

## THE UTILIZATION OF ONLINE GAMES FOR EDUCATION PURPOSE

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### Abstract

The aim of this research is to identify how well the utilization of online games has an effect on the educational purpose, especially, for the teaching and learning process. This paper proposes the benefits of using games in educational purpose. This paper also discusses the challenges that involved in the utilization in using online games. The relationships between online games and educational purpose and the contribution of both concepts in improving student's performance were also highlighted.

**Keywords:** Teaching and learning, online games, educational purpose, teacher, student performance

### 1. Introduction

The education can be defined as a lesson that is found by the students. It is involving the process of teaching and learning in educational purposes. The educational begins during the childhood and it is a lifelong education. The education is divided into two, namely formal education and informal education. For formal education, it can be found in schools, institutions and any place of study. Some education is free and some of the education needs to pay. For example, at government schools the education is free, meanwhile, in private schools, the education that is given should be paid. Therefore, the informal education can also through advice, storytelling, satire, experience and so on. The informal learning occurs in an out of school. The formal education is always changing according with current technological developments. By the advanced technology, the education also more wide and the knowledge also increased. In last decades, the interest to online games is relevant for education improved achievements to their positive outcomes and impacts in learning (Bontchev, 2017).

According to Dicheva (2014), the traditional schooling is regarding as an ineffective and not interested by many students. Nowadays, there are lots of ways to gain the knowledge in the educational fields such as through the online games, traditional games, workshop, social media, blended learning and so on. The use of educational games as learning tools is an encouraging way due to the games' abilities to teach and the fact that they support not only knowledge but also important skills such as problem-solving, collaboration, and communication (Dicheva, 2014). New technology has been growth well and replaced the old one. Mobile technology such as laptop, smart phone, iPad and tablet are the example of new technology that can be used to

access for learning. One of the frequently way that used in the learning process is online games. Online games have incessantly proven to be one of the ways to improve the effectiveness of teaching and learning process. Online games have become a must to be included element in education purposes. According to Li (2016), “game-based learning is utilizing a game as a tool so students can understand different targets, goals or standards”.

In this paper, several issues are discussed regarding on how well the utilization of online games has an effect on the students in their educational purposes. The traditional learning method and environment is not interesting and attractive. The lack of infrastructure, skills, time and the structure of curricula and assessment are serious barriers that hinder wider adoption of games for learning and teacher preparation. The lack of infrastructure, skills, time and the structure of curricula and assessment are serious barriers that hinder wider adoption of games for learning and teacher preparation.

The aim of this study is to evaluate the utilization of online games for education purposes. In order to achieve this aim, we review previous study on online games in order to propose a framework to identify the challenges and benefits in utilizing online game for education purpose.

## **2. Literature Review**

The education is always changing in the teaching and learning process. The students are revealed to the new of technologies, they adjust their learning styles and the teachers must change their instructional method in order to always up to date. In the other hand, one of the technological developments was impact the education nowadays is the online games. Itan (2016) stated that the online games was developed as an instructional approach for teachers to use in the classrooms. The online games are not only educating the students about the valuable skills on its own, but it is also changed the way students learn. According to Hamid Ashraf (2014), the emergence of new computerized and net-based technologies such as the internet will ease the students to access the online games.

### *2.1 The Benefits of Online Games in Educational Purpose*

According to Mercer (2017), the online games have proved beneficial for students in learning experiences. The first benefit of the online games is it can be as a medium for students to improve their language skill. The online games can influence the students to communicate with others in their daily life. Next, it also can help the teacher to ensure the language be more useful and meaningful by using the online games. Even though games are often associated with enjoyment, the teachers must relate the games with the elements of teaching and learning. The online games should be considered as a part of the language syllabus. Other than that, the online games are beneficial because it can decrease the students' stress and create the motivation. According to Broussard (2012), the online games require the students to learn through trial and error and they are shown a certain amount of information and imagined on that information.

At the same time, the online games prove to be a useful method in language teaching. In addition, the online games can motivate, increase their achievement in the learning and promote students' interaction. Liu (2012) stated the game-based instructional programs are more effective on teaching and learning and the instruction that mixed the game characteristics enhances the students' motivation. The online games also create a meaningful approach for the language use and it has actually enhanced the way students' learn. According to Poplin (2012), the English language makes a difference between game and play.

Next, the second benefit of online games is established the essential of the knowledge among the students and develop basic skills in the initial stage of a course, to lead the students into the professional field of study. Before the teachers implement the usage of online games, they should seriously consider initiating students and helping them understand and know on how to use the online games in the education (Tsai, 2012). Playing the online games at school can inspire the students in ways that nobody could predict. The real benefit of online games is not only making the students more enthusiastic to take part in such activities, but rather increasing their knowledge in term of the confidence in every kind of English interaction and also promoting their English ability. Then, any type of communication in the target language or with the target culture will ultimately improve the students' confidence, motivation and ability.

Moreover, the online games also have the interactions to increase the student's motivation leading to improved more their ability and confidence. The online games allow the students to interact with information and participate in learning process through the entertainment (Bisadi, 2014). The students also can develop their basic skills such as the listening, speaking, reading, writing and a number of skills are often involved through the online games with the patience and perseverance, forward thinking and strategic planning. The online games can immerse the students in a world outside with their daily experience based on the utilization and the usage of the online games and it can help them to learn the skills they could never grasp by reading a textbook. According to Genc (2015), the usage of online games in the classroom has the essential to determine the aims of the learning and teaching process to implement appropriate motivational strategies and behavioural responses among the students.

The third benefit of the online games is reducing the stress among the students. Playing the online games can relieve the stress, depression and the students feel better. It may sound like a big claim to make but at this point there is plenty of evidence available to support it. The enough evidence in fact that if the online games are not a regular part of the students' life right now, adding a bit of game-playing time to the schedule could actually improve the mental health in many surprising ways. The video game is one example of the online games. Playing the video games can be able to adopt the mental skills in term of handle the stress, become less depressed and get less hostile during the stressful tasks. Then, the video games do not always hinder studying. The video games can help with schoolwork and class material. Through this to the entertainment value video game have, which would make the learning process more fun to the students. According to Li (2016), the video games have a great potential to promote critical thinking, problem solving and leadership skills. The

students will act as a simulator for the decision-making process by giving players several chances to infer information from their surroundings and forcing them to react accordingly. Poplin (2012) stated that the online games can be defined as an activity among two or more independent decision-makers seeking to achieve their objectives in some limiting context.

According to Talug (2012), the online games also provide some degree of enjoyment and it has playing mode corresponding with game type, has an obvious and significant goal. Pe-Than (2015) stated the enjoyment is defined as a medium of fun, pleasure or excitement gained from performing the activity. The teachers must have the responsibility to educate and inspire the students in term of mind, heart and soul to put more joy into students' experience of going to school and get more joy out of working inside one. Although it is clear that online games are fun and that they elicit positive emotions, there remain unanswered questions regarding the consequences of positive emotional experiences during online game play. For instance, the puzzle games have been empirically shown to trigger positive emotions, but these games are designed for brief and intermittent play. Genc (2015) stated that the puzzles can be a game for free time, but it are also considered as a teaching tool that extends students' vocabulary knowledge, develops their attention and concentration and promotes the intense searching strategies for solving problems because several skills including the spelling, reasoning, evaluating choices and drawing conclusions are required.

## *2.2 The Challenge of Online Games in Educational Purpose*

Teaching about the online games should be easy. After all, the students enjoy engaging with course content and have extensive personal experience with the online games. Teng (2012) stated that the personal interactions also can be negative experiences when the other gamers engage in rude actions or language. In the reality, the online games in education are surprisingly complex. However, there are some challenges to implement the online games in learning. In the teaching and learning process, the syllabus is always changing. According to Mateos (2016), one of the challenges is to find the right balance between fun and learning in online games. To make the learning more effective, a new method of teaching should implement such as using the online games in curriculum. The use of the educational games for students' in the teaching and learning is an increasingly relevant trend (Tsai, 2013). In order to implement the utilization of online games in learning, there are some challenges.

The challenge for teachers is to identify how the certain online games can connect to the curriculum. Moreover, it is also hard for teachers to find the online games-related with the teaching and learning process. The challenge for teachers is to identify the accuracy and the appropriateness of the content of the online games. Whitbourne (2013) stated that a challenge that has appeared in the implementation of online game in learning is the teacher should finding the best format that will motivate their students. Finding the online games that matches to a given course can be quite difficult to the teachers. An example of online games that good to use is online puzzle. The teachers can use the games such as the online puzzle to attract the students in

learning. By using the online puzzle activities in lessons can increase students' achievement, increase retention of information learned by the students and students have positive attitudes toward using puzzle activities in lessons (Genc, 2015). According to Qiolei (2014), nowadays, the online games are more intensive, more complex, more graphic and more violent than those earlier computerized games. The irrelevant or distracting content of the online games should be removed. The contents of the online games should relate to the learning.

Other than that, the teachers also face the difficulties on how to integrate the play of the online games, in 45 minutes for a class. The insufficiency of time also is a barrier to implement game-based teaching strategies. The issue of time raises concerns among teachers, with regard to the possibility of using such environments in the classroom, provided all the challenges and time constraints around curriculum, assessment, and flexibility of schools' schedules. According to Vrasidas (2013), the teachers who were not familiar with this type of the learning spaces needed more time, even though they had guidance from the facilitator.

In the other hand, the other challenge is about attitudes of parents of the students. The challenge is to persuade the parents to the value and significance of the online games in the classroom. Some of the parents may not be confident and disagree with the method of using the online games in learning. The first objection is that online gaming is addictive to the students (Froding, 2013). According to Duncan (2016), the online games with learning actually provide the students with opportunities to focus on the learning process. This attitude of the parents may end up with the not successful use of online games in learning. The teachers will face the problems to deal with the parents and in the same time to adapt the new method in teaching.

Next, the other challenge is many of the teachers were not experienced and not really familiar with the technology. According to Arnab (2012), the educational systems are under increasing pressure to respond and adapt with the rapid technological and associated changes in the teaching and learning process. The online games design requires the teachers to become familiar with and they also need to choose among the software tools and learning to use the tools maybe challenging for students (Holmes, 2016). Teaching with games and teaching with inquiry-based games are a new experience for the teachers and can be outside of their comfort zone. According to Deater-Deckard (2014), the other challenging in the teaching and learning process is the teachers do not provide the fun and engaging to a wide variety of the online games to the students. The uses of the online games in learning will be a barrier to teachers who are not expert in the technology. Other than that, they lack of the technology resources to introduce the game-based teaching strategies. Many teachers and schools do not have the resources to be able to use technology efficiently in a classroom setting. Teachers must know how to play the online games themselves in order to teach students how to do so. While apply the use of online games in the classroom, they also need to handle the classroom effectively. The classroom management is important in order to implement the utilization of online games. In some of the classrooms, the students found other students playing online games while they were study distracting them. The teachers should be efficient to handle the classroom

when using the online games. According to Vrasidas (2013), the increasing of development in the digital technologies for learning and the need for integrating them in teacher professional development creates the opportunities and challenges in apply their transformational practices for teacher learning.

### *2.3 Analysis of review*

In this research, there are the differences between current articles and the previous article on that are focusing on the utilization of the online games in the educational purposes among the students. Moreover, it is also emphasized about the benefits of the online games among the students in the educational purposes. Based on the previous articles, there are the benefits of the online games that can be a one medium for the students to improve their language skill. Furthermore, the online games also can influence the students to communicate in their daily life. In addition, the utilization of the online games can help the teacher to make the contexts of the language be more useful and meaningful to the students.

Based on the article from Poplin (2012), the author was stated that the English language makes a distinction between game and play. That means, the online games can develop all language skills especially the English language. Other previous article also discussed about the other benefit of the online games such which is established the essential of the knowledge among the students and develop basic skills in the initial stage of a course, to lead the students into the professional field of study. Tsai (2012) have stated that before the teachers implement the usage of online games, they should seriously consider initiating students and helping them understand and know on how to use the online games in the education. Then, the online games can improve the students' confidence, motivation and ability. According to Genc (2015), the usage of online games in the classroom has the essential to determine the aims of the learning and teaching process to implement appropriate motivational strategies and behavioural responses among the students.

The third benefit of the online games in the previous study is reducing the stress among the students. Poplin (2012) stated that the online games can be defined as an activity among two or more independent decision-makers seeking to achieve their objectives in some limiting context. The online games also provide some degree for enjoyment and it has playing mode corresponding with game type, has an obvious and significant goal (Talug, 2012). The findings of the article from Li (2016), the video games have a great potential to promote critical thinking, problem solving and leadership skills. For instance, the puzzle games have been empirically shown to trigger positive emotions, but these games are designed for brief and intermittent play. Genc (2015) stated that the puzzles can be a game for free time, but it are also considered as a teaching tool that extends students' vocabulary knowledge, develops their attention and concentration and promotes the intense searching strategies for solving problems because several skills including the spelling, reasoning, evaluating choices and drawing conclusions are required.

Online games are not only educational, they are entertainment. The online games bring new challenges to the learning. The online games represent one method

that may be available to the classroom teacher. However, it must be noted that online games are only part of the learning and teachers need to know the syllabus relevance. Online games have great educational potential in addition to their entertainment value. The potential of online games as a learning tools in a game-based collaborative leaning environment.

The teachers need to identify how a certain online game would connect to the curriculum. They must find the online games that are suitable with the students' age and match to the syllabus. It is also hard for teachers to find the online game-related with the teaching and learning process. If the online games are not related to the syllabus, it will result the failure of the utilization of online games in learning. Most of the teachers were not experienced and not really familiar with the technology. It will difficult to them to use the technology in teaching process. The teachers should learn about the using the online games in learning so that it make easy for them to teach the students. The other analysis is about attitudes of parents. The parents must believe that the online games can assist the students in their learning. They also should confident with this method. Other than that, the teachers also need support from others. The others must support the teachers to use the online games in teaching process. By giving the support, the teachers will be confident with themselves.

### **3. Proposed Framework**

This study discuss regarding the utilization of online games in educational purpose. The online games can be defined as the games that are played through the computer network. Basically, online games play an important role in term of helping and attract students in learning. According to Jeon (2016), by providing the additional information in the online games also can help make the information richer. Nowadays, the social media also provide the online games for their users. Through the social media, the students can play the online games. According Phei-San (2014), we can use the mobile devices to involve ourselves in many different kinds of the activities at anytime and anywhere. Usually, the students can play the online games while their study or revision. Most of the schools in the overseas are implementing the online games as a part of their syllabus in teaching and learning process. . Chun Liu (2016) stated the students who confident they are able to play online games in learning with great skill are more likely to expect positive achievement. According to Badrinarayanan (2015), the online games also can facilitate the life skills in term of the leadership, collaboration and teamwork.

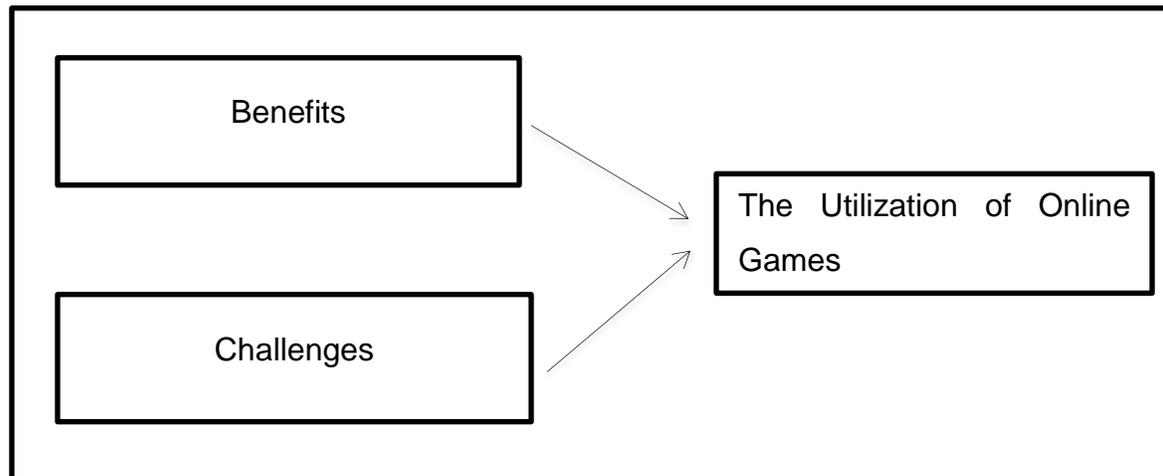


Figure 1. Proposed theoretical framework

#### 4. Conclusion

This chapter is discussing about previous study on the utilization of online games in the educational purpose. The utilization of online games in the educational purpose is rarely used in curriculum syllabus. In this chapter two, we have found two variables that are resulted of the utilization of online games in the educational purpose. The two variables are the benefits of online games in educational purpose and the challenges of online games in educational purpose. For the first variable are the benefits of utilization of online games in the educational purpose. The benefits are improving the students' language skills, established the essential of the knowledge and develop the basic skills and reducing the stress among the students. Meanwhile, there are some challenges of the utilization of online games which are teachers must identify the online games that relate to the curriculum, the teachers facing difficulties how to integrated the online games in teaching process, time consuming, attitudes of parents and the teachers were not expert in technology. Last but not least, the utilization of the online games consists of many benefits and at the same time it is also give the challenges for teachers in order to apply the online games in learning.

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