

Can We Justify Using Gamification In Education?

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Introduction

The image of a teacher instructing from a front board or lecturer with a slide presentation is familiar to many of us. This traditional approach, also known as direct instruction, has long been the go-to mode of transmission in many educational settings. Many people feel that while this method can be effective, it can also lead to students being bored, off task, disengaged, and unmotivated. Meanwhile these methods also have nothing in common with how people learn away from the classroom setting. I wanted to explore the use of better methods of teaching that help students learn more, enjoy what they learn, and match how they learn outside of the classroom.

What is Gamification?

Gamification means using characteristics that make games engaging in other areas to make them more engaging. We can use many of these game characteristics in education to take what is traditionally seen as boring and make it more engaging. Ideally this will help students enjoy STEM classes more and pursue higher levels of education and careers in these areas. Some examples of these characteristics are: levels, points, leaderboards, collaboration, epic meaning, viral, bonuses, discovery, synthesis, choice, and technology integration.

Findings

Students in gamified and direct instruction lessons showed similar achievement. There was no lack of learning when students learned through games. If our goal is for students to enjoy math more, changing from traditional independent direct instruction to more gamified lessons can help. It is important to realize that these lessons take more time and checkpoints need to be put in place to help students stay as focused and on time as in traditional classes. This form of learning is new and students did not feel they were learning as much or working as hard when gamified strategies were applied, however they were learning just as much.

Action Plan

I plan to change the overall setup of my courses. I have used gamification in the past to supplement my traditional classroom instruction. In my new school I will set up my courses with game characteristics and direct instruction will become a tool I use as needed. When students are struggling with time management or are widely missing a concept, direct instruction will be an excellent intervention tool. This will only be used to supplement what they are doing to meet their achievement levels and earn their points. Along with game strategies, I plan to incorporate more technology and time management objectives into my teaching. These skills will help mitigate the reasons students struggled during the gamified lessons during my research.