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STUDENTS' LEARNING IMPACT USING RECORDER THROUGH FROG VIRTUAL LEARNING ENVIRONMENT (VLE)

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LAPORAN KERTAS PROJEK BAGI MEMENUHI SYARAT UNTUK MEMPEROLEH IJAZAH SARJANA (MOD KERJA KURSUS)



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ABSTRACT

Virtual learning environment (VLE) is widely utilized in the education world in many countries. In this context, the researcher used Frog VLE, which also carries out the same meaning as VLE because the term Frog VLE is used in Malaysia. VLE Frog had been launched throughout in every school throughout the country. It is a system based learning networks that resemble real-world learning by integrating conventional education concepts with virtual methods. The purpose of this research is to determine students' view on music teaching and learning through online music games integration in VLE Frog by using *Joytunes*. *Joytunes* is one of the online music games and is a gamification application software where students can play the game while getting connected to their teachers. This study was conducted in an elementary school in Selangor, Malaysia. A total of fifty pupils ($n=50$) were selected by using purposive sampling method. Data were collected using quantitative methods by giving two sets of questionnaire where both sets of questionnaire were not connected with each other. Data obtained were analysed using Microsoft Excel 2007. The findings of this study are relevant to the objectives of the study; where the results of this study indicate that Joytunes supported Frog VLE have a positive effect. This is proved where the overall mean for the three sections, which is respondents' motivation is 3.64, 3.36 for positive impact and 3.59 for independent learning. This research hopes to enhance the teaching and learning in music especially in recorder and other subjects throughout other schools in Malaysia and other countries as well.



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KESAN PEMBELAJARAN REKORDER MELALUI 'FROG VIRTUAL LEARNING ENVIRONMENT' KE ATAS MURID-MURID TAHUN EMPAT

ABSTRAK

Pembelajaran 'Virtual Learning Environment' (VLE), digunakan secara meluas di seluruh dunia. Ia diadaptasi dalam beberapa bidang, terutamanya bidang pendidikan. Dalam konteks ini, pendidik di Malaysia menggunakan Frog VLE, yang juga mempunyai maksud yang sama seperti VLE, iaitu pembelajaran secara maya. Kaedah pembelajaran ini telah dilancarkan di setiap sekolah di seluruh negara. Ia adalah satu sistem rangkaian pembelajaran yang menyerupai pembelajaran dunia sebenar dengan mengintegrasikan konsep pendidikan konvensional dengan kaedah pembelajaran secara maya. Tujuan kajian ini dijalankan adalah untuk mengenalpasti motivasi pelajar, kesan pembelajaran positif, dan pembelajaran sendiri melalui Joytunes menggunakan rekorder. Kajian ini telah dijalankan di sebuah sekolah rendah di Selangor, Malaysia. Kajian ini telah dijalankan di sebuah sekolah rendah di Selangor, Malaysia. Seramai 50 orang murid ($n=50$) telah dipilih dengan menggunakan kaedah persampelan bertujuan sebagai responden kajian. Dua set soal selidik telah diberikan kepada responden dan data telah dikumpul dengan menggunakan kaedah kuantitatif. Dapatan kajian menunjukkan kesan yang positif, di mana keseluruhan min untuk ketiga-tiga bahagian ialah 3.64 untuk bahagian motivasi, 3.36 untuk bahagian kesan positif dan 3.59 bagi bahagian pembelajaran sendiri. Akhir sekali, kajian ini diharapkan agar dapat memberikan sumbangan dalam pengajaran dan pembelajaran dalam Pendidikan Muzik serta subjek yang lain dan seterusnya kepada sekolah-sekolah lain di seluruh Malaysia dan juga negara-negara lain.



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LIST OF ABBREVIATIONS

| | |
|------|---|
| VLE | Virtual Learning Environment |
| MOE | Ministry of Education |
| ICT | Information, Communication and Technology |
| UPSR | <i>Ujian Penilaian Sekolah Rendah</i> |
| SDT | Self-determination Theory |
| KSSR | <i>Kurikulum Standard Sekolah Rendah</i> |
| KBSR | <i>Kurikulum Baru Sekolah Rendah</i> |
| KBSM | <i>Kurikulum Baru Sekolah Menengah</i> |
| CAI | Computer-aided Instruction |
| Num | Number |
| Apps | Applications |



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CHAPTER 1

INTRODUCTION



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1.1 Introduction

The advent of the internet since the 1990s has brought upon various new products and tools to keep updated to the latest trends. One of the well-known trends that all of us know is - Information and Communication Technologies (ICT). In this new era, the use of ICT is widely being spread all around the world and to every sector throughout the countries. One of the sectors which are strongly affected is in the education sector. Many studies in the world of education are done about the use of ICT and positive results were shown.



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ICT has a major impact on the shift change and the management of education systems around the world, especially developing countries such as Malaysia. Based on Malaysian Education Blueprint (2013-2025), which was recently launched by The Ministry of Education, Tan Sri Muhyiddin Yassin said that the Ministry of Education (MOE) intends to increase the usage of ICT among students and teachers. In conjunction, every student should have access to quality education and technologies that shape the world today.

Besides that, the applications of ICT for the purpose of teaching and learning are soon created to get better learning outcomes. One of the applications being created is Virtual Learning Environment (VLE). At the end of the year 2013, the Malaysia Ministry of Education (MOE) has cooperated with 1BestariNet by introducing Frog Virtual Learning Environment (Frog VLE) and expands this technology to improve the level of education and equip students with the necessary skills. All schools were also provided with 4G wireless internet high-speed in order to use Frog VLE in schools.

VLE is an online learning environment that involves people like teachers and students, where they can communicate with each other without having face-to-face interactions. Teachers will offer anything which he or she thinks is relevant to the course content. This includes homework or assignments to their students. In addition, students will receive the content and discuss with their teachers or with their peers through forums (Azad, 2009 in Haziqah, 2014).



Azad also said that there are many advantages of VLE in the learning process because it provides different types of tools, such as tools for assessment, communication, forums, students' work, questionnaires, tracking tools, blogs and so on. However, this learning environment would only be valuable to students when the students are passionate and willing to use it. Therefore, students' views on the use of VLE in their learning progression are very important to get positive outcomes to reach to the utmost.

1.2 Background of the Study

Today, the emerging of ICTs has brought a dynamic change in society and has become more and more crucial to every human being. According to Yusuf (2005), the field of education, especially in teaching, learning and research has undeniably affected by ICT. Students nowadays have grown up with dynamic changing of ICTs and so, they are called the 'Net Generation.' The 'Net Generations' are those who grew up using electronic equipment in their daily lifestyle (Haziqah, 2014). The process of teaching and learning should incorporate the use of technology to draw the attention and interest of students' towards learning.

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using electronic equipment in their daily lifestyle (Haziqah, 2014). The process of teaching and learning should merge the use of technology to draw the attention and interest of students' towards learning.

In order to provide both the teachers and students with more opportunities to get use in teaching and learning, the Ministry of Education (MOE) has cooperated with IBestariNet by launching Frog VLE and this technology is expanded throughout the country. Khasiman (2013) explained that the term Virtual Learning Environment (VLE) for primary school pupils has long been established and practiced in many advanced countries such as the United Kingdom, the United States, Ireland, Hong Kong and Singapore. However, it is still a new and fresh learning concept to our primary school pupils in Malaysia. Thus, the researcher wants to adapt this new knowledge into music teaching and learning.

Frog VLE is a Frog Virtual Learning Environment, or better known as VLE. In this context, the researcher uses Frog VLE throughout the research, where it brings the same meaning as VLE. Frog VLE is like an online classroom and social spaces which took place in school or anywhere with Internet access. It is also a system based learning networks that resemble real-world learning by integrating conventional education concept with virtual methods. For example, teachers can give assignments, tests and check students' assignments virtually or through online, while students can submit their assignments and checkpoints through the VLE. Frog VLE acts as a function for every individual in the school to communicate with each other in a learning community.

Rheingold (2004) mentioned that VLE involves community members to connect with each other and they can discuss and cooperate in performing a task or project in VLE, which is built on the internet. By doing so, they can participate actively by exchanging views on their progression in the future, share their perceptions on the implementation of certain policies or talk about the development of their work.

In this study, one of the online music games that will be integrated onto Frog VLE in music teaching and learning is Joytunes. Joytunes is a type of gamification application software that focuses on teaching and learning in piano, as well as recorder. But in this context, the researcher will only use Joytunes for the recorder purposes because piano learning is not included in the Malaysian's primary school Music Education syllabus.

1.3 Problem Statement

There are some issues faced in Malaysian music education today. According to Nor Mubin (2011), problems faced by music subject in most of the Malaysian primary schools are among the perception of school society's in music and administration. Most people especially parents think that music education is not considered to be a core subject because it is not an examination subject in the Malaysian Primary School Evaluation Test also known as *Ujian Penilaian Sekolah Rendah* (UPSR). Parents also thought that music learning does not require music education in school. For children who are interested in music, their parents send them

to music centres for music classes. Most of them also think that music is only for entertainment purposes. Thus, they do not encourage their children to attend music classes.

Besides that, Nor Mubin mentioned that parents are afraid that when their children are involved with musical activities in school, it will affect their children overall performance in the other important subjects, such as Malay Language, English Language, Mandarin, Mathematics and Science. Therefore, parents are worried and would not let their children participate in this kind of activities, which they think is not important as other subjects.

The Ministry of Education (MOE) has implemented a new syllabus in the primary school, known as *Kurikulum Standard Sekolah Rendah* (KSSR) since the year 2011. Due to this new syllabus, time allocated for music education has been reduced to only thirty minutes per week (World Data on Education, 2011). According to Nor Mubin, music classes were not only being used for other examination subjects, it is also sometimes not being taught because of events held in schools. Therefore, music teachers are facing problems and difficulties teaching musical skills to students. Students that have no musical backgrounds would also have problems in understanding musical elements that being taught in class.

There are also music teachers who have no confidence in teaching music in primary schools. These teachers are those who are among the generalists teachers in school or unskilled and inexperienced music teachers. To add up, teachers who have been trained or who are major in music, are assigned to teach others subjects and not

music or likewise. According to Bowic (2013) in Ballantyne (2006); DEST (2005); Duck (1990); Ewing (2010); Meiners, Schiller & Orchard (2004); Sanders & Browne (1998) and SERCARC (1995), research showed that most generalist primary school teachers do not have confidence in teaching music, as well as often did not treat music education as a priority in their classroom and did not treat it importantly. Nor also mentioned that these teachers neither not committed nor not skilled in teaching music. This is why they need more subjects to improve their musical skills and their abilities to showcase are needed.

Therefore, the researcher proposed and examined that equipping Joytunes supported in Frog VLE towards teaching and learning in music education may solve this dilemma. Generalist primary teachers who do not have confidence can take this opportunity to use this method in their music teaching and learning. Other than that, teachers and students can get connected and communicate in Frog VLE even though there is not much time for music education in class.

1.4 Research Objectives

The main purpose of this study are:

1. To determine students' motivation towards music learning in Joytunes supported by Frog Virtual Learning Environment (VLE).
2. To determine the positive impact of Joytunes supported by Frog Virtual Learning Environment (VLE).



3. To determine students' independent learning through Joytunes supported by Frog Virtual Learning Environment (VLE).

1.5 Research Questions

The following are the research questions of the study:

1. Does Joytunes supported by Frog Virtual Learning Environment (VLE) increases students' motivation towards music learning?
2. Does Joytunes supported by Frog Virtual Learning Environment (VLE) have a positive impact on student's music learning?
3. Does Joytunes supported by Frog Virtual Learning Environment (VLE) helps to develop students' independent learning in music learning?

1.6 Significance of the study

The study aims to look at the opinions and perceptions of students in their music learning through Joytunes supported in Frog VLE. It is expected to clarify whether Joytunes supported in Frog VLE has the potential to supported and help in the process of students' learning in music education. It also provides the reason why virtual learning should be used in music education in Malaysia schools.

1.7 Limitations of the study

This study focuses on the views of students in one Chinese school in the state of Selangor only. Hence, the sample might not be relevant to other schools or other countries. Moreover, *Joytunes* is a free online music game about piano and soprano recorder. The researcher equipped only the soprano recorder part towards the teaching and learning in music education because the learning of soprano recorder is required in the Malaysia's music education syllabus.

1.8 Operational Definition

1.8.1 Virtual Learning Environment (VLE)

Virtual Learning Environment (VLE) is a learning that takes place through web; also known as web based learning. According to Haziqah (2014), this learning environment is designed for students and teachers to communicate easily through online, which is not the same as traditional face-to-face type. It allows students to access different learning tools, such as information of certain programmes, course content, forums and discussion board, learning resources and document sharing systems, without being limited by the time and place.

In this research, the term Frog VLE is used to replace VLE because the term Frog VLE is used in Malaysia education and it represents the same meaning as VLE.

Frog VLE is like an online classroom and social spaces in school and also as a

learning based system through websites that resemble the world of education by consolidating the concept of virtual reality in conventional education (Frog Asia, 2013).

1.8.2 Gamification

The term gamification is emphasized in Joytunes. A gamification is an educational approach where students can learn by using video game design and game elements in the learning environment. Werbach and Hunter (2012) stated that gamification is a strategy that aims to apply the mechanics of gaming to non-game activities to change behaviours.

In the educational field, gamification is used to foster students' learning by integrating certain games into their learning activities. Research by Gomes, Figueiredo, Bidarra and Gomes (2014) supported that gamification with the aims to encourage engagement, motivation and participation of students in this integration which included test, training drills, quizzes, educational games and so on.

1.8.3 Joytunes

Joytunes is an application that combines music technologies with the latest in game mechanics, where it works directly with a real music instrument and no wires or cables are needed (Rimon, 2015). Learners can play with Joytunes either by

downloading it from the playstore (for any android users), IOS (for any apple users) or in their computers or laptops.

Rimon continued that the apssp gives instant feedback on playing, award winder and players unlock the next level or pieces when succeeded in the previous level and move up in rank. Children are encourages to progress up in chapters, unlock new songs and raise their difficulty level along the way and this has made Joytunes engaging. They can learn songs step by step, from easy to intermediate and have access to practise options while being able to personalize their learning experience. Avatars, points, ranks and all sorts of eye catching reward for the gamer is rewarded when they hit the targeted of right notes in a row.



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1.8.4 Motivation

According to Gredler, Broussard and Garrison (2004), the term motivation brings the meaning of behaviour or an attitude that will encourage us to do or not to something. Motivation refers to behaviour which includes the combination of one's views, beliefs, interests and actions that are characterized by one's desire and willingness (Guay, Ratelle, Roy & Litalien, 2010).

Therefore, Gottfried (1990) said that the key of motivation is one can enjoy on doing something; learning something challenging; curiosity and determination. To add on, Turner (1995) defines motivation is as same as cognitive engagement, where



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high-level of self-regulated learning by a person willingly on planning, monitoring, paying attention and so on.

1.8.5 Independent Learning

Meyer (2010) said that independent learning is the responsibility that involves the understanding of pupils in their learning, being motivated and willing to learn by themselves while collaborate with their teacher in their learning process. Independent learning is also called as 'child or student-centred learning' where pupils take part actively in their learning process and become lifelong learners. The role of interaction between pupil and teacher and the role of information and communications technology (ICT) in learning are both important role in their learning process.

Besides that, independent learning does not mean that pupil learn on their own only, it is refer to the pupil that are able to search assistance from others, such as their teachers, tutors, or peers to supported their learning (Ashford & Cummings, 1983; Damon & Phelps, 1989 in Field, Duffy & Huggins, 2015). University of New South Wales (2013) in Field et al. (2015) mentioned that independent learners not only can manage their studies, but also their time and themselves.



In conclusion, this chapter shows a clear vision of problem and rationale for conducting this study. Research purposes and questions have also been provided. Besides, the significance, limitation and the operational definition of the study have also been shown.



CHAPTER 2

LITERATURE REVIEW



2.1 Introduction

This chapter discusses mainly the literature review, which is related to the topic of the study. The researcher also includes the theoretical framework of the study in this chapter. The next chapter will discuss the methodology of the study.

2.2 Theoretical Framework

The current study was based on the self-determination theory (SDT) by Deci and Ryan (2000) as a framework to engage students in music learning. According to Deci and Ryan, there are two forms of motivation in SDT, which is intrinsic motivation and

