose. The bonus level involved earning virtual tickets for engaging in various aspects of our online course, all of which were aimed at strengthening soft skills that benefit online learners. I incorporated video game elements that help learners to become more immersed in the game narrative, such as Easter eggs (hidden features common in digital media that must be “hunted”). For instance, during weeks where I knew it would be beneficial for students to log in to the course shell early in the week, I would hide an image somewhere within that week’s online module. The image, which was always relevant to our course content for the week, was a clickable link that led to a Google Form. Students knew ahead of time what types of images to be looking for, and I would usually send out an announcement that an Easter egg was forthcoming. This encouraged students to log in often, read each page of the online module closely, and not simply skip to the assessment.

The tickets earned through this activity and others like it, such as asking students to note Scrabble letters I held up at random points throughout weekly recorded videos, were accrued throughout the semester and tracked in a leaderboard. (The tracking of tickets and prizes was done through a combination of Google Forms and Sheets, the latter of which offers an easy-to-implement leaderboard widget.) Some ticket-earning opportunities were announced from the outset, such as submitting an assignment more than 24 hours before the deadline, attending office hours, or collaborating with peers in online discussion boards, whereas other opportunities were revealed as the course progressed. One such example was an assignment where students upvoted each other’s work, and the top three submissions received bonus level tickets.

While the bonus level in some ways functioned like typical extra credit, the fact that it was packaged in the form of a game meant that—similar to an arcade—I could attach large ticket values to desired tasks while the actual real-world point equivalent remained very low. Because students enjoyed seeing their name on the leaderboard and/or the thrill of trying to find Easter eggs in the course modules, they were not as concerned about the tangible reward (i.e. the extra credit points) that they were working toward. In fact, the conversion rate between virtual tickets and actual points added to their grade was extremely modest, as even the top earners added less than one percentage point to their final grade.

In addition to extra credit points, which carried a high ticket-to-points conversion rate, the virtual tickets could also be redeemed for prizes, which had a much lower ticket threshold. These prizes were intended to bring equity to those who otherwise would be heavily disadvantaged in the course. Most of the bonus level prizes were opportunities for students to return to modules where they had not achieved mastery or perhaps had skipped altogether, which meant that learners had an alternate path and multiple “second chances” to successfully master the course content. Unlike traditional extra credit models, these prizes purposely advantaged low-performing students, particularly those who were having trouble staying on top of their coursework. For this subset of students, many of whom didn’t opt into the game until much later in the semester, they were not motivated by the game architecture but were instead enticed by the prizes since their grade was suffering and the tickets could earn them a chance to improve it. Nicholson (2015) notes that even this type of rewards-based gamification can be effective when the goal of the game is to teach a skill with real-world value. This is because the player ultimately replaces the external reward with the new skill, which becomes a reward in and of itself. The goal was that after these students saw the benefits of engaging more effectively with
the course (which they should, since the bonus level scaffolded and strengthened the online learning skillset that the course required), they would see the inherent value of the study habits the tickets were incentivizing.

4. Discussion. When I originally gamified my course in 2016, my focus was not necessarily on researching the effectiveness of gamification. I was instead motivated simply by trying to solve a classroom challenge. Thus, I did not ever conduct a formal study on the bonus level’s effectiveness, although that would be a natural next-step for this work. I did, however, have a colleague who was teaching the exact same course in a non-gamified way. In a cursory comparison of the data from our two sections, I found that my students were more likely to turn in work more than 24 hours in advance of the deadline as compared to his students. Obviously, to be able to make any legitimate claims about the effectiveness of the bonus level, I would need to measure the statistical significance of this difference and would also want to collect data on other criteria, such as timestamps, course logins, attrition rates, final grades, video statistics, etc. It would also be useful to track students longitudinally to see whether these skills translate into success in subsequent courses. Anecdotally, though, many students commented on how motivating they found the bonus level. Likewise, I noticed that many students who were inclined to drop the course altogether after having a rough start to the semester found a reason to stay since the bonus level provided them alternative pathways to successful course completion.

One final observation that I had about the bonus level was actually not about my students’ experience but about my own. Although I tried my best to tie the bonus level to linguistic content (for instance, I used its inclusion in the course as an opportunity to lead students in a study of gaming jargon), the bonus level could just as easily have been a part of an undergraduate course of any discipline, as it is more pedagogical rather than linguistic in nature. But, instead of begrudging the fact that I needed to expand the curriculum to accommodate student needs, I found myself widening my definition of what it means to be an introductory linguistics professor. I ultimately concluded that if linguists seek to occupy more space in university core curricula and to widen our reach to non-majors and first-generation students, we must be willing to take on new roles and tackle issues of equity that may be keeping students from hearing the linguistic message that we are so eager to share.

References


