

GAME-BASED LEARNING (GBL) AMONG CHILDREN

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Abstract

Game-based learning is the best tools when teaching students in school. It is the most preferred tools for teachers to teach their students in school. Computer games are now one of the part of modern life and mastering this platform for learning purposes can be a great benefit not just for students, but for all. Although there is a different perception about GBL, there is a general statement that can be agree by all of the people, which is computer games can be use a tools for learning based on the previously positive research made by other researcher. This research focus on the effectiveness of game-based learning, challenges of game-based learning and disadvantages of game-based learning.

Keywords: Game-based learning, video games, computer video games, computer games, gamification

1. Introduction

Nowadays, most of the children have their own hobby, such as playing the game. Gaming has several definitions, such as it is a structured form of play, usually for enjoyment. In other word, gaming is a system in which players engage in an artificial conflict, defined by rules and the results in a quantifiable outcome. Besides, a game also can be defined as a physical or mental contest with a goal or objective, played according to a framework or rules, which determined what a player can and cannot do in a game world. As we know, the children primarily for entertainment and as their hobbies play games. However, most of them do not realize that a game can be used as a tool in education. In the 21st century or in the new era of technology, games not only can be used as a tool in order to fill their free time, but it can be integrated into innovative learning platforms (Nadzri et al., 2017). Games usually have an element that makes the players involve in learning through the game's storylines. GBL can give motivation to the children and create awareness. Children are allowed to express themselves as individuals while learning and engaging in social issues. Nowadays video games are more social, with most teenagers playing video games with others at least a number of the time and might comprise many aspects of civic and political lifestyles. In classrooms, GBL systems are growing in popularity, as they purport to enable learners to reinforce knowledge and develop social and leadership skills.

GBL is defined as a model, which makes use of the game as a medium for conveying the mastering contents. It widely refers to the use of video games to help teaching and studying. Although it is a relatively installed notion, it is tough to give the meaning precisely. GBL certainly is all about the advantages the power of pc games for specific functions, which includes gain the new knowledge and skills. According to Tan et al., there are main components in GBL models. To start with, Pedagogical, that are difficult to learn, psychological desires, critical thinking, exploration, challenge, engagement, opposition, practice, goal setting and interaction, construction, motor skill, and motivation. Secondly, video games design, storytelling, interface, simulation, feedback, literacy, communication, and memory and outcome evaluation.

The success of GBL techniques owes to lively participation and interaction being on the center of the experience, and signals that cutting-edge educational strategies are not encouraging learners enough. Experience with and affinity for video games as studying equipment is an increasing number of general characteristic among those entering better education and the workforce. The usage of collaborative game-based role-play for studying offers an opportunity for learners to use acquired knowledge and to experiment and get feedback in the form of outcomes or rewards, therefore getting the experiences inside the safe virtual world.

The aim of this paper is to evaluate game-based learning as a medium in teaching method in education among the children and how effective this medium for the children regarding to era that full of technology. In order to achieve this aim, this paper proposes a conceptual framework focus on game-based learning.

The remainder of this paper is organized as follows. Section 2 is literature review. Proposed framework is in Section 3. Final section contains some concluding remarks.

2. Literature Review

Game based learning (GBL) has becoming growing topic amongst human resource and school educations worldwide. GBL is a way that takes video games technology to create a motivating, fun, and interactive learning environment (Stephen Tang, 2009). GBL has been use to develop new technical skills and soft skills. It has been used for many years in training staff, business, and military through GBL (Paul Hollins and Nicola Whitton, 2011) some are may getting confused for between Gamification and GBL. Gamification use some of the tools from the game to help teaching the students. Surely, we can use these to make the learning fun, but the student will not gaining any new learn. GBL is a learning approach that use educational computer games or software to deliver information and allow for exploration of content.

According to Hamari (2016) Video games brings a great effect of individualized customization in terms of matching the challenges of the learning interest to a gamer's abilities as they develop. The learning process need to use a concept for them to learn. That is where GBL bring the impact. GBL happened when the games can teach the student until they understand. Each student has a different way of processing information and learning has been recognize by educationalist (Soflano, 2015). The game and its characters are making the students to learn concepts. Video game technology has boosted the possibilities of these tools. For our research, we came out with the effectiveness of game-based learning, challenges of game-based learning and disadvantages of game-based learning.

We know that GBL has becoming popular and effective these days. Since most of the students nowadays play video games at home, it should not be a surprise that most of the students will perform better, when games is introduced in learning environment. Educating video games can help complement and make stronger taught material through promoting students' participation and engagement in an interactive and motivational studying environment (Aburahma, 2014). The effectiveness of GBL is measure by creating interactive games for the target audience such as the students. When talking about games, each games developers develop their games for a purpose. GBL makes process of learning in class become interesting and can increase the ability of student (Sundari, 2014). Game player can increasing their skills, ability, and building knowledge as they playing the games. According to Backlund, P. and Hendrix, M (2013), video games can causes impact on motivation and aggression. Through GBL, we cannot only create an attitude that encourages students to attempt new things and no longer be scared of failing, but also can allow students to interact in exciting experiences for the motive of learning (Rula Al-Azawi, Fatma Al-Faliti, and Mazin Al-Blushi, 2016)

GBL takes advantages and challenges of gaming technologies to create an amusing, motivating, and interactive digital learning surroundings that promotes situated experiential

studying. The adoption of GBL is a challenge on its very own, because it need instructors to have knowledge of computer systems with gaming specification, technical help, and familiarity with the GBL content material (Mohd Sharif, M.S., Mohamad, A.N., Fuziah., M.F., 2012). Preparing the GBL module is often quite difficult especially for the subject matter, Yong Suk Choi (2015). Many researchers now believe that this method can better inspire present day entertainment-driven beginners to greater thoroughly interact in learning through significant activities defined in the game context in place of the ones offered the use of more traditional didactic approaches. Development of introduction to GBL learning content material might require a huge price range and such financial limitations have been a main challenge for plenty instructors who intend to adopt it. The time taken of the game-play session may also be an issue as classes are normally schedule in slots of multiple hour. Computer video games are design to be notably attractive, therefore an hour of video GBL might not be sufficient to fulfil the desires of learners, however more importantly will they be able to examine within this era of time. Therefore, it is far justifiable if GBL is included into the curricular framework to resource learning and cater for distinct learning styles.

3. Proposed Framework

Studying with computer video games excites and captivates beginners to study a topic with game-play transforming from the dull and painful studying experience to an amusing, motivating and attractive experience. From a purely financial perspective, GBL may be a price effective method to conduct training and education for domains consisting of medication and national security, which can involve high priced or risky device or material that could jeopardize the protection of learners because of mishandling. According to Anderson et al. (2009), GBL also has its disadvantages. User of GBL have followed a particularly ideology at the impact of computer gaming that promote aggressive behavior and poorer educational performance. Many question the validity of the proof offered by detractors of computer games based at the studies of media violence and instead accept the fact that the unintended effects of game playing are depending on social and cultural elements upbringing of game-players (Stephen Tang, 2009). Furthermore, violence in computer video games is broadly misinterpreted as an agent for aggression as opposed to entertainment, which is what is truly experienced by game-players when they may be aware about the effects of such acts in real life (Dawson et al., 2009).

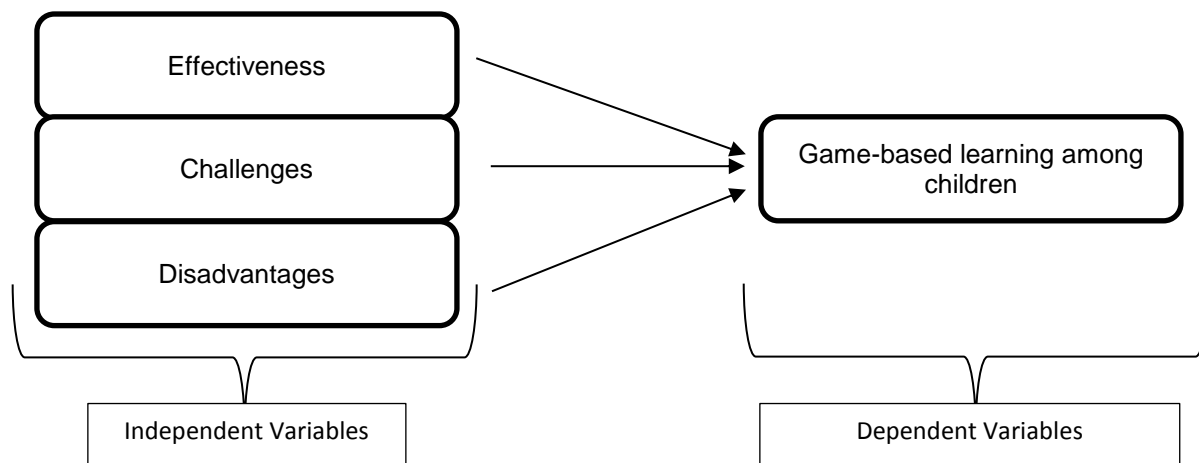


Figure 1. Research Framework

In Figure 1, we created illustration of our research framework from the articles that we have read. Our figure above contains the two variables, which is dependent variables and independent variables. Dependent variable is the opposite meaning of independent variables. By looking at the work "dependent", we can clearly see that it is something that are depending on other factors. Our topic is about Game-based learning among children. The dependent variable is could change based on the independent variable.

4. Conclusion

We can conclude that GBL is the best tools when teaching students in schools. Even though it has some disadvantages, is still the most preferred tools for teachers to teach their students in school. Computer games are now one of the part of modern life and mastering this platform for learning purposes can be a great benefit not just for students, but for all. GBL can also challenge teachers who is old school to compete with newer generation of teachers that is Information Technology literate. Although there is a different perception about GBL, there is a general statement that can be agree by all of the people, which is computer games can be use a tools for learning based on the previously positive research made by other researcher.

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