# Using Video Games in the Classroom

"Video games will rot your brain." This seems to be the sentiment towards video games and being part of the generation that grew up on video games, the fear was the world would come to an end. This generation grew up and the world is still standing, so let's get past the fact that video games are bad, and accept the reality that they can actually be used for instruction in the classroom. This idea is called Game-Based Learning (GBL), and is where learning happens through playing a game. Now, let me explain: video games are a type of medium--just like books. And just like books, not all games are good for teaching, but rather about what games is used and how it is used. If used correctly video games can open up new possibilities for learning and truly address 21st century skills of collaboration, problem solving, communication and critical thinking. In this article benefits of Game-Based Learning will addressed, as well as, strategies for implementing games into instruction.

#### **Benefits**

### 1. Exploration & Experimentation

Games can offer learning experiences that are not feasible in classroom due to time, budget, space, equipment and/or location. They offer an opportunity to step into another world, a different perspective and allow students to take on a different role that they may not be accustomed to in their lives. It can give students ownership in their learning by allowing them to make decisions and choices in the game, and learn through their successes and failures.

### 2. Risk Taking

Game Over. This is the worst thing a gamer can see, but that disappointment does not last long as you are able to try again, compared to the classroom, where one failure can lead to another, wearing down the learner until they no longer believe they can be successful. Due to the games' ability to provide instant feedback, learners can constantly try new things and take risks without the fear of failure, because failure is a part of gaming and learning from it is the only way to get to the next level.

### 3. Cooperation & Collaboration

The imagination of playing games usually conjures up someone playing it in isolation. On the surface this may appear to be so, but there is a much bigger community in games, where players are collaborating and cooperating. With almost any game, there is an online community where players share strategies to improve their play or get together to play online. This interaction just appears definitely since it is not face-to-face, but when players are playing games in the same room, the same cooperation and collaboration occurs. Students will start to hop around to each other sharing what they just learned in the game and other players. This is then imitated by other players, who try to build upon what was just shared. What begins to happen is students start to become teachers themselves and take on higher-level thinking skills when they are showing what they have learned to other students and are encouraged when others succeed. This is the magic GBL can have in building a community of learners.

### 4. Engagement & Motivation

Teachers know one of the most important parts to a lesson is engagement. It doesn't matter how much time was spent on going over every detail of a lesson plan because if the students are not buying in, then it's game over. Using games to support instruction can increase engagement because games are designed to be engaging. Game designers' jobs are to make the game as engaging as possible to keep the player coming back and let's just state the obvious...GAMES ARE FUN! What makes them so engaging, is learners can see the incremental improvements they are making; seeing these improvements motivates the learner to persevere through more challenging tasks to get to the next level or unlock an achievement.

### **Implementation**

# 1. Align with Learning Objective

Standards-based instruction can allow instructors the opportunity to determine their path to meeting those standards. Administrators and parents may be wary about games being used to provide instruction, but that may be the result of not communicating how the game is aligned with the learning objective(s). If the students understand how the game connects to the learning objective(s), they will be proactive in making meaningful connections to the learning standard.

#### 2. Teacher Role: Guide on the Side

Using games in the classroom does not mean they replace teaching, but really just changes the role the teacher plays in the learning process. Instructors may be in an uncomfortable position when first integrating Game-Based Learning into the classroom because they are no longer the expert in the room. This is okay; teachers will need to learn to let go and allow their students to be the experts, since games are their domain. The instructor's job is to synthesize the game's content, and give students the resources in guiding them to make connections between skills and knowledge learned in the game to the real-world.

### 3. To Play Games or Not to Play Games

Game-Based Learning is not a silver bullet, but just another teaching tool in the teacher tool belt. Like any other learning activity, you have to consider if it is the best match for the learning objective. A game shouldn't be masquerading as a worksheet, but it should offer a more meaningful way of learning that could not be accomplished any other way.

### 4. It's Not All About the Game

Games should not be the only exposure to the content being taught, but in conjunction with it. Students will need background and context to avoid seeing the game as just a game, but as a learning tool.

### 5. Evaluating Technology & Selecting the Right Game

So, you are already to get started with Game-Based Learning...not yet! Before you start implementing GBL make sure you evaluate the technology resources available at your school and make the games will be supported. If the school has the resources, the next step would be selecting the right game that addresses the desired learning objectives. This can be an overwhelming task with digital marketplaces flooded with games, and it would be time consuming to try them all out to see if they are the right fit for instruction. There are several sites that can guide you in picking the right game and some strategies on how to use them in the classroom.

- edutopia
- edsurge
- commonsense

Once you have a game picked out, make sure you the playability is easy and comfortable for you to use it in the classroom. If the game playability is too hard for you, this means scaffolding will be needed in teaching learners how to use the game. You are trying to avoid the learners from being overloaded with simply trying to just play the game. The goal is to get the game play to flow, which opens up the mind to focus on the academic ties into the game.

## Conclusion

Video games meet all of the criteria of 21st century skills, in a medium that reaches learners where they are. But, just with any other instructional material, video games must be carefully selected, examined and aligned with learning objectives for them to be effective. When used correctly, video games can enhance students' learning experience and make learning fun!

### About the Author

Ryan McCoach is a middle school technology education teacher the state of Maryland. Currently he is pursuing a master's in Instruction Technology and Designs and wants to pursue future in design and developing educational games.