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Argumentative Research Paper

Studies show that the average teenager today spends more time playing video games than sitting in a classroom. In response, the use of gamification in education has grown greatly over the past decade. Interactive learning platforms such as Kahoot, Minecraft: Education Edition, and Quizlet Live began gaining popularity in schools during the early 2010s.This marked a shift toward more engaging, game-based instructional methods. These platforms have shown only the beginning of how gaming can be used in the education system. Increasing the use of game based learning in classrooms can greatly enhance student engagement, improve learning outcomes, and provide teachers with more effective instructional tools. I have played games from a young age, and they have helped improve my focus in class and develop skills that I can apply in many different situations. During my time in school, many of my teachers have applied gaming elements into the classroom that have enhanced the learning experience, fostered positive competition, and provided a more engaging time in class.

Gamification in education can assist teachers by providing them with better teaching strategies. Due to the many games that can be created and designed, gamification can be adapted to any subject making “concepts more tangible and engaging”(12). Games like Rocket League can be used by students to “persevere in problem solving and strategic reasoning” for mathematics. I have played Rocket League for a long time and it does help because it requires you to make quick decisions on the spot. With creative world building games like Minecraft and simulation games, subjects like history can be replicated by remaking events or ideas that match moments from the past. In addition, actual semi historical games like Civilization can be used to provide real world representations of decisions that affect society. This provides students with “ample opportunities for simulation, real-world questions, and rich instructional support”(3)(Meta review). I have played decision making games like this and it really teaches students that not all choices are easy. Moreover, it teaches that there are negative consequences to a lot of decisions and you have to weigh it with the positive side. This can also be applied to the English subject as it can be used to “represent scenes and themes” from various stories(7)(Digital Promise). Students can then see the semi real scene and allow them to form their own thoughts, feelings, and interpretations on the reading material. Gamification also allows teachers to provide students with immediate and “personalized feedback”(3). In educational settings, students do not all learn at the same pace, and teachers are not always able to give each student individual attention. This lets teachers better track students' learning progress and create various personalized objectives to assist them in reaching their goals. This is the case for Reflex Math, an elementary school education platform, that allows teachers or parents to “quickly generate graphs that show fluency over time”(6). I used this platform in

elementary school, and it had a fun and engaging tone, while also keeping track of my progress and what I needed to work on.

Utilizing gaming in the classroom can increase student growth in various areas of learning. There are multitudes of games that will assist in helping students target and grow core skills that they will use in the future. As stated by Vankus, permitting “the use of games in specific areas can provide effective learning”(7). Such as, having students play team based challenge games, like “This War of Mine” and “Frostpunk”, where students have to make decisions for a character's survival. Alternatively, students could play a game like “Portal 1 & 2” or “Chained Together” that require students to talk to each other and figure out problems together, in addition to teaching them some physics concepts. This application of gaming in education serves to foster better collaboration and communication between students. In addition, Wang states that “”Games” perform an essential function of promoting cognitive development”, this is true for myself, as games like Skyrim and Fallout have given me better memory and improved decision making speed(2). These games require players to memorize quests, items, and abilities that need to be done or used in certain encounters. Marino argues that using gaming on students with learning disabilities “provid[es] students with multiple means of representation and expression”(1). Meaning that they will better be able to communicate their problems or issues. And teachers will be able to help them understand the material quicker. Moreover, giving students the ability to experiment with creative world building games like Fortnite Creative mode, Minecraft, and Roblox, allows them to express their creative and imaginative thinking. While also teaching basic STEM concepts that help them in future courses. On the other hand, a student failing at a game or falling low in a competition teaches them to have good emotion handling. It assists them in developing patience and self control that they can use further down the line in life.

Gaming can be used to support students in getting more engaged in the classroom. The rewards gained from completing games increases the motivation in students. This is proven by students who “didn’t want to apply” to the current material in class(6). But, when provided an experimental use of Fortnite Creative in the classroom. Students were motivated to get into the story that they were initially not interested in while reading a regular book. By implementing the creative and fun aspect of all games, students would better be able to focus their attention on the educational tasks and objectives in the classroom. As stated by the Editorial Team, it “encourages them to actively participate in their own learning”(18). Additionally another reason is that games are able to provide immediate feedback to students. This eliminates the wait that students usually have in a regular one teachers classroom. Providing them with the information directly grants them the space to learn self-improvement, so they can learn to fix their mistakes or thinking on their own. This reason is one of the many experiences that I have gone through that made me improve. Losing in a game activates the competitor in people that makes them want to try again and do better. Alternatively, when you win it provides “a sense of accomplishment” that helps them build confidence, promote a growth mindset, and gives positive emotions. Furthermore, as stated by the Editorial Team, by “displaying leaderboards that showcase their progress” it gives a sense of competition among students that “encourages students to strive for improvement”(19). Challenges made for students give them goals that they

need to reach in order for them to understand. This encourages persistence in students, for them to keep improving themselves and push on until they complete that goal.

Opposition to integrating gaming in education argue that it can lead to more problems than benefits. One reason being that it could be a distraction from educational goals than improve learning. This stems from the view that most students already struggle on staying focused in school, so introducing gaming could have them concentrate more on entertainment than trying to understand the learning objective. However, most academic games platforms in school currently don't serve to distract students but support them based on the learning objectives. They also say that increasing screen time in schools contributes to negative mental and physical effects like eye strain, impaired social skills, and decreased attention span. These issues can be resolved by balancing the use of games with traditional instruction. This will minimize the negative effects of the increased screen time, while also allowing students to interact with others during the instruction. Another reason people are against gamification is that heavily relying on games in education may undermine traditional instruction. But, the integration of gaming in education is not to replace traditional instruction, for it is to assist with helping motivate and engage with students that might not be as focused during it. They might also argue that Marino studies state that "students' performance did not indicate significant differences between UDL-aligned units and those taught using traditional curricular materials.(1)". This argument is not valid because in the same article it states that there was not enough testing to conclude this as a final answer. Additionally, they argue that not all teachers have the adaptability to implement gaming in their courses and that including more in their learning could compromise the quality of their teaching. This can be solved by providing basic training to educators on the games implemented. Also, by increasing planning time in school teachers can have more time to look at the areas where games can be effective in making teaching easier and motivating. Lastly, they state that there is inequity in implementing gaming in education because not all schools have the same funding or accessibility in certain regions. This can be mitigated by having schools have some degree of less technical games, in which they are accessible on various devices and not just high end technology.

In conclusion, integrating gaming into education provides great opportunities to improve student learning, classroom engagement, and provide teachers with better tools to reach them. Providing improvement for skills like problem solving and communication to support cognitive development and offering personalized feedback, gamification has proven that it has the ability to strengthen traditional instruction rather than replace it. Issues like overreliance, screen time, and distractions are valid, but can be mitigated by balancing gaming with traditional instruction. While issues like implementation costs and teacher adaptability can be solved by basic training and budget planning by the school. My experiences are personal proof that gaming increases confidence, improves mental and physical skills, and can enhance learning by making it more enjoyable and fun. The growing presence of gamification in education highlights the potential to completely change education, by making it a more engaging and motivational experience for all students and teachers.

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