

A Study on Game Based Learning is An Extremely Effective Learning Tool

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ABSTRACT

The development of gaming industry is increasing rapidly, games are not only for entertainment alone it also plays an major role in game based learning. More than half a population world are regular gamers. Video games have become common form of medium for 21st century. Technology is rapidly increasing, digital media tools like virtual lecturing, cloud computing etc are used for learning. But still this is not extremely effective especially for children's because many applications become not enjoyable when they provide information alone. Thus by combining some entertainment like games makes the application more attractive and more effective. Now education combines with entertainment and it becomes edutainment with the help of gaming. Integrating games in to education has the potential to create more powerful ways to learn in school communities. This papers shows how gaming process is extremely effective in learning process.

1. INTRODUCTION

In these days, Digital medium is rapidly increasing and supporting our every need. The main problem in traditional teaching is audience fail to sustain their concentration. Video games have the potential of being customized to fit the abilities of individual user's and can engage them with interactive tasks and simulate real life situations. Games can create new social and cultural world that may not be available for everyone in their past. These worlds can help people by learn integrating thinking, social interaction and update of new technologies. Children may be very reserve in nature but these gaming social world help them to get socialized with people it develop their interacting skill. Using video games as classroom tool that help teachers to do their job with more impact is also a good pedagogy. Games make player's to think new things , new strategy and make them as good decision makers. When children fail to clear a level they try to think new thing they use new strategy to clear that level. For example THE SIMS a real time strategy game where players need to make decisions that alter their character's life. They can manipulate the scenario to create digital lives where they can experience the struggles of single parenthood or poverty. Players in these games are not allowed to modify a previous decision to alter the outcome, even if the outcome is not pleasant. The goal is to survive to the best of their abilities. The game is difficult and complicated it is like living real word in digital world. These kinds of games psychologically help the students to make correct decisions and improve their strategicalthinking and it helps to tackle crisis situations in real world. THE SIMS has been used as a platform for students to learn a language and explore world history while developing skills such as reading, maths skills, logical thinking and collaboration.

GAME BASED LEARNING

Learning doesn't mean rote memorization, it means acquiring the skills and thought process needed to respond appropriately under pressure in various situation. We cannot think and perform in face of real world challenge in class room. We need effective and interactive experiences that motivate and actively engage us in the learning process. Video game designers have been producing and refining highly motivating learning environments for their users. Many **educators, policy makers, investors and game developers** are trying build games for schools. This is because Game based learning are extremely effective tool and they are also relatively inexpensive to build and to distribute. In other words they are very fast growing increase in demand, they can be recreated easily. Game based learning applications make us to engage in to an virtual environment that look and feel familiar and relevant

COMPARISON OF TRADITIONAL LEARNING AND GAME BASED LEARNING.

	TRADITIONAL LEARNING	GAME BASED LEARNING
Cost effective	X	X
Low physical risk	X	X
Standardized assessments allowing student to student comparisons	X	X
Highly engaging		X
Learning pace tailored to individual student		X
Immediate feedback in response to student mistakes		X
Student can easily transfer learning to real world environment		X
Learner is actively engaged		X

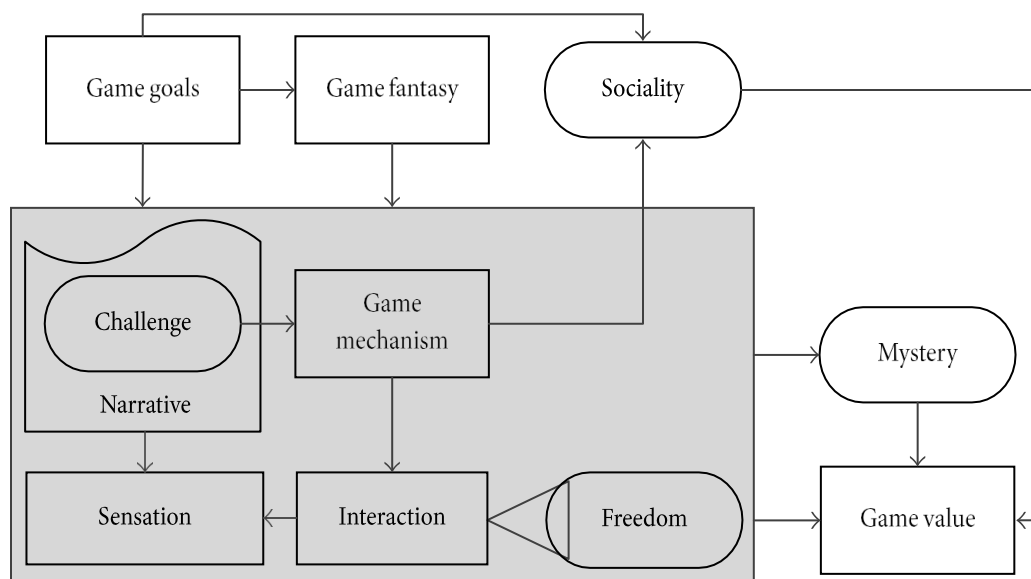
In effective game based learning environment we work toward a goal, choosing actions and experiencing the consequences of those actions throughout the play. It will be very risk if we commit a mistake in real world but in virtual world we make mistake in a risk free setting and through many experimentation we learn to do right things. This keeps us highly engaged in practicing new strategies and thought process and correct our mistakes with that we can easily apply this thought process and handle things in real life environment. In game based learning environment we not only learn facts, but also the important, underlying whys and how's. This understanding of deeper and more abstract principles prepare children's to perform consistently and effectively, even in new unexpected situations.

HOW DOES IT WORKS

Video games can be exceptional teaching tool. In video games there are almost two 'I's. The first 'I' is who holds the controller and the second 'I' is that's within the bezel of monitor. Gamers are set in a distance from their gaming character which will make them feel to thinking about their actions like an outsider looking in a **metacognitive** distance is build in. Metacognitive is term in educational psychology. Metacognitive means it describes the ability to think about your own thinking. Becoming aware of one's awareness and high order thinking skills. Strong metacognitive functions give students an awareness about his own thinking or understanding capacity. Metacognitive functions provide one with control of one's own intellectual capacity. This helps in education strongly because metacognitive function leads to good academic skills. Through

metacognitive functions, children's realize their strength and weakness and adapt to the situations accordingly.

Games have the advantage of giving immediate feedback to the players. If the player commits a mistake they will fail to complete the level. This greatly helps the decision making ability of learner as they know the consequences of wrong decisions.



GAME BASED LEARNING APPLICATIONS

- **Slice it :** is an educational game for android and ios based system. In this players must equally slice the geometrical shape shown in the figure. The game goal was to promote player understanding of geometry and a puzzle game was used to accomplish this.
- **Spellingcity.com:** This game effectively able to communicate ideas and concepts with healthy vocabulary will help children to excel on exams. With over 50,000 words and 60,000 sentences spellingcity.com offers students a fun way to learn to spell while improving their vocabulary.
- **Galxyz:** This app helps kids to master basic scientific concepts and scientific reasoning. This app follow curriculums to augment what students learn in class in a fun and engaging way.
- **Dragon box algebra:** This app quickly teaches the player concept of opposite operations and other rules required to solve the complex maths equations. The purpose of this app is to teach the concept of maths.
- **Crazy gears:** is a problem solving game that gets children thinking critically, problem solving and explore the concept of physics. Kids experiment as they figure everything out on their own.

- **Hand writing without tears:** This app helps kids to learn number and letters. The visual demonstration and verbal instruction provided by pleasant voice and the colorful letter cards give kids just enough reward without being distracting.
- **Loopimal:** Kids have endless opportunities to create rich compositions and explore loops and computing sequence within easy to use pre programming framework.
- **Monkey word school adventure:** It takes kids through phonics and word group activities to help kids master early reading skills. It quickly moves to next challenge so kids won't likely get bored. If kids masters finding letter in gems, the next round will give them words.
- **Princess fairy tale maker:** is a great app to encourage children's to get creative. This app let kids to colour and create their own fairy tales. In this kids choose scene then choose variety of characters in presets. They can also record their voices or add noise while moving around characters. Resulting story with action and sound

2. CONCLUSION

Game based learning method help the children to learn more effectively. In traditional teaching method kids fails to sustain their focus towards the speaker. Game based learning method not only does the learning method more fun. It also motivates students to learn. Immerses them in the material so they learn more effectively. Encourages them to learn from their mistakes. In this digital Era game based learning games are inexpensive to build and distribute. There are many game based learning apps are available in E – market and it's very easy to access from anywhere.

3. REFERENCES

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