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Gamification Learning for iPad Engagement in Middle School

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Abstract

The purpose of this action research was to determine if gamification learning would increase iPad engagement. This research was done in a 7th grade urban middle school over nine weeks in the fall of the school year. A regular 7th grade class of 18 students and an accelerated 7th grade class of 34 students participated in the study. Informed data was collected from pre and post survey, checklists, observations, student journals and gamification platform on Classcraft. The literature review examined the how motivated and self-regulated learner skills contribute to their academic success and how these skills can be used when introduced with a 1:1 device such as an iPad. The literature review also examined how to build engagement by having the use of iPads and gamification of learning in the traditional classroom setting. Results were positive on the impact of gamification in increasing iPad engagement. This research implies that gamified learning or gamification does have an impact on increasing engagement and self-regulated learners have an increased engagement of using their iPads compared to non-self-regulated learners.

Keywords: gamification, iPad, self-regulation learner, engagement, motivated, middle school

Technology has started to play a stronger role in how students learn today, first from typewriters to computers, Windows, Mac; then to laptops, iPads and tablets, Chromebooks, SMART boards, clickers and cell phones, etc. The use of technology to further student engagement, learning and reflection can be done in many different ways and with different technological devices. Devlin (2013) argues, "Student learning and outcomes have the ability to be affected by this use of technology, regardless of the device" (Robertson, W., Wilhite, Robert, Perney, Jan, & Storaasli, Mikkel, 2015, pg. 1). According to a Burdno (2013) survey, "...92% of teachers responded that digital technology is crucial to teaching and has an impact on learning" (Ferguson 2016, p. 1149). These impacts can be critical to the learners' outcomes.

In a district with a 1:1 device program, specifically the iPad, I wanted to see how to motivate students to use their devices for educational purposes. I had noticed that my students' engagement had not increased with the addition of these devices, but instead had decreased. Instead, the students were distracted and off task with these devices, watching YouTube, playing games, etc. I wanted to see if other tools or strategies were available to increase my students learning and install in them to be motivated, self-regulated learners.

What effect does gamified learning have on self-regulation and engagement in a 7th-grade classroom? There is literature on how students are motivated, self-regulated learners, how they achieve their goals and research on the use of 1:1 iPad in schools as well as how the opinions of gamified learning can provide engagement and motivation for students to increase their learning and achievements. My action research will be about using a gamified tool to increase iPad use and engagement in my class. With these devices, we want students to be engaged, not distracted. In order to do this, I had to increase their iPads being brought to class, increase their use of their iPad for educational purposes, and have my students reflect on the

whole process of being a more self-regulated learner. This action research will address what data I have collected in my research and how my students' learning has progressed in the fall of the school year.

Statement of the Problem

The use of technology such as iPads is relevantly new in schools. In the past, computers, laptops, Chromebooks and such were more readily available to students. Little is known about the use of iPads across a whole district and specifically with middle schoolers. The use of iPads can be distracting to adolescent learners and needs proper tools, purposes, and incentives to use them accordingly. There is a great need to use these technologies in the classroom, but also a great need to have students be better at self-regulating their learning and engagement on these devices. The purpose of this action research is to show how gamified tool can help increase student engagement on their iPads. The specific gamified tool (Classcraft) was used to increase iPad use and engagement.

Theoretical Framework

Pintrich and De Groot (1990) developed a theoretical framework model proposing that there are three motivational components to be linked to self-regulated learning. First, an expectancy component, or students' beliefs about their ability to perform a task. Second, a value component, or students' goals and how they believe how important and interest of the task is. Third, an effective component, or students' emotional reactions to the task (Pintrich & De Groot, 1990, p. 33). Students first need to believe they can perform a task. Students need a task to have value and are important and has interest in the task. They need an emotional reaction to a task to finish the task. It is when the task has these three parts will students find it engaging.

Pintrich's conceptual framework was updated in 2004. The first update is cognition, which represents the various activities and strategies that students do to plan, monitor, and regulate their learning. The second update relates to regulation of motivation and effect, which includes regulating various motivational beliefs such as for purposes for doing a task, judgments of competence to perform a task, perceptions of task difficulty, beliefs about the importance of a task, and personal interest in the task. The third update addresses regulation of context involves efforts to control the tasks that students encounter in the classroom (Robertson, 2015, p. 10). According to Robertson et al., (2015) "The Pintrich self-regulated learning model supports the links between learning, motivation, and self-regulation" (p. 10). Research by Ames and Archer (1988); Dweck and Elliott (1983); Meece, Blumenfeld, and Hoyle (1988); Nolen (1988); Paris and Oka (1986) has suggested that, "students with a motivational orientation involving goals of mastery, learning, and challenge, as well as beliefs that the task is interesting and important, will engage in more metacognitive activity, more cognitive strategy use, and more effective effort management" (Pintrich & De Groot, p. 34). Students who have and can master their goals, find the activity interesting and important have a higher rate of continuing their learning until they have finished the task or meet their goals.

This theoretical framework is essential to encouraging and increasing motivation for students. When students have a higher sense of self-regulation, they have a higher engagement in their work, in class, in involvement at school. This theoretical framework will be used as part of the interventions to increase students iPad engagement and motivation in this action research. This theoretical framework will be discussed further in the literature review and its purpose in this action research.

Review of Literature

Motivated, self-regulated learners & use of iPads for learning.

Technology has started to play a stronger role in how students learn today. First from typewriters to computers, Windows and Mac; and then to laptops, iPads and tablets, Chromebooks, SMART boards, clickers and cell phones, etc. Devlin (2013) argues, "Student learning and outcomes have the ability to be affected by this use of technology, regardless of the device" (Robertson, W., Wilhite, Robert, Perney, Jan, & Storaasli, Mikkel, 2015, pg. 1). According to a Burdno (2013) survey, "...92% of teachers responded that digital technology is crucial to teaching and has an impact on learning" (Ferguson 2016, p. 1149). In a district with a 1:1 device program, specifically iPad, I wanted to see how to motivate students to use their devices for educational purposes. I had noticed that my students' engagement had not increased with the addition of these devices, but instead had decreased. Instead, the students were distracted and off task with these devices, watching YouTube, playing games, etc. I wanted to see if other tools or strategies were available to increase my students learning and install in them to be motivated, self-regulated learners. My question is: What effect does gamified learning have on self-regulation and engagement in a 7th-grade classroom? This literature review will focus on how students are motivated, self-regulated learners to achieve their goals and draw upon research on the use of 1:1 iPad in schools and the opinions of gamified learning on how it can provide engagement and motivation for students to increase their learning and achievements.

Motivated and Self-Regulated Learners

When looking at engagement and student success, researchers have found that motivation and self-regulation emerged as the best predictors of achievement or have met their goals (Pintrich & De Groot, 1990; Karlen, 2016). When students are motivated, they have higher

engagement in their learning. The research of Boekaerts (1997); Coutinho and Neuman (2008); and Meneghetti and De Beni (2010) has suggested that, "Learners who are highly motivated are more attentive to their learning process, implement learning strategies more effectively, establish a more productive learning environment, provide greater effort, persist longer at tasks, and show higher metacognitive skills (Karlen, 2016, p. 254). The research of Corno and Mandinach (1983) and Corno and Rohrkemper (1985) has found that, "Self-regulation of cognition and behavior is an essential aspect of student learning and academic performance in classroom context (Pintrich & De Groot, 1990, p. 33). Having both these attributes of self-regulation will increase the students learning.

Motivated Learners & Goals Learners have a higher interest in engagement and student success. Pintrich and De Groot (1990) develop a theoretical framework model proposes that there are three motivational components to be linked to self-regulated learning. Pintrich's conceptual framework was updated in 2004 (Robertson, 2015, p. 10). All these components can make a motivated learner. In order for students to be motivated, they need goals. According to Nicholls and Dweck (1979) performance goals are where students seek to maintain positive judgments of their ability and avoid negative judgments. They find value to prove, validate, or document their ability and not discredit it. This is in contrast to learning goals, in which students want to increase their ability or to master new tasks (Elliott & Dweck, 1988). When a student has either a performance or a learning goal, they have a higher level of achievement. Elliott and Dweck's (1988) study results suggest that students' achievement goals are critical determinants of certain patterns. When students value their performance goal and believed they had low ability, they responded back with negative affect and giving up patterns. Students who valued their performance goal and believed their ability to be high had higher comprehension even in

the face of obstacles. Motivated learners need to value their performance goal and have a high value in their abilities in order to achieve Maehr (1983). Maehr (1984) states that achievement goals are different as a function of the situation and what it demands, as well as vary across students (Ames & Archer, 1988). According to Ames and Archer (1988) "For example, when social comparison has been made salient, students have focused on their ability, and these self-perceptions have mediated performance and affective reactions to success and failure. By contrast, when absolute standards, self-improvement, or participation have been emphasized, students have focused more on their effort and task strategies" (p. 260). These strategies help a student to be either successful or not depending on the way they see themselves as a motivated learner. Ames and Archer (1988) found that, "How students approach tasks, engage in the process of learning, and respond to the situation may be related to their own perceived ability as well as the perceived goals of the environment" (p. 261). Goals are important to students and how they perceived their class. For example, Ames and Archer (1988) "When students perceived their class as emphasizing a mastery goal, they were more likely to report using effective learning strategies, prefer tasks that offer challenge, like their class more, and believe that effort and success covary" (p. 264). Motivated learners who have goals in their learning can achieve using multiple strategies.

Self-regulated learners. How does being a self-regulated learning show achievement? Karlen (2016) explains that self-regulated learning (SRL) is intricate and has many different definitions, multiple conceptualizations, and models. Findings from Boekarts and Cascaller, (2006); Pintrick (2004); Zimmerman and Schunk (2008) states, "SRL includes several processes such as planning, monitoring, regulation, and control of cognition, and motivation and involved the dynamic interaction of cognitive, metacognitive, and motivational components of learning

(Karlen, 2016, p. 253). The three self-oriented feedback loops are important to self-regulated learners. Adjustments are important because personal, behavioral, and environmental factors are always changing while a student is learning (Boekaerts, Pintrich, Zeidner, Pintrich, Paul R, & Zeidner, Moshe, 2005). The three self-oriented feedback loops are a good tool for students to use to see where they are in their reflection and self-regulation of their own learning.

SRL can learn in many different ways and forms and have strengths in different areas of learning. So how do you measure the achievements of SRL? Corno (1986); Zimmerman and Pons (1986), (1988) research states, "More important, the finding that self-regulation was the best predictor of academic performance on all the outcome measures suggests that the use of self-regulating strategies, such as comprehension monitoring, goal setting, planning, and effort management and persistence, is essential for academic performance on different types of actual classroom tasks" (Pintrich & De Groot, 1990, p. 38). Karlen (2016) agrees with Pintrich and De Groot that learning strategies are a key component of SRL. Boekaerts (1999) and Weinstein and Mayer (1986) found that, “From a cognitive-psychological view, learning styles strategies can be understood as behaviors and cognitions that learners activate more or less consciously to influence the processing of information, the learning process, and their motivation (Karlen, 2016, p. 253-254). Having these traits can be helpful to students who want to be successful self-regulated learners. According to Karlen (2016), “Successful self-regulated learners might not only have an elaborated learning strategy repertoire but also know how to use learning strategies adequately in order to reach their learning goals” (p. 254). Using their vast learning strategies will help these students reach their learning goals.

Student involvement in SRL is connected to the belief that classroom tasks are interesting and worth learning. Boekaerts et al., (2005) states “People can increase their self-reactions by

using environmental supports, such as self-administered rewards or praise" (p. 25). Students can get rewards or praise from their teachers or from setting and achieving their own goals in their self-regulation process of learning. Pintrich and De Groot (1990) states, "Cognitive strategy use and self-regulation were highly correlated with each other...and self-regulation was a better predictor of performance" (p. 37). Self-regulated learners tend to think about their thinking and plan their learning outcomes. Thus, with more planning and self-reflection comes a higher degree of achievement. Pintrich and De Groot (1990) believe, "Self-efficacy was positively related to student cognitive engagement and performance. Students who believed they were capable were more likely to report the use of cognitive strategies, to be more self-regulating in terms of reporting more use of metacognitive strategies, and to persist more often at difficult or uninteresting academic task" (p. 37). Even if the task is difficult, self-regulated learners continue and endure. They have learned strategies to help them through these difficulties of completing an academic task. Research by Blumenfeld, Pintrich, Meece, and Wessels (1992); Paris et al., (1983); and Pintrich (1989) found that "these motivational beliefs are not sufficient for successful academic performance; self-regulated learning components seem to be more directly implicated in performance. Students need to have both the "will" and the "skill" to be successful in classrooms" (Pintrich & De Groot 1990, p. 38). Pintrich and De Groot (1990) states, "We need to integrate these components in our models of classroom learning" (p. 38). Teaching and using these skills of comprehension monitoring, goal setting, planning, effort management, and persistence are important skills for students to have.

iPad Use for Learning & Classroom Engagement

After students have been shaped to be motivated and self-regulated learners, the next step is for the teacher is to create classroom engagement. Motivated, self-regulated learners thrive on

learning at their own pace. This method can be done in many different ways, including the use of iPads for learning. According to Hoffman (2013), "The iPad provides increased opportunities for student-driven work, collaboration within and outside of class, and a leveling of the academic playing field in which all students have the same informational and technological resources available at the touch of a finger" (p. 9). Student and faculty attitudes toward the use of iPads in the academic environment have been found to be positive. A cross-discipline study done by Miller (2012) found, "students self-reported that iPad use contributed to increased learning and engagement...the convenience and "fun" factor of using the device, and the device's portability" (Hoffman 2013, p. 10). When a device is seen as fun, it makes it easier to engage the student in using it and increase learning along with it.

iPad uses for learning.

Hoffman (2013) states, “The iPad provides increased opportunities for student-driven work, collaboration within and outside of class, and a leveling of academic playing field which all students have the same informational and technological resources available at the touch of a finger” (p. 9). Collaboration and student-driven work are important for becoming 21st-century learners. Ferguson’s (2016) research found, “...some students indicated that it was easier to communicate with teachers and easier to find answers using the internet. Researching topics was easier and faster for some” (p. 1154). Having an iPad and the internet at your fingertips makes it easier to research and find more resources and tools. Keane, T., and Keane, W. (2017) agree with Hoffman (2013), that for an effective 1:1 learning environment, you need several key parts to collaborative together. There also needs to be a balance of traditional learning methods and electronic learning devices.

Being able to communicate with peers and teachers through emails or social media is also key. Means (1994) agrees as he proposes four categories to organize educational technologies: tutors, exploration, tools, and communication. For example, Means (1994) explains, "technology is used as a tutor when it does the teaching directly, typically in a lecture-like or workbook-like manner" (p. 9) (Murray & Olcese 2011, p. 43). A device can be used for tutoring, exploring, tools and communicating. For example, there are specific APPS or programs to help students by tutoring them, others that help students explore and communicate in various forms. These programs are tools that students can use to further their learning. These educational technologies are key. Ferguson (2013) research found having access to their textbooks all in one device, being organized and having everything in one place and that learning with the iPad was fun and easy to check grades students stated. A student states, "everything is in one place." Another student commented, "I write sloppy sometimes and it is much easier for me to type" (p. 1154). All of these and many more are examples of effective uses of iPads for learning.

iPad for classroom engagement.

Apple Education would suggest that just having innovative devices and its software alone could provoke and promote systemic education reform (Crichton, Pegler & White, 2012). But according to Dexter, Anderson, and Becker (1999) findings, "Many educators and policy makers believe that technology can be a catalyst for educational reform" (Crichton et al., p. 23). They suggest that the use of technology in classrooms will change the roles of teachers and students, and cause teachers to be more like facilitators. The introduction of technology use in education can be both exciting and engaging. Keane et al. (2012), "found that the most important factors for success of an iPad program was the teachers be engaged, supportive and prepared to use the device" (Ferguson 2016, p. 1151). When teachers are engaged and well trained, the program's

design and implications are endless. Teacher professional development involving the use of these technologies is a key part of a successful program. Robertson et al., (2015) concluded that teachers are the most important factor in student success in the classroom. The use of technology falls under the teachers' responsibility for instruction. Teachers can use this tool to assist students during the learning process. But in order to do that, they too need professional development around the technology. According to Robertson et al., (2015), "When considering high-quality instruction and high-quality curriculum, professional development for teachers needs to be involved...The same fact holds true relative to curriculum and instruction in general, particularly because instructional technology is a component of instruction" (p. 84). It is up to the teachers to use the iPad as a tool for engagement and educational purposes and not just for fun and games. The excitement of having iPads is engaging for students; teachers can turn that excitement and channel it towards using the devices for educational purposes is just as exciting. Findings from Keane & Keane (2017) study found that a 1:1 program that was successful had weekly professional development for teachers, delegated leadership, collaborative professional learning, and supportive teachers. Teachers also working together on planning curriculum and assessment to integrate the technology and subject teams "fleshing out" of how to of technology was important to having a successful 1:1 program. Keane & Keane (2017) study concludes that for a 1:1 program to be successful they need these four factors: stable infrastructure, supportive teachers, delegated leadership, and collaborative professional learning.

Limits to the iPad for learning.

Even though the iPad can be an excellent tool for students to use, there are limits to it. For example, no data were collected to examine whether learning did or did not improve at the time. According to Miller (2012) study, "further study...is needed to assess the achievement of

specific learning outcomes (p. 58), which emerged as a common sentiment across the research reviewed" (Hoffman, 2013, p. 10). It would be good to have specific learning goals with the use of the iPads researched further. Another limitation of the iPad is the availability of applications in the Apple Store. Murray and Olcese (2011) found, "In the context of a K-12 classroom, there are few examples of iPad applications that we studied that support truly innovative teaching and learning...in the sense that they represent resources that extend what educators and students could otherwise do" (p. 46). These limitations can be addressed and further explorations will provide more research on this subject area. Also, the Apple Store is always adding more applications, and with more teacher training, these two can both be utilized better. In addition, Crichton et al., (2012) study recommend, "...consider a menu of devices and applications for their teachers and students — no single device is the answer to every teaching and learning situation" (p. 29). This makes a good point, because the iPad does have its limits, and not all devices have the same functions. Another concern is for students being distracted by the iPad related off-task behavior such as playing games or watching videos. Through Hoffman (2013) observes, "...students were more on task, and relatedly less distracted by iPad-related applications, when they had a strong impetus to stay on task" (p. 13). It is up to the teachers to use the iPad as a tool for engagement and educational purposes and not just for fun and games. The excitement of having iPads is engaging for students; now teachers can turn that excitement and channel it towards using the devices for educational purposes is just as exciting.

Gamified Learning

Another form of engagement can be done through gamified learning strategies. According to Deterding, Dixon, Khaled, and Nacke (2011), "Gamification is defined as a process of applying the motivating aspects of games (i.e., game elements and game design) to non-game

activities engaging" (Ding, Kim & Orey, 2017, p. 127). Another definition of digital games is from researchers, Abt (1970); Dempsey, Haynes, Lucassen, and Casey (2002); Juul (2003); Kinzie and Joseph (2008); and Salen and Zimmerman (2004) who have found the following commonalities in their definition of digital games, "Each game has:

1. a goal, an objective to achieve;
2. game activity, which refers to the fact that the game is an activity, a process, an event; the player is doing something;
3. game rules, which means that there are some rules that need to be followed, a game is rule-based;
4. outcome(s), which refers to a numerical score and particular game actions results in gaining or losing; for example, points or virtual money;
5. conflict or competition, which means that there is some kind of contest, either with the system or with other players, or even with game players themselves by aiming to improve their own score" (Huizega et al., 2017, p. 106).

Most people tend to grow up playing various amount and different types of games. Proctor and Marks (2013) reported, "that only 25% of teachers in secondary education use games in their classroom, whereas 60.6% of teachers in primary education use games" (Huizenga, Ten Dam, Voogt & Admiraal, 2017, p. 105). Secondary teachers don't find educational value in games compared to primary teachers. Gamified learning is still a very new learning strategy in the education field. We all know that children love playing games. Whether they are the traditional board games, computer games or newer App games, children find them fun and engaging. With the addition of 1:1 device in schools, having a device can give access to students to this kind of gamified learning. According to research by Hew, Huang, Chu, and Chiu (2016);

Da Rocha Sexias, Gomes, and De Melo Filho (2016); Hanus and Fox (2015), "Gamification has seen some utility in the education field, and has been shown to increase learner engagement and motivation (Adukainte, van Zyl, Er & Cantoni, 2016, p. 173). Children and adults alike enjoy games and have fun when playing games. Why wouldn't it be any different with gamified learning? Kapp (2012); Kopcha, Ding, Neumann and Choi (2016) findings suggest, "Gamification has been proposed as a potential approach to boost students' motivation and engagement in school activities" (Ding et al., 2017, p. 127). Higher motivation and engagement in learning can produce achievements in students' goals.

The relationship between digital games and learning can have lots of positives effects. Davis and Singh (2015); Kountromanos and Avraamidou (2014) believe, "Yet, games simulations, and gamification often bridge the distinctions between formal and informal learning in order to support development" (Adukinte et al., 2017, p.173-174). In addition to motivation and engagement, gamification can also increase critical thinking and autonomy. Kebritchi, Hirumi, and Bai (2010) findings, "that it empowers students with low self-efficacy, and that it allows for increased autonomy over the learning process" (Adukinte et al., 2017, p.174). Students who have low self-efficacy tend to have low motivation to achieve their goals. Gamification allows these low self-efficacy students to take control of their own learning. Hew et al., (2016); Paraskeva, Mysirlaski, and Papagianni (2010) agree, "Moreover, games can reinforce critical thinking and probe students to examine problems from multiple perspectives" (Adukinte et al., p. 174). These are factors when looking at gamification to be implicated into the traditional classroom setting. Venkatesh and Bala (2008) found, "It is argued that emotions play a role in acceptance of a technology; scholars have proposed several variables such as perceived playfulness, perceived enjoyment, and flow to assess this" (Adukinte et al., p. 183). When we

perceive something as fun or enjoyable, we tend to want to do it more than something we don't like. Gamification allows teaching to be seen as fun and enjoyable. Students might not realize that they are still learning as they are engaging in gamified learning. In addition to the students' teachers also need to be engaged and positive about using gamified learning. Adukaite et al., (2017) explain, "If educators do not believe that using specific technology will help fulfill their needs, it is reasonable to assume that they will avoid adopting that technology" (p. 173). Because the gamification was fun, stimulating, and perceived to be enjoyable, teachers were more likely to adapt to using it. Teachers play an enormous role in how students perceive and receive content, material or lessons. Huizenga et al., (2017) found "Regarding the students' motivation to learn, 17 teachers mentioned that playing or creating games helped students to become more interested in the subject and to better understand the value of what they have learned" (p. 110). The gamification of lessons does not change that but adds another layer of fun and engagement not only of the students but the teacher as well. Huizenga et al., (2017) findings showed that, "Teachers mentioned that playing a game and solving problems presented in a game makes the subject less abstract compared to teaching the subject in a regular lesson" (p. 111). Students were able to learn from the game format than from a traditional lesson being taught by the teacher. General skills can also be created by playing games. The biggest one being collaborated skills, due to many games requiring students to collaborate in order to achieve a goal or win a game. Huizenga et al. conducted a study that found other skills that were observed by teachers, including "assessment skills, reflective skills and autonomous learning skills" (p. 112). All these skills will help a student be a motivated, self-regulated learner who achieves their learning goals.

Limits of Gamified Learning

The first thing that may come to mind when you think of gamified learning is students playing games for pleasure. Turel (2015); Turel and Serenko (2012); Turel, Serenko, and Giles (2011) have found, "For example, some studies have raised concerns regarding the negative effects of hedonic and excessive patterns of IT use, such as the problematic use of videogames and/or social media, on adolescents' performance at school" (Qahri-Saremi & Turel, 2016, p. 66). Some of these aspects of technology can be seen as negative based on students' use of these platforms today. In contrast, other studies by Gross (2004); Jackson et al., (2006); Madell and Muncer (2004); and Willoughby (2008) have argued that, "IT can help adolescents; they use IT predominantly for accessing information, mostly for educational purposes, which can have positive impacts on adolescents' educational development (Qahri-Saremi & Turel, 2016, p. 66). These differing views show the limitations to gamified learning and further need for more research and studies done on gamified learning. Another limitation is the technical difficulties that can be challenging for students and teachers to troubleshoot. Huizenga et al., (2017) found, "Six teachers explicitly stated that a minority of their students did not like games or that enthusiasm decreased after the first lesson. These teachers mentioned various reasons for students' disengagement during game playing, such as technical difficulties that frustrated students and students who did not like the readings connected to the game (p. 110). Gamified learning still is a good tool to use and does provide more engagement of students involved and interested in their own learning.

The iPad is a great tool for motivated and self-regulated learners to engage in the classroom. There are some more explorations such as looking at the benefits of iPad use for ELL or special education students. Ferguson (2016) suggests, "A combination of some work in some

subjects being done with paper and pencil and other classes only using the iPad might help with this transition" (p. 1156). Though there are some negatives such as eye strain, headaches there are approximate applications available in the Apple Store, the positives outweigh the negatives. Hoffman (2013) found, in a study of iPad use in classrooms, that, "three implications for classroom practice emerged: 1) the need for a balance between paper and electronic means for learning, 2) a consideration of what level of restriction should be placed on students' electronic learning devices, and 3) students' evolving definition of what it means to be a good student" (p. 17). These three practices will be a great benefit for students using iPads in their learning.

Methodology

I have done my action research by using the classroom action research method to study and improve my own educational practice and to see if student engagement will increase or not. My overarching research question was: What effect does gamified learning have on self-regulation and engagement in a 7th-grade classroom? Broken down further into three additional sub questions:

1. What encourages student's engagement to bring their iPads to class and use them for educational purposes?
2. How will gamified learning (Classcraft) help increase student engagement?
3. To what extent will students be motivated to bring their iPads to class and use them for educational purposes?

Since my school has 1:1 iPad, I wanted to study the effects of gamified learning on self-regulation and engagement. I teach at an urban school, Pre-K thru 8, with 95% free and reduced lunch. A very diverse learning environment and my participants were primarily focused on one regular 7th-grade and one 7th-grade accelerated in my American Studies classes. The research

design for this study used a variety of qualitative and quantitative data points. Classroom observations, students pre and post surveys, student checklists, tally sheets, and student reflections were all collected to show and answer the action research questions on the effects of gamified learning on self-regulation and engagement of the 7th-grade students.

First, in order to have iPads in the classroom and present to use for learning and for the intervention, I started with an iPad Tally Sheet (see Appendix A & B). This encouraged the 7th-grade students to bring their iPads to class. This provided quantitative data about the number of iPads are brought to class before/during/after the intervention. Students were given one point daily for their iPads being present for the whole nine weeks. This data was collected daily by me as I observed students coming into the classroom. Students got a point every time they had their iPad present with them, and no points if there was no iPad. This observational data and tally sheet were important to encourage students to bring their iPads to class so that we could continue to the next process of the action research.

Once iPads are present, then I started the gamification aspect of learning. I did this first by giving the students a pre-survey about the topic. Students first took a survey before gamification lessons start and after to see their thoughts about this way of teaching. This first data point was done through a Google form (see Appendix C & D) sent to students through emails and a shared link on the board for students to access. Using the Google form as a questionnaire gave me qualitative data for the action research. This provided an inquiry and qualitative data on students' thoughts about what it means to be a motivated, self-regulated learner who brings their iPads to class for learning. The pre-survey provided the amount of self-regulated learning each student has in my class and where they believe they are at in their own self-regulated learning. At the end of the nine weeks, the students were sent the post-survey. This

was done again in the same way the pre-survey was shared and the data was analyzed by the teacher on both surveys. This provided information on the amount of self-regulated learning each student has in my class and where they believe they are at the end of the interventions.

Then, I sent home a short one-pager (see Appendix E) on what Classcraft was with their login and password. I used Classcraft as the platform for my gamification lessons, where each student had their own character and team. Each student was allowed to create their own character, their name, their clothes, their seal, and location/setting for their team. Once students had signed up for their free account, they were able to access their character and receive health points (HP), action points (AP), experience points (XP) and gold pieces (GP) from the teacher based on their engagement, participation, and behavior in class. Individual students and groups were given coin daily and were announced of their points during class time. Some students or groups lost coins due to behavior and were also told about this at the end of class or the next day. The teacher also left messages on the Classcraft platform when students received or lost their coins. Classcraft also allowed the teacher to see student engagement and use of the platform, which gave me more data points for analyzing.

Additional quantitative data was gathered through observations to see if students were more engaged with their iPads, on the task or off task during class time. This observational data checklist (see Appendix F) was observed and collected at the beginning, middle and end of class twice a week. This will be done by a checklist. The checklist will also be collecting data on whether students are turning in work digitally or on paper. This allowed the teacher to observe various aspects of the action research, use of iPads for educational purposes (on task) or students playing games, watching videos with iPads (off task). I observed the number of work that is

completed on the iPad and turned in for grading (digital work compared to traditional paper) and kept a record of it in the checklist.

The last qualitative data was collected through student journals (see Appendix G). The 7th-grade students reflected each week about the use of technology, gamified learning, and iPads in the classroom. They had journal prompts provided by the teacher each week, mostly on Fridays. Journal prompts had a rating scale and various short questions for students to answer weekly. For example, "Rate how you feel on a scale of 1-6, how positive do you feel about school?" was constant and each week there was a slightly different second question(s) for students to respond to. For example, "How do you feel about the use of iPads? Share both positive or negative feelings?" This data provided qualitative data on how students felt about the interventions and how their self-regulation and use of iPads have changed over the nine weeks of the action research. Students were able to keep reflection journals in a notebook or write them digitally on Google Docs, which then they shared their journals with the teacher.

Pre and post surveys, observation checklists, tally sheets, and student reflection journals all provided data points to answer the research question, What effect does gamified learning have on self-regulation and engagement in a 7th-grade classroom? The data will show if students improved their self-regulation and engagement using gamified learning and their iPads or not.

Analysis of Data

The purpose of this study is to determine if gamification lessons will have any effect on self-regulation and engagement in a 7th-grade classroom. The research method was a mix of surveys, student reflections, observation checklists and tally sheets that were designed to gather information on how students use self-regulation through gamified learning to increase engagement in their own learning.

Self-Regulated Learning

The first research question dealt with the effect of gamified learning on self-regulation and engagement in a 7th-grade classroom. To answer this question, the teacher asked students a series of questions for students to respond to in a pre and post survey about self-regulated learning, iPads and gamification learning. The teacher also had students do weekly student reflection journals, where students were asked how they feel about school and specific self-regulated learning and technology questions that varied weekly. The surveys and journal data were collected, analyzed to find key ideas and concepts.

After analyzing the pre and post surveys, three key ideas emerged. First, most students did not have a strong sense of what self-regulated learners were at the start of the research. Pre-survey results show 84.4% felt higher than a 3 on how much motivation they had for school. Compared to post-survey results where 83.4% felt more motivation for school at a 3 or above. There was not much change in their feelings and ideas of what a self-regulated learner is.

Table 1
Self-Regulated Learning
Pre-Survey

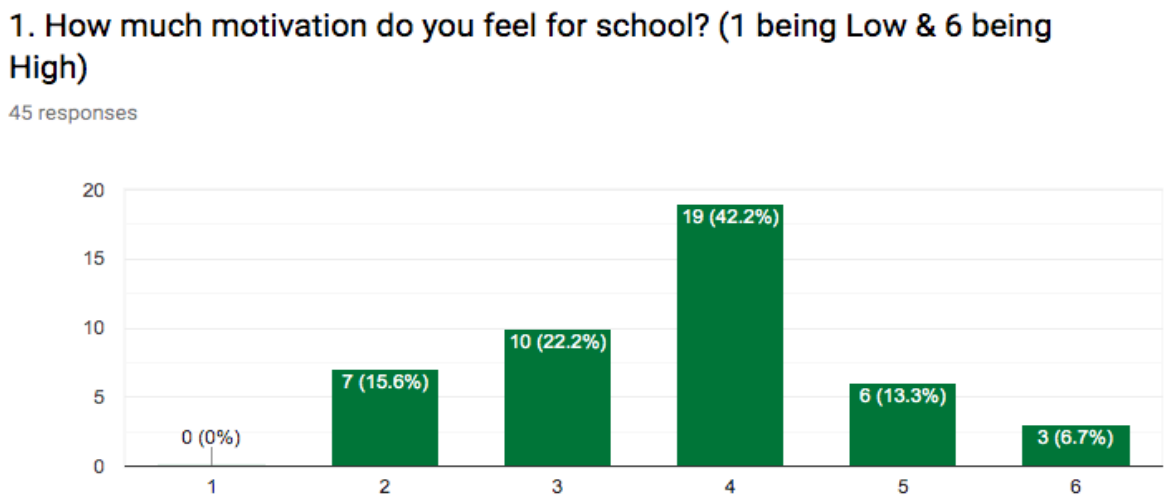
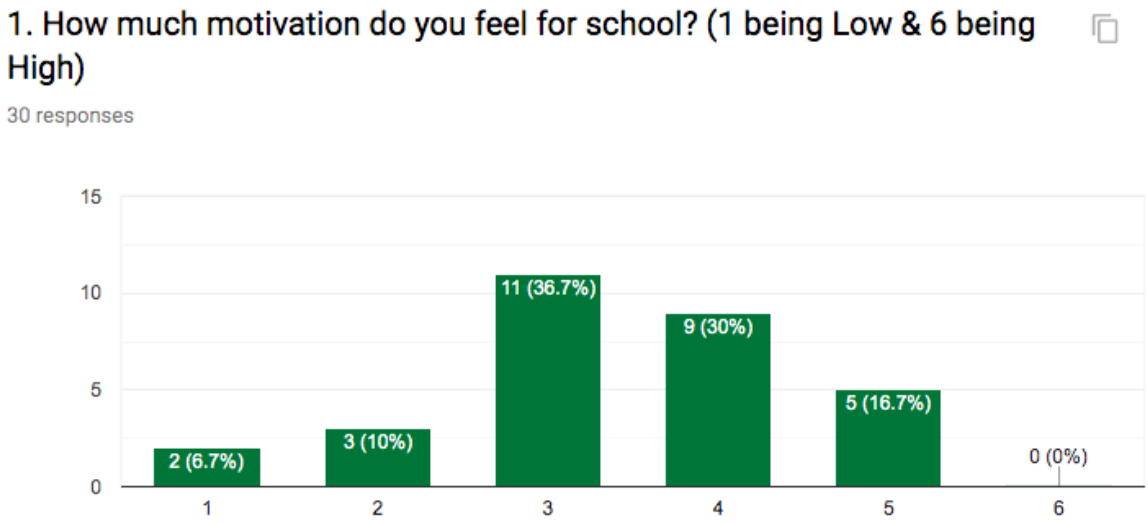


Table 2
Self-Regulated Learning
Post-Survey



Student Engagement with iPads

The second research question focused on what encourages student engagement in regards to bringing their iPads to class and use them for educational purposes. The researcher encouraged students to bring their iPads to class by keeping a record of a tally sheet of students and their iPads. This data was recorded twice a week for nine weeks and the data was counted and graphed in a chart.

There is a large contrast between the regular and accelerated class on their iPad engagement. Both classes had a high degree of iPad engagement in the first few weeks of the research. This could be due to the fact that iPads that had just been passed out the week prior. As the weeks progressed, there was a slight shift in the regular students who don't bring their iPads to class regularly compared to the accelerated students. There was also a steep drop-off for specific students in the regular class, this was due to attendance, not lack of iPad present. In the accelerated class, where attendance was regular and consistent, iPad counts were high except for

a few outliers. The breakdown between gender also reveals that the females had a higher rate of iPad attendance in total in both the regular and accelerated class. This could be due to many various reasons including a higher self-regulation and responsibility and response to the interventions. There were three male students in total in the regular class that had a low iPad attendance compared to only one male student in the accelerated class. The majority of the female students had a steady iPad attendance expect for a few outliers.

Table 3
Student Engagement with iPads
Regular 7th-grade class

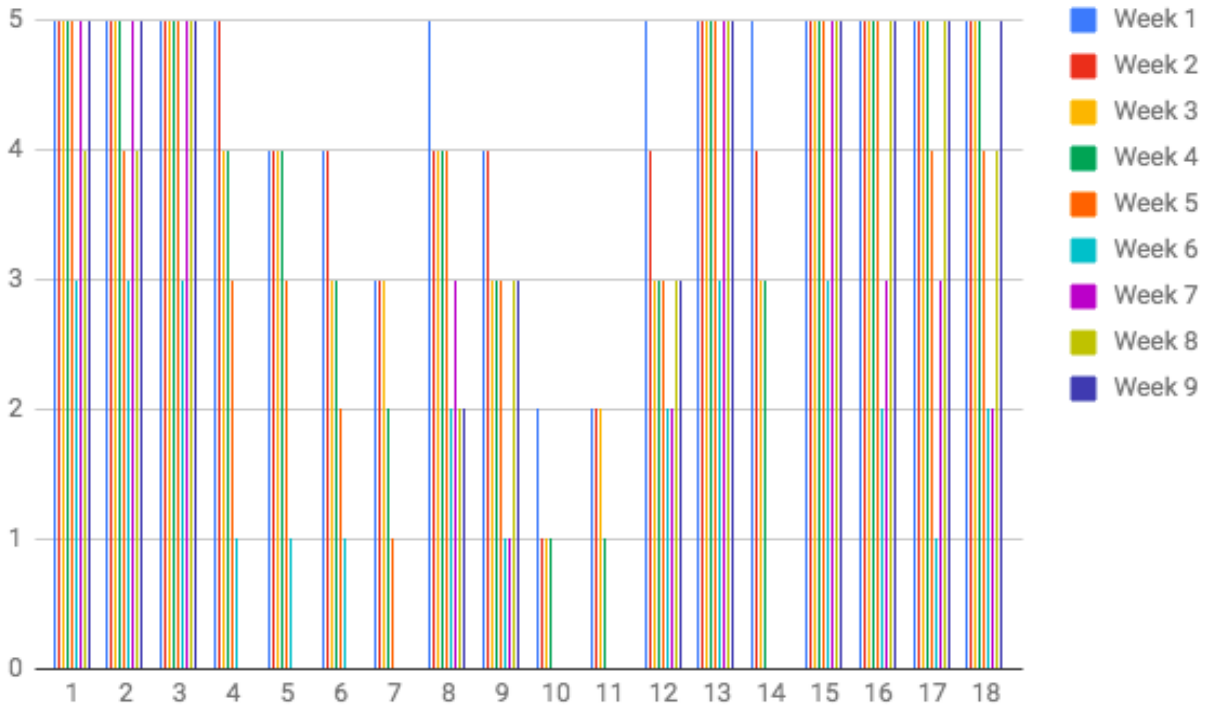


Table 4
Student Engagement with iPads
Regular 7th-grade male

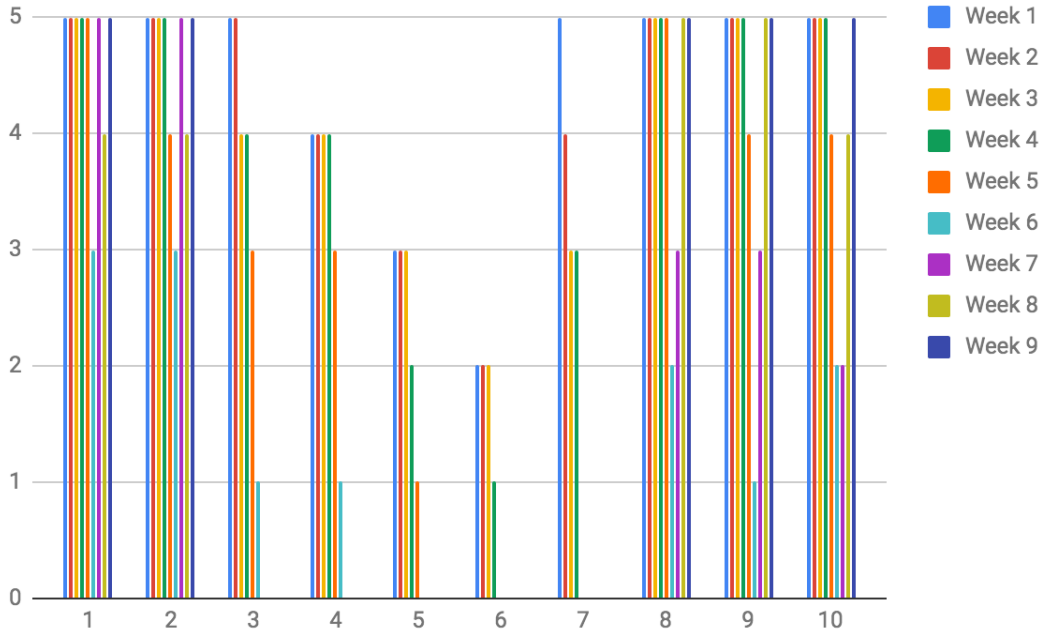


Table 5
Student Engagement with iPads
Regular 7th-grade female

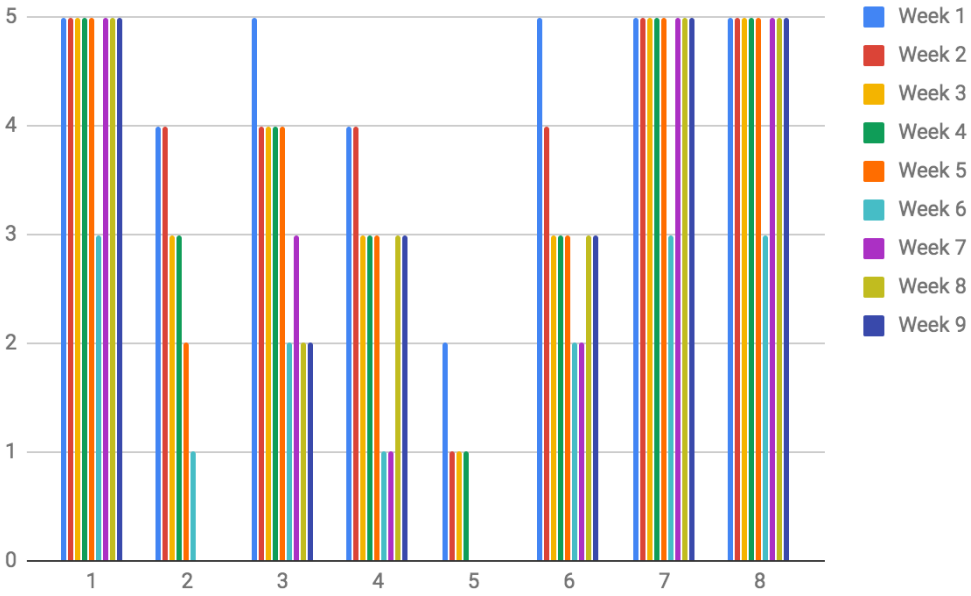


Table 6
Student Engagement with iPads
Accelerated 7th-grade class

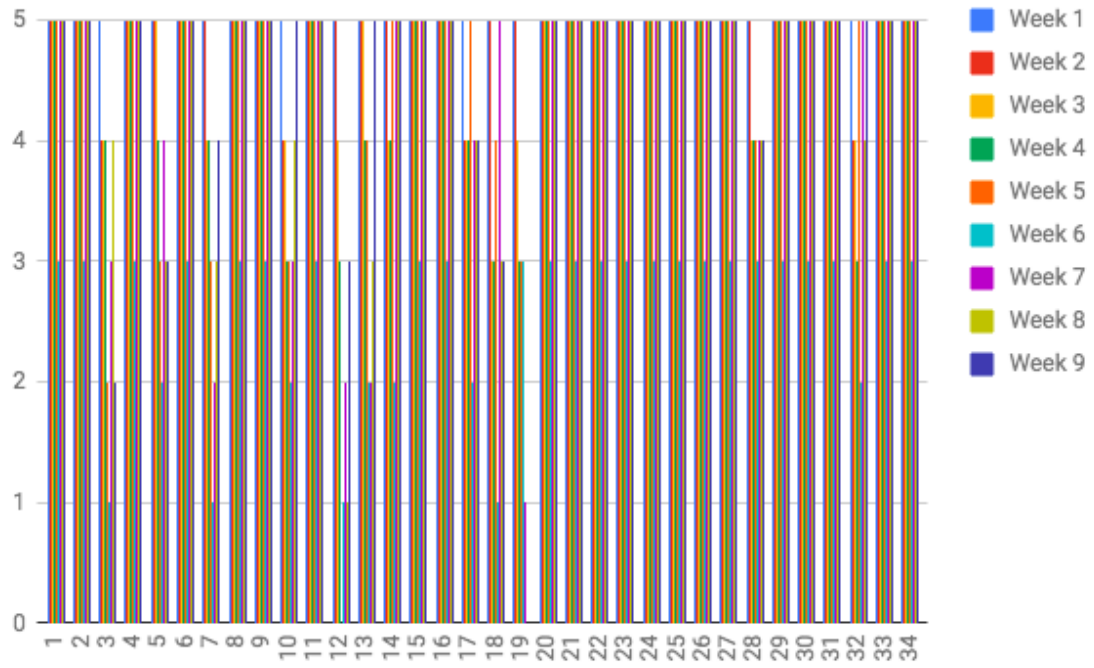


Table 7
Student Engagement with iPads
Accelerated 7th-grade male

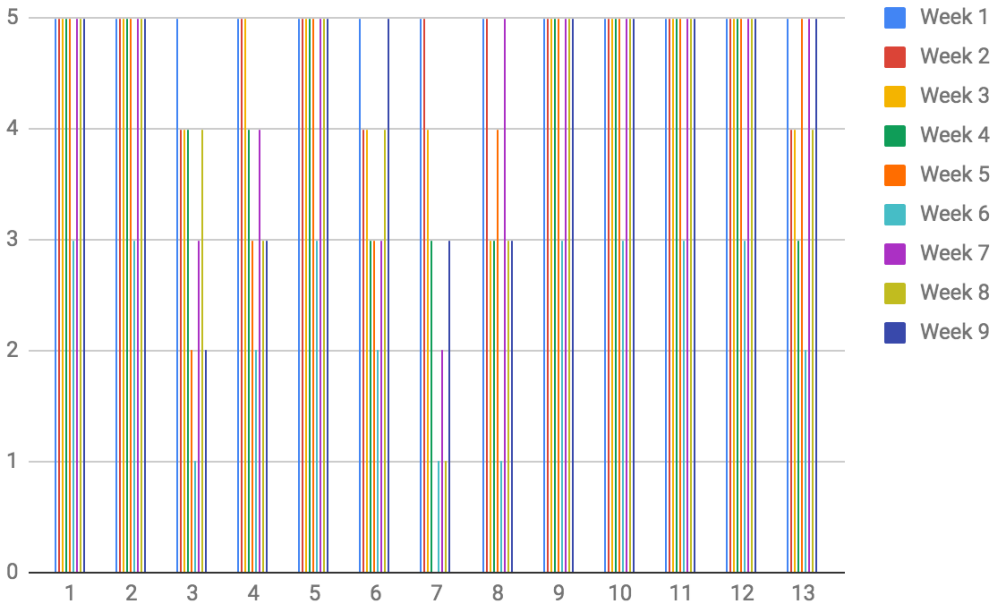
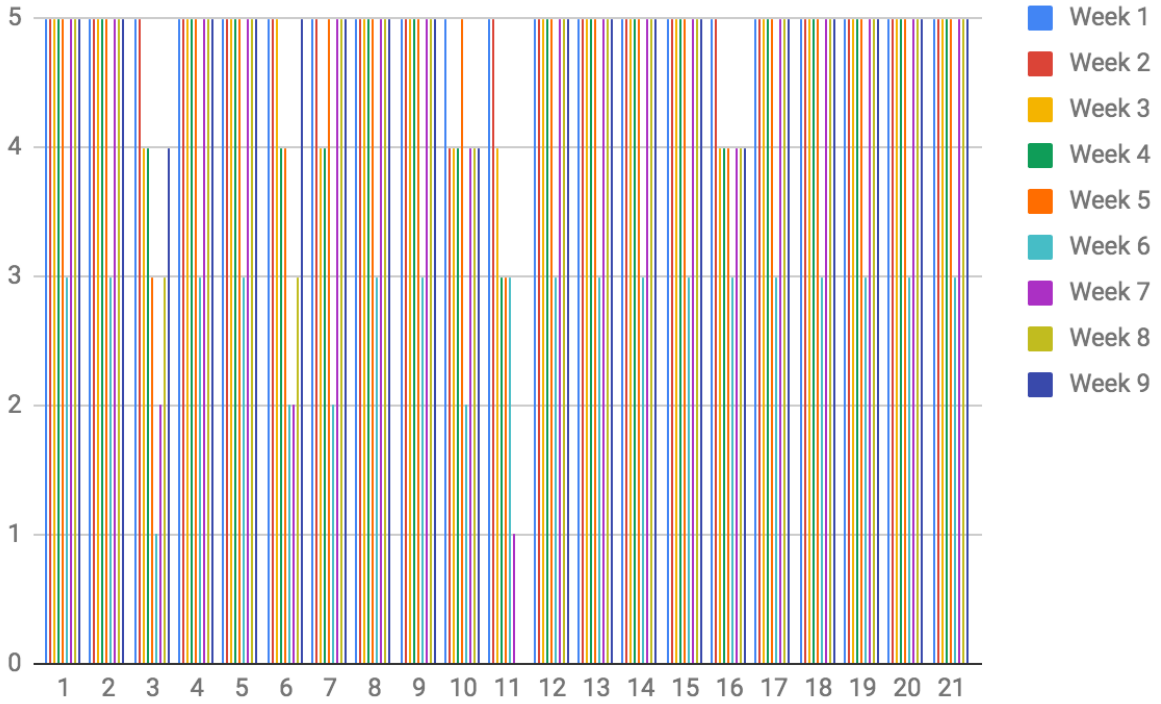


Table 8
Student Engagement with iPads
Accelerated 7th-grade female



Concept of Gamified Learning

The third research question dived deeper into the first question and focused more on how gamified learning (Classcraft) help increase student engagement. To answer this research question, the teacher created a teacher account on the Classcraft platform and assigned all students an avatar and team. The teams were assigned at random by the teacher. Each team than choose what seal design they wanted and what background for their specific team. This was done as a whole class to get the students introduced to the platform. The teacher also showed a video explaining Classcraft to the class and send home a one-pager invite with class codes for parents and students to sign up for the platform. Students were given coin for their participation in class, engagement of the coursework and behavior. The Classcraft platform kept a record of student interactions and the teacher accessed this information to help answer this research question. The

Classcraft analytics kept a record of health points (HP), experience points (XP) and gold pieces (GP). The data was collected and analyzed to answer the research questions.

Based on the data from the Classcraft platform both the regular and accelerated class was engaged in the platform. Classcraft was introduced to the students on October 1, 2018, and ran for four weeks until the end of the research. The trend moved upward for most of the students who participated in the platform and was especially higher in XP for the male students compared to female students. The XP marks the events of which the students did their class work, homework or participated in class. As a whole, the XP was higher in the accelerated class than the regular class. This could be due to the high self-regulated learners in the accelerated class than the regular class. Plus, the male students tend to participate and finish the Quests of Westward Journey more than the female students did. The HP was lower for the regular class compared to the accelerated class, due to more negative behaviors and actions of the students. The GP was pretty steady in both the regular and accelerated classes. GP were given to most students for finishing specific quests and task or as a group, team or whole class. Labels of each event and reason for XP, HP or GP are stated below each graph.

Table 9
Concept of Gamified Learning
Classcraft-male student in regular class

Table 10
Concept of Gamified Learning
Classcraft-female student in regular class

Table 11
Concept of Gamified Learning
Classcraft-male student in accelerated class

Table 12
Concept of Gamified Learning
Classcraft-female student in accelerated class

Motivational Theory

The last research question focused on to what extent will students be motivated to bring their iPads to class and use them for educational purposes. The researcher answered this question by using an observational checklist. The information was collected over the nine weeks of the research, analyzed, counted, and graphed in a table.

Based on the observational data most students were motivated to use their iPads at the beginning of class. As the class period continue they got distracted and were off task using their iPads to either play games, watch YouTube videos or do other activities. The trend also shows that most students in the regular class tended to do their work the traditional way on paper, rather than digitally on their iPads.

Table 13
Motivational Theory
Observational Checklist in the regular class

iPads On Task		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
	Start of class	36	30	30	33	36	15	28	33	36
	Middle	24	20	20	15	30	10	22	30	22
	End of class	36	20	20	18	28	12	15	28	22
iPads Off Task		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
	Start of class	0	16	16	3	0	5	8	3	0
	Middle	12	16	16	21	6	10	14	6	14
	End of	0	16	16	18	8	8	21	8	14

	class									
Completion of Work on iPad		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
		2	3	5	7	5	5	7	3	3
Completion of Work on Paper		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
		16	15	13	11	13	13	11	15	15

These findings show a positive link between gamification learning and increased iPad engagement. Even though self-regulation was low and inconclusive, it is still vital to the motivation of student engagement. The next action plan will discuss further findings and recommendations of this action research.

Action Plan

The purpose of this action research was to increase student self-regulation and engagement of their iPads using gamified learning strategy. It was hoped that students would be using their iPads for educational purposes, and increase their engagement in class with more work turned in. As previously mentioned, student self-regulation is important for students to be able to bring their iPads to class and use them for educational purposes without the teacher's reminders. With the inclusion of technology such as iPads into the learning environment of students there can be distractions to the students learning. This study hoped to help students have higher self-regulation with their iPads. In additional to self-regulation, gamified learning was also used to help increase engagement, through the platform Classcraft. This part of the action research helped bring higher engagement, encourage more student work, manage student behavior and self-regulation with quests for homework turned in. I believe using both these strategies will help increase student engagement and use of their iPads for learning.

Based on the findings of this study, the following conclusions were drawn:

- Student engagement with iPads increased, which was evident in observations done for the tally sheet. This encouraged students to bring their iPads to class for educational purposes.
- Student achievement increased, which was evident when looking at their rate of turning in student in class work and homework.
- This increase in achievement is supported by observations that revealed higher student motivation, students using their iPads to complete their work and using their iPads to participate in class.
- Students increased in their own self-regulation of work. This was evident by their increase of digital turn in of their class work and homework.
- Further, students said that because of the gamified learning strategy they felt more engaged, learning was fun and they did more work and participated in the class more as stated in their student reflection journals and the post-student survey.

Based on the findings and conclusions of this study, the following recommendations were drawn:

- This action research was done pretty early in the school year, week 2. I would recommend pushing it a week or two passed since there were no pre-data to compare how these students were doing in school work prior to the intervention.
- While the tally sheet was somewhat efficient for encouraging students to bring their iPads to class, it was long and tedious to do every day and every class period. I would recommend that the teacher picks a reliable student(s) to do this task. Encouraging the students to be more involved participative in the study.

- It was great that the rate of work turned in by students had increased, there was still more paperwork than digital work turned in from the regular class compared to the accelerated class. I would recommend teaching the regular students to use their iPads and turn work in digitally earlier and hold them more accountable for using their iPads instead of the paper version.
- Student reflections were done in a manner that was not consistent. I would recommend from the start to have students do reflections in one style, for example, Google Docs and share their journals with the researchers. This way, there are no lost reflection journals, no one-page reflections and other forms of journals from various students.

This action research overall did increase some student engagement, particularly for the boys. The data did show that boys were more engaged using gamification learning, and the higher self-regulated students in the accelerated class had a higher engagement of using their iPads than the regular class. The data also show how important self-regulation is for student motivation and engagement as well as how difficult it was for the regular students to understand and be able to self-regulate their own learning. The conclusions and recommendations would take this action research further, generating more data that could support gamification learning further in the classrooms. Just having a little gamification would help increase a percentage of engagement of students, and for me that was the most worthwhile part of this whole action research.

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Appendix A
iPad Tally Sheet: Regular Class

	iPad Present (tally)					MEA Week			
Student #	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
1	5	5	5	5	5	3	5	4	5
2	5	5	5	5	4	3	5	4	5
3	5	5	5	5	5	3	5	5	5
4	5	5	4	4	3	1	0	0	0
5	4	4	4	4	3	1	0	0	0
6	4	4	3	3	2	1	0	0	0
7	3	3	3	2	1	0	0	0	0
8	5	4	4	4	4	2	3	2	2
9	4	4	3	3	3	1	1	3	3
10	2	1	1	1	0	0	0	0	0
11	2	2	2	1	0	0	0	0	0
12	5	4	3	3	3	2	2	3	3
13	5	5	5	5	5	3	5	5	5
14	5	4	3	3	0	0	0	0	0
15	5	5	5	5	5	3	5	5	5
16	5	5	5	5	5	2	3	5	5
17	5	5	5	5	4	1	3	5	5
18	5	5	5	5	4	2	2	4	5

Appendix B
iPad Tally Sheet: Accelerated Class

	iPad Present (tally)					MEA WEEK			
Student #	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
1	5	5	5	5	5	3	5	5	5
2	5	5	5	5	5	3	5	5	5
3	5	4	4	4	2	1	3	4	2
4	5	5	5	5	5	3	5	5	5
5	5	5	5	4	3	2	4	3	3
6	5	5	5	5	5	3	5	5	5
7	5	5	4	4	3	1	2	3	4
8	5	5	5	5	5	3	5	5	5
9	5	5	5	5	5	3	5	5	5
10	5	4	4	3	3	2	3	4	5
11	5	5	5	5	5	3	5	5	5
12	5	5	4	3	0	1	2	1	3
13	5	5	5	4	4	2	2	3	5
14	5	5	4	4	5	2	5	5	5
15	5	5	5	5	5	3	5	5	5
16	5	5	5	5	5	3	5	5	5
17	5	4	4	4	5	2	4	4	4
18	5	5	3	3	4	1	5	3	3
19	5	5	4	3	3	3	1	0	0
20	5	5	5	5	5	3	5	5	5
21	5	5	5	5	5	3	5	5	5
22	5	5	5	5	5	3	5	5	5
23	5	5	5	5	5	3	5	5	5
24	5	5	5	5	5	3	5	5	5
25	5	5	5	5	5	3	5	5	5
26	5	5	5	5	5	3	5	5	5
27	5	5	5	5	5	3	5	5	5

28	5	5	4	4	4	3	4	4	4
29	5	5	5	5	5	3	5	5	5
30	5	5	5	5	5	3	5	5	5
31	5	5	5	5	5	3	5	5	5
32	5	4	4	3	5	2	5	4	5
33	5	5	5	5	5	3	5	5	5
34	5	5	5	5	5	3	5	5	5

Appendix C
Google Form Pre-Survey

Student Motivational & Self-Regulated Learning Survey

Please take this short survey on how you feel about school and the use of iPads.

* Required

Email address *

Your email

1. How much motivation do you feel for school? (1 being Low & 6 being High)

	1	2	3	4	5	6	
Low	○	○	○	○	○	○	High

2. What does the term "self-regulated learner" mean to you?

- ☐ A student who plans their own learning
- ☐ A student who listens to directions
- ☐ A student who checks their progress
- ☐ A student who think's about their own thinking
- ☐ All of the above
- ☐ Never heard of it before

3. How excited are you to use iPads in school?

	1	2	3	4	5	
Low	○	○	○	○	○	High

4. Do you think there needs to be a system in place to encourage students to bring their iPads to class and use them for educational purposes?

- ◯ Yes
- ◯ No
- ◯ Maybe

5. What do you think is the main purpose of the school giving students iPads?

- ◯ To learn, collaborate and have access to lots of resources
- ◯ To watch to YouTube videos
- ◯ To read textbooks and research
- ◯ To play games and have fun with
- ◯ To carry around and not use

6. Rank how you feel about traditional paper/teacher lecture teaching style.

	1	2	3	4	5	
Dislike	◯	◯	◯	◯	◯	Extremely Like

7. Describe what makes a classroom fun, engaging and motivating you to learn?

Your answer

8. Have you ever experienced or heard of gamified learning before?

- ◯ Yes
- ◯ No
- ◯ Maybe

9. Do you think gamified learning will be different from traditional learning? Please explain how so.

Your answer

10. Are you excited to start this new style of learning?

- ○ Yes
- ○ No
- ○ Maybe

Appendix D
Google Form Post-Survey

Student Motivational & Self-Regulated Learning Survey

Form description

Email address *

Valid email address

This form is collecting email addresses. Change settings

1. How much motivation do you feel for school? (1 being Low & 6 being High)

	1	2	3	4	5	6	
Low	○	○	○	○	○	○	High

2. What does the term "self-regulated learner" mean to you?

- ☐ A student who plans their own learning
- ☐ A student who listens to directions
- ☐ A student who checks their progress
- ☐ A student who think's about their own thinking
- ☐ All of the above
- ☐ Never heard of it before

3. How excited are you to use iPads in school?

	1	2	3	4	5	
Low	○	○	○	○	○	High

4. Do you think there needs to be a system in place to encourage students to bring their iPads to class and use them for educational purposes?

- ○ Yes
- ○ No
- ○ Maybe

5. What do you think is the main purpose of the school giving students iPads?

- ○ To learn, collaborate and have access to lots of resources
- ○ To watch to YouTube videos
- ○ To read textbooks and research
- ○ To play games and have fun with
- ○ To carry around and not use

6. Rank how you feel about traditional paper/teacher lecture teaching style.

	1	2	3	4	5	
Dislike	○	○	○	○	○	Extremely Like

7. Describe what makes a classroom fun, engaging and motivating you to learn.

Long answer text

8. How do you feel about gamified learning?

	1	2	3	4	5	
Never heard of it.	○	○	○	○	○	My favorite way to learn.

9. How is gamified learning different from traditional learning? Please give an example.

Long answer text

10. Did you find gamified learning fun and exciting?

- Yes
- No
- Maybe

Appendix E
Classcraft One-pager

Classcraft
Make Learning an Adventure

[redacted]
Student Code: **jkeqbukt**
Parent Code: **m8hrfns6**

Dear students and parents,

We're using Classcraft in our classroom to have fun, promote teamwork, and become better learners. Stay up-to-date with class announcements, assignments, and more by creating a free account using the instructions below.

[redacted]

STUDENT CODE : jkeqbukt

Create a New Account

1. Go to **game.classcraft.com/student.**
2. When asked, enter your student code.

CLASS CODE : s5nq76dy

Use Existing Account

1. Log in and go to **game.classcraft.com/profile.**
2. If you played last year, **archive** the character you're no longer using.
3. Once you have no active character, input your class code to join your new class.

PARENT CODE : m8hrfns6

Create a New Account

1. Go to **game.classcraft.com/parent.**
2. When asked, enter your parent code.

Use Existing Account

1. Log in and go to **game.classcraft.com/profile.**
2. In the **"Add Child"** section, input your parent code.

Appendix F
Observational Datasheet

iPads On Task		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
	Start of class	36	30	30	33	36	15	28	33	36
	Middle	24	20	20	15	30	10	22	30	22
	End of class	36	20	20	18	28	12	15	28	22
iPads Off Task		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
	Start of class	0	16	16	3	0	5	8	3	0
	Middle	12	16	16	21	6	10	14	6	14
	End of class	0	16	16	18	8	8	21	8	14
Completion of Work on iPad		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
		2	3	5	7	5	5	7	3	3
Completion of Work on Paper		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
		16	15	13	11	13	13	11	15	15

Appendix G
Student Reflection Prompts

Week 1

Rate how you feel on a scale of 1-6, how positive do you feel about school?

Very negative	Negative	Neutral	Slightly positive	Positive	Very Positive
1	2	3	4	5	6

Do you like school? What makes a motivated learner?

Week 2

Rate how you feel on a scale of 1-6, how positive do you feel about school?

Very negative	Negative	Neutral	Slightly positive	Positive	Very Positive
1	2	3	4	5	6

How do you feel about the use of iPads? Share both positive or negative feelings?

Week 3

Rate how you feel on a scale of 1-6, how positive do you feel about school?

Very negative	Negative	Neutral	Slightly positive	Positive	Very Positive
1	2	3	4	5	6

What does it mean to be a self-regulated learner? Do you feel like you have any of those qualities?

Week 4

Rate how you feel on a scale of 1-6, how positive do you feel about school this week?

Very negative	Negative	Neutral	Slightly positive	Positive	Very Positive
1	2	3	4	5	6

How has the iPad point system helped you in motivating to bring your iPad to class?

Week 5

Rate how you feel on a scale of 1-6, how positive do you feel about school?

Very negative	Negative	Neutral	Slightly positive	Positive	Very Positive
1	2	3	4	5	6

Do you enjoy gamified learning? How is it different from the traditional way of learning?

Week 6

Rate how you feel on a scale of 1-6, how positive do you feel about school?

Very negative	Negative	Neutral	Slightly positive	Positive	Very Positive
1	2	3	4	5	6

Do you feel more engaged to use your iPads for educational purposes or for fun?

Week 7

Rate how you feel on a scale of 1-6, how positive do you feel about school?

Very negative	Negative	Neutral	Slightly positive	Positive	Very Positive
1	2	3	4	5	6

What is something new you have learned while using your iPads?
Or something new you have learned about motivational & self-regulated learning?

Week 8

Rate how you feel on a scale of 1-6, how positive do you feel about school this week?

Very negative	Negative	Neutral	Slightly positive	Positive	Very Positive
1	2	3	4	5	6

Do you like gamified learning? What's one benefit and one drawback from gamified learning?

Week 9

Rate how you feel on a scale of 1-6, how positive do you feel about school?

Very negative	Negative	Neutral	Slightly positive	Positive	Very Positive
1	2	3	4	5	6

How do you plan to use the rest of the year with your iPads? Will you continue to try to be a motivated, self-regulated learner?