**The Benefits of Game-Based Learning**

By LING GEN SHAN

Game-based learning has the ability to ignite significant motivation in students and offer a practical learning exercise to enhance effective learning. It helps to transform dull, dry classroom learning into an enjoyable, engaging experience that motivates students to participate in an absorbing learning process. When the learning is exciting, we don't learn. When we are entertained, we are excited to learn.

**Elements of Video Games**

- Scoring points or “levelling up” act as a reward or motivation for certain behaviours. For example, the accumulation of points, the promise of rewards in video games that are developed as a learning tool, to “unlock” new scenarios, which allows for the kind of gameplay that would be easily transplanted to actual practice. We might consider, for example, a farmer, who helps to prepare learners for the actual work of taking charge of the wheel.

**What is Game-Based Learning?**

Game-based learning is a method of using games to teach students a particular set of skills, or to help them to achieve specific learning outcomes. Many people confuse game-based learning with gamification.

**Gamification**

Gamification describes the use of game elements in a non-game environment. For example, using points, earning badges, or engaging online competitions and virtual worlds that are designed to make learning more enjoyable, inspiring and productive. Gamification uses those elements of inspiring achievement to motivate students through the use of game-based learning.

**Virtual Learning**

Virtual learning is a framework of in-place and interest to the individual. Games enable learning outside the classroom—students can initiate a hunger for knowledge in students that they otherwise may not experience or develop through common means that people want to spend more time with it.

**Structured Simulations and Models**

Some concepts are too complex that it becomes difficult to be taught within a conventional framework, due to lack of clarity, guidance, or variety in learning. Games offer digital simulations and models to help better explain concepts that are complex, thanks to the structure of virtual learning. Simulations are able to demonstrate and to experience through conventional, which may be time-consuming to show in the classroom. The animation also makes information clear and easy to understand.

**Learning from Mistakes**

When we are learning in the conventional manner, it can take some time before we really understand the mistakes we are making. Let alone how to fix them.

- In games, feedback is immediate and any negative consequences from mistakes made will not impact on real world.
- We can make mistakes while flying an airplane or simulate how the arrows can be set up. Clear goals are set for players, which they have to achieve in order to complete the game.
- The environment is that in the virtual world, we can up that the employers who have clear goals and directions will be much more likely to be motivated to learn.
- Professionals who are not in control of the wheel may learn faster become bored, while those who are in control of the process struggle to catch up.
- It is very difficult to do anything in a virtual environment without any feedback. Everything is a virtual world and it’s important that feedback is given even while the learning is taking place. Game-based learning provides the perfect platform with regard to continued feedback.

**Immediate Students**

Immediate students are informed of how well they are performing, which areas they need to improve, and how they might go about doing that. If a student is learning how to fly, they can be informed of how well they are performing, and how to do it.

**On a Psychological Level**

On a psychological level, students find the shared experience in relation to working towards solutions in the face of a problem, and they also learn to adjust their approach when their behaviour leads them to making mistakes.

**What Game-Based Learning Does**

- **Motivation:** What game-based learning does is that player learns immediate feedback on their performance, with suggestions on how they might improve.
- **Gamification:** This is the key element behind the success of game-based learning. Points and leader boards are often used in games because they are extremely motivating for players to accumulate points and achieve high ranking positions. Thus, players are driven to keep playing to achieve high points and rank as a way to gain recognition of success.
- **Engagement:** Gamification practices act as a reward or motivation for certain behaviours. For example, the implementation of a leader board, is a mechanism that can provide students with some form of feedback that is provided, and are in a position to fix them.

**Benefits of Learning**

One of the key aspects of game-based learning is that such players receive immediate feedback on their performance, with suggestions on how they might improve.

- **In a traditional setting, grades can provide students with some very low feedback on how they have performed in the exam, but game-based learning does not suffer from this because it doesn’t present any real world difficulty with regard to performance.**

- **By the time grades are awarded, it’s too late for the student to do anything to correct their mistakes.**

- **In traditional learning, grades are given after the experiment has taken place.**

- **In a virtual environment, immediate students are informed of how well they are performing, which areas they need to improve, and how they might go about doing that.**

**Ling Gen Shan is an undergraduate psychology student at HELP University. He is currently carrying out research experiments on the topic of game-based learning, entitled ‘The Effect of Game-Based Learning on Learning Outcomes of Biology’.

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**Learning is Progressive**

Games create a learning environment where progress is key — not winning a race. Players are allowed to learn at their own pace to master basic knowledge before progressing to more difficult concepts.

- It’s not like traditional classroom learning, where students need to work through more difficult concepts at the same time, with no feedback that is provided, and are in a position to fix them.

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