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Integrating Animation with Experiential Learning Approach to Enhance Students' Engagement in the Learning Process

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Abstract

This paper discussed the integrating animation with experiential learning approach to enhance students' engagement in learning process. Today's young generation is expressed a strong preference for the digital world. Within the educational sphere, the development of technologies is defined as a powerful tool to create a huge number of various learning materials. From this view, the use of multimedia technologies is becoming more common in education as well as providing an extremely interesting atmosphere. In line with this, animation has been introduced for the education system since it is a part of students' daily life. Consequently, the animation must be integrated with the pedagogy such as experiential learning because the integration to foster students' engagement in the learning process. Indeed, experiential learning is imbued with students' experience. Experiential learning is a phase where learning should be student-centred because students engaged in direct contact with learning as well as experience that evokes interest in students. This paper discussed the students' engagement was boosted by the integration of animation and experiential learning.

Keywords: Multimedia Technology, Animation, Experiential Learning, Student Engagement, Learning Process.

Introduction

Increasing the advancement in information technology, the education system has gradually utilized multimedia learning. Today, teachers are no longer carrying stand in front of the classroom with a blackboard and chalk communicate information to students. Multimedia fall into category of graphical as well as interactive tool to communicate information to students. As stated by Tapscott (1998), the young generation familiarity with computers and the internet and thus they are going to expect information in the classroom to follow the same way.

In response to the need of young generation, animation has identified innovative method that teacher should use it in the classroom. Animation is a part of daily life for the young generation (Pedersen, 2011). Animation belongs to multimedia. As indicated by the literature stated that

texts, graphics, animation, video and sound in an integrated way and the content can be structured and presented differently are a key feature of the multimedia (Inceday, 2018). The animation is an alternative method to the traditional learning by it provides a funny and entertaining learning environment. Empirical evidence documented that animation has been strongly encouraged as an innovative, constructivist and students-centered (Moreno et al., 2000; Neo & Neo, 2009).

However, creative learning tool must not be separated from creative teaching strategy. Over the last decades, the education system is generally realized that experiential learning method is an integral part of learning. Numerous studies have proven that experiential learning was comprised one important way to improve student's interest, learning outcomes and satisfaction (Konak et al., 2014; Orús et al., 2016). Experiential learning was a great encouragement to students for engaging in activities that enable them to experience the course content (Svinivki & McKeachie, 2011). It is our intention is about how to enhance students' engagement can be in the learning process by integrating animation with the experiential learning method.

Multimedia Technology

According to the cognitive psychology studies have shown that 94% of the information learned through the visual and auditory access, of which 88% is obtained through the vision, and 12% through hearing (Zhen, 2016). Historian researchers have proven that only 7% percent of successful communication between teachers and students come from the verbal communication, but 55% came from visual communication as well (Hii & Fong, 2010). From the foregoing description, Zhen (2016) concluded that, multimedia has a great potential to organize students' audio, visual and other sensory organs, and thus obtain the best of the cognitive effect. Multimedia access to knowledge is one of the possibilities of information and communication technology that has tremendous impact on learning. Through the interactive function of multimedia to foster students and effectively convey content information since the teachers display the content in an effective way. Regarding this, teachers to get students to become interested in one topic of subject and make they with a strong passion and enthusiasm to participate in teaching (Zhen, 2016). Effectively, moving from the textbook to the computer is the opportunity for greater interactivity and novel ways to think about a learning activity (Gilakjani, 2012). Many researchers have concluded that students experience deeper learning from video than from words alone (Shepard, 1967; Baggett, 1984; Salomon, 1984; Wetzel et al., 1994; Mayer & Moreno, 2002; Mayer, 2002, 2003, 2005).

Animation

In this day and age, students derive benefit greatly from multimedia technologies such as animation. One of the best ways of showing visualization is using animation. There are studies proven that students receiving information from multiple multimedia sources and processing pictures, sounds and videos before text (Jukes et al., 2010). In fact, with respect to students learning from visual forms of presentation in the way that promote better their understanding (Mayer, 1999; Sweller, 1999). In line with the study, Roberto (2010) and Chan (2013) concluded that students have become mainly visual learners and known as "digital generation".

Specifically, animation is an interesting vehicle which makes teaching methods and classroom environment more engaging and entertaining as a whole. For instance, animation can assist teachers to explain and reinforce the contents in an interesting and entertaining way particularly among digital generation (Chan, 2013). Animation were evaluated as being more “engaging and credible” (Roger, 2008). Based on this definition, animation is a changing graphic visual arrangement which stimulates the view of a constant modification (Schnotz & Lowe, 2008). There has been good evidence, animation is chosen as a reinforcement tool to nurture students’ learning and engagement.

Experiential Learning

Experiential learning is soundly focused on experience. Following Li (2009) and Dewey (1973), in the learning process, experiential learning theory has emphasized the main role of experience that arouses interest in students. In the regard, students engaged in direct contact with subject through using experiential learning (Kolb, 1984). With the strength and contribution of experiential learning which cultivated and developed students’ interest, satisfaction and learning outcome (Konak et al., 2014; Orús et al., 2016).

Experiential learning is the core pillar of establishing the relationship between students and learning. An experience consists of two main components that included the acquisition and transformation in the learning process. When students learn through their own experiences, it becomes more memorable (Geh, 2014). As McCarthy (2016) stated, learning as a holistic adaptive process that combines experience, perception, cognition and behaviour. Based on the investigation conducted by Dewey (1973) found that, if students unable to build up a connection with experience there are most likely to be a gap between the subject matter to be learned and the interest the subject matter.

Student Engagement

In response to the educational outcomes, student engagement is an integral part. It means student engagement indicates students’ positive learning and functioning (Reeve & Tseng, 2011). According to Fredricks et al., (2004) the definition of engagement is about a student’s commitment or investment concerning their learning activities. A number of studies have proven that engagement provide a vital link with students’ achievement and success in academic (Fredricks et al., 2004; Wang & Degol, 2014; Wang & Eccles, 2012; Chang et al., 2016). As Gunuc (2014) defined the idea of student engagement means that “what the student did for improving learning experience”.

Conclusion

In the area of education, the rapid expansion of the multimedia technologies that support the learning platform for expressing the learning experience (Gunuc, 2014; Carrillo et al., 2017). Animation can be defined is a highly effective interactive multimedia tool for encouraging students be more engaged in their learning process. Additionally, education system is generally realized that experiential learning method is becoming increasingly important instrument used for learning. Experiential learning has gained widespread acceptance in the twenty-first century (Prince & Felder, 2006; Slavich & Zimbardo, 2012). Students have benefited greatly from experiments by learning through observation and interaction (Dedouli, 2001). Such as lived

experiences, experimentation, simulations, role plays or viewing video and film were categorized as an experiential learning (Kolb, 1984). In conclusion, students' engagement was boosted by the integration of animation and experiential learning.

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