

## **Gameful Engagement: Gamification, Critical Thinking, and First-Year Composition**

**Sarah Dwyer**

Texas A&M University-San Antonio

### **Introduction**

In 2015, I was teaching in the First-Year Composition (FYC) program at Valdosta State University, a regional institution in southern Georgia. Our undergraduate population included a large number of first-generation, low-income students from the surrounding rural area. As such, many incoming freshman were unfamiliar with our institutional culture and with academic culture more generally. During my time there, our institution experienced dropping enrollments and problems with retention, issues exacerbated by many of our students' unfamiliarity with college contexts. To help orient my students to the university, I used gamification to develop an engaged pedagogy that would respond to and hopefully help ameliorate these issues by turning my FYC classroom into a Role-Playing Game (RPG). This engaged pedagogy, focused on critical thinking and transfer of learning, was designed to help students become familiar with university resources and introduce them to the different disciplinary roles and identities they would take up within their majors, ideally helping them discover not only how to write within different academic contexts, but also how to be students at our university.

Bell hooks (2010) defined engaged pedagogy as “a teaching strategy that aims to restore students' will to think, and their will to be fully self-actualized. The central focus . . . is to enable students to think critically” (p. 8). In this framework, critical thinking involves “discovering the who, what, when, where, and how of things . . . and then utilizing that knowledge in a manner that enables [students] to determine what matters most” (p. 9). Critical thinking also requires “participants in the classroom process to be engaged” (p. 10). Engagement is defined in this context as “a positive, fulfilling and work-related state of mind that is characterised by vigour, dedication and absorption,” wherein a student “views [themselves] as belonging to, and an active participant in, [their] learning communities” (Baron & Corbin, 2012).

The critical thinking skills that are a focus of engaged pedagogy have been highlighted as key elements of transfer by a number of composition scholars. Students who are engaged, who have “[a belief in] their own ability to achieve their desired outcomes and [a belief] that they have some control over those outcomes,” are more likely to have “dispositions which will allow them to transfer knowledge to new contexts” (Driscoll & Wells, 2012). In this context, transfer is “a dynamic activity through which students . . . actively make use of prior knowledge as they respond to new writing tasks” (Robertson, Taczak, & Yancey, 2012). Lee Ann Carol (2002) argued that FYC classes can “provide a space early in the college experience for students to step back and focus directly on their own literacy development” (p. 120), wherein students can take on new and difficult roles that challenge their abilities as writers: roles which require the metacognitive awareness that is inherent to critical thinking.

Metacognition, broadly understood as thinking about the learning process, “enables individuals to better manage their cognitive skills, and to determine weaknesses that can be corrected by constructing new cognitive skills” (Schraw, 1998, p. 123): a practice which many FYC classes, including mine, emphasize through reflective writing and discussion. Elizabeth Wardle (2007) suggested that “meta-awareness about writing, language, and rhetorical strategies in FYC may be the most important ability our courses can cultivate . . . what FYC can do is help students think about writing in the university, the varied conventions of different disciplines, and their own writing strategies in light of various assignments and expectations” (p. 82). To help students develop meta-awareness, Kathleen Blake Yancey, Liane Robertson, and Kara Taczak (2014) suggested including space for the use of prior and concurrent knowledge and metacognition in FYC to encourage transfer for students who are actively engaged in their classes. Creating this space for reflection in an FYC class provides students with an opportunity to articulate what and how they are learning and the chance to strategize with classmates throughout their learning and writing process, just as players in a collaborative game do.

To create engagement and provide opportunities for reflection in my FYC class, I designed my gamified class to encourage my students to think critically about their own learning. I define critical thinking as a metacognitive process through which students become able to determine what they need to know and how they can learn it by engaging in reflection throughout their research and writing processes. Metacognition is a vital part of both learning and gaming, as players learn how to play games by experimenting with different methods of gameplay and make changes to their strategy based on their reflections about their experiences.

Gamification is the application of complex game elements in non-game contexts. Over the past decade gamification has become a popular method for creating engaging learning experiences in a variety of different settings, including the academic and business worlds (Deterding, Dixon, Khaled, & Nacke, 2011). Effective gamification is “gameful”: player-oriented and designed to “create platforms and experiences that empower players to have the spirit of the gamer [someone who is optimistic, curious, motivated, and always up for a tough challenge] in real life” (McGonigal, 2011). In gameful design, “organizational goals of the game are achieved by empowering the players to get more of what they really want” (McGonigal, 2011), and what a number of students at our institution wanted were tools to help them navigate their new university. Assignments in my gamified class were thus designed to help students begin to understand the university as both a physical space filled with resources that they could learn to use and a space in which they could begin to develop their identities as learners, as practices leading to student engagement are considered key to academic success, retention, and transfer (Cruce, Wolniak, Seifert, & Pascarella, 2006; Driscoll & Wells, 2012; Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008).

To gamify my FYC class, I turned it into a Role-Playing Game (RPG). RPGs are a traditional form of gaming wherein players choose a role for themselves and play their way through a narrative, making choices that change the story as they go. My game allowed students to explore the campus and learn about it on their own terms through the completion of various activities and assignments and provided a context in which they could share what they learned with their classmates through class discussion and the completion of various writing assignments, which were shared in peer review sessions online and during class

meetings. The gamified class became a space for engaged pedagogy: a place for exploration, which “create[d] the space for everyone to speak” (hooks, 2010, p. 20).

To create an environment that would encourage active engagement and critical thinking, I gamified two sections of first-semester composition in fall 2015. To learn more about my students’ experiences with the class, I invited them to participate in two surveys: one in early October and one in December, with a mid-semester reflection in November. Students in both sections chose to participate, and some of their responses are reproduced in this report. Students responded to the project enthusiastically, and I have continued using the gamified format described here, with some variations, in the semesters since then, to equal enthusiasm.

Based on my experiences in teaching these classes, I argue that the gamification of first-year composition courses can facilitate the critical thinking skills that are key elements of transfer from FYC to writing in the disciplines by encouraging the formation of student identity, the exploration of campus communities, and the practice of metacognition.

### **Gamification**

FYC classes are ideal spaces for gaming. Frequently capped at 20–25 students, these often intimate classes allow faculty to develop the engaged pedagogy hooks (2010) described as “highlight[ing] the importance of independent thinking and each student finding [their] unique voice” (p. 21). In a gamified classroom, students play the game together; they are able to learn from the game and each other, developing their critical thinking skills as they explore, research, and exchange information, “discovering the who, what, when, where, and how of things” in pursuit of their goals within the game, “and then utilizing that knowledge in a manner that enables [them] to determine what matters most” (hooks, 2010, p. 9). Through this process of metacognition, students develop individualized strategies for completing assignments and are able to exchange tips, suggestions, and ideas as they work on their individual projects. This creates the “multiplayer classroom” conceptualized by Lee Sheldon (2012), wherein “[e]ducational goals do not change . . . only the road we take to reach them changes” (p. 191).

Indeed, much of what instructors ask students to do already mimics the structure of a game. Students learn and execute increasingly complex scaffolded tasks within a specified time, in pursuit of a particular goal: the completion of the class. In this analogy, successfully passing the course is the equivalent of winning the game. Regardless of the type of game, all gameplay requires the metacognitive processes intrinsic to critical thinking: players must carefully assess their situation, plan appropriate strategies, and execute them successfully in order to continue in the game, all while working with others to accomplish their goals.

In an engaged pedagogy, which “emphasizes mutual participation [and] forges a meaningful working relationship between everyone in the classroom” (hooks, 2010, p. 21), the alignment between game design and curriculum development becomes even clearer. To create engagement in my game design, I drew upon the 36 Learning Principles that James Paul Gee (2007) described as being built into good video games, focusing on two key concepts related to critical thinking: the “Insider Principle” and the “Multiple Routes Principle.”

The “Insider Principle” of game design makes gameplay unique and builds on the strengths that players bring to the game: “the learner is an ‘insider,’ ‘teacher,’ and ‘producer’ . . . able to customize the learning experience and domain/game from the beginning and

throughout the experience” (Gee, 2007, p. 227). Likewise, the “Multiple Routes Principle”—a core element of RPGs—allows for “multiple ways to make progress or move ahead. This allows learners to make choices, [and] rely on their own strengths and styles of learning and problem solving, while also exploring alternative styles” (Gee, 2007, p. 223).

These two principles privilege individual student experience and emphasize choice: essential components of both an engaged pedagogy and a good game. When students are “required to take responsibility for activities that require daily decisions and tasks, they become invested in the activity and more committed to the college and their studies” (Kuh et al., 2008, p. 557). This decision-making process involves the metacognitive process of critical thinking, with students planning for, monitoring, and evaluating their own learning experiences (Schraw, 1998, p.115). Students must decide for themselves how they want to play the game, and strategize as they do so, experimenting with what works best for them given their particular circumstances.

### **The Game**

In the parlance of the game, assignments became Battles and Quests, and each class became a Guild. Each Guild invented its own name via popular vote during the first week of class. Over the years, students have strongly identified with their Guilds, naming them jokingly (Math 1101, Mehormishmorg) and with pop-culture references and puns (District 204, Straight Outta Comp One, Comp of Duty II, APAcocalypse). Students were Guild Members and referred to one another as Guildmates, while I was the Game Master: the creator and director of the game. The Guild system personalized gameplay for students and established each Guild as a unique learning community, developed by everyone involved: a form of hooks’ (2010) engaged pedagogy and Gee’s (2007) “Insider Principle.” As unique learning communities, Guilds could also serve as models for what it means to work in a major or discipline. As in a discipline, Guilds established shared rules, methods, and goals. Within each Guild, students worked in small teams on a daily basis to complete in-class activities and developed their own community norms. A number of classroom rules and decisions were made via majority vote, including schedule changes and the invention and adoption of new Side Quests (explained below).

Students were able to recognize and clearly articulate the impact these daily activities and unique communities had on their learning: as one student explained, “I find it very valuable that we have lots of class participation . . . I learn based off of interaction, so this is very valuable to me!” In this reflection—a metacognitive exercise completed in the latter half of the semester—the student was able to look back over their work during the semester and identify what they needed to know (how best to learn the course material) and the steps that they needed to take in order to do so. For this student, the best way to learn the course material was to be actively engaged and participate fully during each Guild meeting. This understanding of how specific elements of the gamified class enhanced their learning process suggests that the student was able to think critically about their own learning and their preferred style of gameplay and use that knowledge to their benefit during the course of the semester.

My Role-Playing Game was also an Alternate Reality Game (ARG). Alternate Reality Games are “multiplatform, playable, transmedia narratives that attempt to make the game part of the player’s real world” (Bono, 2008). In my game, students played as themselves: newcomers in a foreign land, investigating the university and its opportunities. The objective

of the game was to explore the campus, bringing back information to share with Guildmates, so students could discover “the who, what, when, where, and how of things” that bell hooks (2010) described as essential to critical thinking. In exploring the campus, its resources, and its communities, students determined for themselves what they would investigate, the best methods for doing so, and what to highlight as they presented the results of their Quests to the rest of the Guild.

In the narrative of the game, students started as Level 1 players on the first day of class. In a traditional RPG, completing Quests allows players to earn Experience Points (XP) to Level Up their characters, enabling them to learn new skills and make their characters stronger. In my game, students earned XP and Leveled Up by completing Battles (shorter assignments including brainstorming and freewriting exercises, outlines, drafting, and peer reviews), Quests (major essays), and Side Quests (optional short, low-stakes assignments).

The use of XP is one way in which gamification can reflect an engaged pedagogy. XP is commonly used in gamification as the equivalent of a points-based grading system, and it provides a visible measure of student progress throughout the semester: a cumulative grading system, not a punitive one. In games, XP can only be earned: it is never lost, and failure is not a punishment. Instead, failure gives players the opportunity to try again, a key element of engagement: “in [an engaged] community of learning there is no failure” (hooks, 2010, p. 11). As one student explained, “I find that gamification actually really helps me stay [motivated]. I am a very competitive person, and I like the fact that I can level up . . . I also like the idea of side quests. I like that if I don’t do well on a paper I am not doomed to failure.” This metacognitive awareness—the student’s ability to identify how the structure of the game and their preferred style of gameplay impacted their learning process— suggests that the student was able to think critically.

The game structure seems to have encouraged students to think critically about their learning process, practicing metacognition as they carefully considered the best methods for earning XP, given their particular circumstances and personal preferences. Even if students did poorly on a Quest, they still earned XP, which helped advance their Levels. Likewise, if students failed to complete a Battle or Quest, they could choose to make up that missed XP by completing extra Side Quests. The XP system and associated Side Quests can provide a way for students to feel more in control of their learning, which can help students stay engaged: as one student explained, “The level up system gives me multiple opportunities to get my grade to [whichever] level I choose. So as long as I do all assignments on time and receive good grades I should come out with the grade I believe is best for me.” In this reflection, the student identifies the processes by which they are able to advance through the class to best achieve success as they personally define it. This student’s reflection also suggests that they have a high internal locus of control—the belief that one’s ability or efforts are the cause of their success or failure—a disposition which has been linked to successful transfer (Driscoll & Wells, 2012).

Side Quests, a feature of the XP system in my class, are a traditional feature of RPGs that are shorter and less complex than Quests. Worth valuable XP, Side Quests make Battles and Quests easier. The Side Quests in my game encouraged student engagement with campus resources, such as the tutoring center, library, and student organizations. This helped orient students to the university on a practical level and improved their ability to do well on their Quests and Battles. Students thought critically about how to earn XP via Side Quests, deciding when, how, and which ones to complete—the selection and monitoring practice that Schraw

(1998) defined as essential to metacognition—and often found that Side Quests encouraged them to try new experiences, an important step in orienting them to the university. Students were cognizant of this as well, again demonstrating their awareness of how specific elements of the class enhanced not only their learning process but also their orientation to the university campus and community: as one student explained, “I really enjoy the different side quests because it forces you to step out of your comfort zone and try new things or meet new people.”

While I built my gamified course to encourage exploration, I also built it in accordance with the requirements of our FYC program. Thus, my assignment sequence followed a familiar pattern: Quest One was a gamified variation on a traditional summary and response essay; Quest Two was a variation on a traditional rhetorical analysis; and Quest Three was a variation on a synthesis essay, which linked to Quest Four, a researched argument essay, in a “Quest Chain.” Quest Chains are a common feature of RPGs wherein players complete “a series of quests, one leading to the next” (Sheldon, 2012, p. 168). Quest Five, the last in the sequence, was a reflective piece based on the work students completed during the semester, composed as a digital oral narrative.

This traditional assignment scaffolding was adapted to a gameful context: students chose how to complete each Quest and chose the topic of each Quest based on their own interests and experiences on campus and in their first-year classes. Each assignment built on the prior knowledge and experience students developed in previous Quests, as assignment scaffolding of this type has been noted to enhance transfer: “reiterative assignments . . . invit[e] students to revisit what they have learned in light of new information and experience . . . mapped onto a larger framework” (Yancey, Robertson, & Taczak, 2014). Completing their Quests in sequential order provided a framework within which students could begin to define their identities as students, explore campus communities, and practice metacognition.

### **Defining Student Identity**

Job Classes—a staple of RPGs—invited students to chart their own path through the course via Gee’s (2007) “Multiple Routes Principle.” The four Job Classes allowed students to engage in different ways with on-campus events, resources, and classes as part of their Quests. For each Quest, every Job Class had a different mission: Adventurers explored the campus; Artists examined on-campus artworks and performances; Scholars investigated classes they were taking; and Freelancers did a little bit of everything. Students chose their Job Class based on personal preference, and each Job Class enabled students to reach the same learning outcomes while allowing them to take the paths that worked best for them.

Students engaged in critical thinking as they thought strategically about which Job Class to choose, as one function of the Job Class system was to allow students to make adjustments to their play style as needed, given the world outside of the game: family, work, social obligations, etc. The Scholar Job Class was specifically designed as an option for students whose schedules did not allow them much free time for Questing outside of class. My students appreciated the opportunity to plan around events that would impact their ability to complete their Quests, and this system also helped students become responsible for their own learning—an important element of engagement, metacognition, and transfer (Driscoll & Wells, 2012; Kuh et al., 2008; Schraw, 1998).

Students could change Job Classes throughout the semester, and some did, but many did not, particularly the fine arts majors. These students fully embraced the Artist identity,

as this Job Class both acknowledged their insider experience—Gee’s (2007) “Insider Principle”—and also privileged and celebrated their ways of knowing the world. Students in other Job Classes, however, had to discover what made them “Insiders”—whether that was by gaining knowledge through research or from reflecting on their own experiences. As hooks (2010) explained, an engaged pedagogy “assumes that every student has a valuable contribution to make to the learning process” (p. 21), and it was up to students to figure out what their contributions could be: thinking critically about what they wanted to share with their Guildmates, based on what they had learned from completing their Quests.

### **Exploration of Campus Communities**

The Job Class system provided a way for students to begin exploring their identities as participants in new campus communities. Quest One, Exploration, asked students to explore an element of life on campus and report their findings to the Guild. Adventurers explored an event; Freelancers explored a specific campus location; Artists explored the fine arts on campus; and Scholars explored one of their classes. Students chose both their Job Class and what they wanted to explore within the bounds of that Quest: Gee’s (2007) “Multiple Routes Principle” at play. Students had to think critically about their options: they first had to decide on a Job Class, and then on the specific event, location, artwork, or class that they wanted to explore. Many chose to investigate things that had caught their attention prior to the Quest, a practice which invited critical thinking and encouraged students to become more engaged with different campus communities by helping them identify ways in which they could become involved.

Because of the Job Class system, every student had a unique learning experience. Even students who explored the same topic did so in different ways, including two Adventurers who teamed up to investigate a sizable and complex student orientation fair. Although they attended the event together, each student pursued different methods and resources to gather the necessary background information for their Quest: one relied primarily on interviews with the organizers and students who attended the event, and the other relied primarily on event advertisements posted in on-campus and local media. These students learned the university in different ways—from interacting one-on-one with other members of the campus community to observing the relationships between the campus and the larger community that surrounded it.

In completing this Quest, students could not turn to the Game Master as the ultimate arbiter of knowledge: I was not in possession of the information they sought. The role of the Game Master is to guide the game rather than give specific directions to players, a practice tied to hooks’ (2010) engaged pedagogy, where “the classroom functions more like a cooperative where everyone contributes to make sure all resources are being used” (p. 22). While I could offer advice and suggestions, the ultimate decisions about their Quest were entirely up to students: an assignment design that encouraged critical thinking and transfer (Driscoll & Wells, 2012; Kuh et al., 2008; Schraw, 1998).

To explore the world around them, students had to determine who might have the information they needed and where they might go to find it: the “planning” that Schraw (1998) described as essential to metacognition, involving “the selection of appropriate strategies and the allocation of resources that affect performance” (p. 115). Adventurers and Freelancers had to decide how to observe, how to reflect, and how to record their observations. In addition to those observations, a number of Freelancers also visited the

campus archives to learn more about the history of their chosen campus location. Artists scoured the Internet and talked to reference librarians for information about their chosen artwork. Some photographed the artwork or the performance they attended and included those images in the final drafts of their essays. Scholars perused syllabi and course websites to better understand the class they were investigating, with some focusing on in-class activities and others focusing on the textbook or course website. These different roles helped students orient themselves to the university in a practical sense—learning the campus as they sought out different experiences and individuals—and also allowed them to begin developing their disciplinary or professional identities if they chose to investigate classes or topics related to their majors and interests.

The complex decision-making involved in these activities required students to think critically about the best ways to complete this Quest. In gathering the information their Quest required, students became Insiders, developing their own expertise on the topics they had chosen, and engaging in metacognition as they determined how to first gather, then organize, and finally report their discoveries to their Guildmates (Schraw, 1998). Students were able to articulate the beneficial effects of personalizing their learning in this way, with one noting, “I like the freedom we have in writing. It makes me actually want to participate,” and another stating, “I felt more involved and felt that I had more freedom to choose my topics.” These students, reflecting on their experiences, drew clear connections between their ability to make choices about their Quests and their levels of engagement with the class, something that has been echoed by students many times over in the years that I have been teaching with gamification.

The independent decision-making which the students valued continued with Quest Two, the rhetorical analysis, which built on the tasks and learning that students completed in Quest One. Rather than simply reporting information, students were asked to consider the design and creation of the subject of their rhetorical analysis, encouraging them to think critically about the topic and their responses to it. This task promoted metacognition, particularly the “monitoring” that Schraw (1998) described as an “awareness of comprehension and task performance” (p. 115). To understand their topic, students had to understand both how it was created and why they reacted to it in the ways that they did.

For Quest Two, one Artist (assisted by a reference librarian, or “Sage” in game parlance) researched and then conducted a phone interview with the artist of a painting hanging in the university library. The student described the experience as making them feel like an investigative journalist pursuing a story rather than a student doing a project for class: an embodiment of the “Insider Principle.” Another Artist, a theater major in the midst of rehearsals, also relied on primary research for their rhetorical analysis by interviewing both the director of and the other actors in the drama department’s production of *The Tempest*. This process deepened their understanding of both the play and the directions that they were given as a member of the chorus. These activities helped both Artists begin to see themselves as part of the campus community and as members of their chosen profession: they conducted primary research with established professionals in their field and “utiliz[ed] that knowledge in a manner that enable[d them] to determine what matter[ed] most” in their analysis (hooks, 2010, p. 9).



## **Metacognition**

To help students engage in critical thinking, I built metacognitive practices into the structure of the gamified course. Highly scaffolded, Battles and Quests required students to first brainstorm and then write outlines, rough drafts, and peer reviews, and finally submit a revised draft of each Quest. In completing these tasks, students also completed what I called “Random Encounters”: daily freewriting exercises that allowed for reflection on their progress in their Quests and on in-class activities. These reflective activities provided space for them to discuss their learning processes: students used Random Encounters to plan their research and drafting process, to articulate and explore the frustrations they encountered, to brainstorm and outline ideas, and to reflect on their progress in each Quest and throughout the course of the semester. For example, during the mid-semester reflection, one student discussed how the structure of the Quests helped them organize their ideas: “One of the elements that I find valuable in this class is the requirement to create an outline. It really forces me to get all of my ideas down and serves for a much more organized essay that is much easier to write.” This student was able to understand why they were asked to complete a specific task and was able to articulate how and why that task benefited them in their learning process, suggesting that they were thinking critically about their experiences and learning during the course.

These regular metacognitive practices culminated in the last Quest in the semester, Quest Five. This Quest asked students to create a digital oral narrative reflecting on their experiences while playing the game. In deciding how to tell their stories, students considered word choice, tone, and technical issues, and offered one another advice and suggestions on how to complete their narratives—one lively in-class discussion revolved around the fact that the so-called “Quiet Rooms” in the library were a terrible place to record due to their thin walls. This Quest gave students “the opportunity to see and hear each unique voice” audibly, in ways that celebrated their unique features (hooks, 2010, p. 20). Students told their own stories, in their own voices, and in their own ways: Gee’s (2007) “Multiple Routes” and “Insider” principles at play once again.

Adventurers composed narratives about an experience during the game that taught them something significant, with some adopting the discourse of our game, including an epic tale of seeking an elusive article in the library databases with the aid of a wise Sage—an important learning experience that taught the student how to seek assistance from the knowledgeable experts on campus who could help them. Artists composed narratives in the style of a bard, either singing, rapping, or composing a poem, including free verse about one student’s struggles in adjusting to dorm life: an experience which taught them that rooming with strangers can be fraught with unexpected tensions. Scholars composed short informative lectures recounting something they had learned in one of their classes: one lectured on biology, and another on history, with both students taking a position of authority in relation to the material in their majors. Freelancers combined styles: one informative rap bemoaned textbook prices and explained the student’s plan to avoid making purchases from the bookstore in the upcoming spring semester. Combining creativity with critical thinking, these exercises in metacognition gave students a chance to reflect on their successes and failures as they wrapped up their first semester.

In reflecting on their experiences during the semester, both during Quest Five and in the final survey, students seemed to gain a better understanding of their learning process and how it was similar to, and different from, their learning in other non-gamified classes:

metacognitive practices which reinforced an “internal locus of attribution for academic success” (Cruce et al., 2006, p. 369; Schraw, 1998), as students were able to recognize how their decision-making throughout the semester affected their overall academic performance. As one student explained, “[I learned] how to control my own destiny in a class depending on how many side quests and reading notes that I did to earn XP.” Another student, reflecting on the writing they had done throughout the semester, explained, “I learned I do my best work if I span my writing time out instead of doing it the night or day before.” Another student realized that “writing about things that could inspire a change interests me more than anything else.” The reflections of these students seem to indicate that they possessed a clear understanding of how they learned during the class and suggest that they could think critically about the choices that they made, a potentially helpful skill as they continued into their majors.

### **Limitations**

Gamification is not a panacea to problems of student disengagement and passive learning. A gamified course should be designed with learning objectives and game design principles that will encourage critical thinking and engagement, where student voices and student concerns are of primary importance. A gamified class must also stand on its own as a game, one that allows for playfulness, creativity, and multiple avenues for completion: the “gameful design” described by McGonigal (2011).

One issue with gamification is that students may find the idea off-putting or overwhelming, at least initially. As one student explained, “At first I thought it was a little weird, but then I learned that it is a cool way to be able to keep up with your grade because it is exciting when you see that you have leveled up.” Another noted, “I enjoy [the gamified class] a lot more than expected. At first it seemed like so much to do but it has helped me explore more avenues of sources.” Student responses to the gamified class were generally positive, though in my fall 2015 pilot, one student was fairly uncomfortable with the setup of the class throughout the semester, though they struggled to articulate why, simply noting, “it was not an effective learning environment for me.”

Another issue is time. While the Scholar Job Class was explicitly designed for students who have busy schedules, several students mentioned that due to other obligations, participating in the class as much as they wanted to was sometimes difficult, particularly as many of the Side Quests required dedicated out-of-class time. Although the students in my fall 2015 pilot were mostly traditionally aged and living on or near campus, many of them also had significant work and family obligations to deal with. As one student explained, “With my job and school I don’t really have time to go out and do stuff. I did the [ones] that you didn’t have to go out for . . . I feel silly going to the [tutoring] center for every paper trying to add XP, even though it is super helpful.”

While I have attempted to ameliorate these problems in later semesters, they have been of particular concern for two types of students: working adults and dual-enrollment students. The dual-enrollment students, coming from local high schools, are particularly impacted by this, as they often do not have the time to engage with the campus community in the same ways that more traditional students might. This problem is shared by working adults, who frequently must struggle with the balance between work, school, and family obligations. Ultimately, I have yet to find a truly effective resolution to this issue, though student feedback has been helpful in this respect—one Side Quest asks students to invent

Side Quests of their own, which students who are crunched for time have appreciated, inventing everything from rhyming games to library- and research-based activities.

Another issue with this gamified format is that due to its intensely localized nature, it is difficult to generalize from my results. While I have had success teaching with this gamified format at two very different institutions, FYC instructors who are unfamiliar or inexperienced with games or gaming may find it challenging to build a transfer-focused FYC curriculum through the medium of gamification. Likewise, these methods might be difficult to apply to FYC courses that have a standardized syllabus with set assignments and readings.

## **Conclusion**

My goal in designing a gamified FYC course was to help students become engaged critical thinkers by practicing the metacognitive skills that would help them as they moved from one context to another. Students, empowered to explore their community and their interests as a means of “self-development and self-actualization” (hooks, 2010, p. 22), identified and explored issues of concern and then shared them with their peers, helping them develop the understanding that “every student has a valuable contribution to offer to a learning community” (hooks, 2010, p. 22).

Teaching with gamification had noticeable effects on student learning, including an increase in student engagement with campus resources: a number of my students had never visited our campus library or the tutoring center before venturing there on Quests. Emboldened by the promise of XP, students made appointments with reference librarians and tutors and became more willing to attend on-campus events. One Side Quest required students to join a campus organization; a student who completed it explained that because they were doing it for a class, they felt brave enough to attend the first meeting of a group they were interested in, something they otherwise would not have done due to social anxiety.

Students were also able to reflect on their learning experiences through the metacognitive practices they engaged in throughout the semester. One student observed that with gamification, “Instead of making a good grade it feels like you actually win or accomplish something. It changes your [mindset].” Another student found that the structure of the gamified class “made writing essays more exciting and enjoyable to do. It creates a nice atmosphere in the class that is not as daunting as . . . a normal class.” These students felt engaged and seemed able to think critically about their experiences, with one noting, “[gamification] allows students to be creative and it has personally made writing less of a chore and more of an adventure.”

In my class, gamification served as a mechanism for learning not only the discourses of the college community but also the college community itself: interacting with different members of that community, different places on the campus, and different organizations and resources that might otherwise be confusing or overwhelming to a first-year student. Students have been both cognizant and appreciative of what they are learning, focusing their comments explicitly on transfer, with one noting: “After this semester I believe that I will be able to write decent papers for my other classes considering that writing papers in general is not my strong point.” Another student commented, “I also enjoy the fact that you are helping to prepare us for all the future classes that we will be taking down the road since most of us are freshmen on campus.” By developing their identities as students, exploring campus communities, and engaging in metacognitive practices, students in my gamified

classes seemed to become more confident in themselves, not only as writers but also as students.

While gamification is not a panacea to the inherent complications of first-year experience, by introducing elements of gamification that focus on the metacognitive practices of critical thinking, we may have greater success in helping students adjust to the new writing contexts that they will experience as they continue on from FYC and other general education classes into their majors.

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