THE BENEFITS AND DRAWBACKS OF USING TABLET-BASED DIGITAL STORYTELLING IN VOCABULARY LEARNING AMONG MALAYSIAN YOUNG ENGLISH AS A SECOND LANGUAGE (ESL) LEARNERS

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Abstract: Vocabulary is one of the most important skills to be mastered in the English language learning as the mastery of vocabulary learning determines learners' efficiency in learning the language. However, mastering the learning of vocabulary poses difficulties to the English as a Second Language (ESL) learners. Hence, it is important to identify the appropriate approaches in learning the vocabulary. This study aims to examine the benefits and drawbacks of using the tablet-based digital storytelling application in vocabulary learning among young ESL learners. Qualitative case study has been employed as the research design of this study utilised interviews, documentation and observations techniques. The participants involved in this study were six 11-year-old ESL learners of different level of language proficiency (high, intermediate and low) selected through purposive sampling. The findings revealed that there were eight benefits and five drawbacks in using the digital storytelling application on tablet to learn vocabulary among the ESL learners. It is found that the use of this vocabulary learning application on tablet is suitable to be used as a vocabulary learning material among the learners. This study is significant to the curriculum planners, educators and learners in planning and determining the materials that is suitable to be used for vocabulary learning among the young ESL learners. The benefits and drawbacks identified are able to inform all the authorities on the possible strengths and weaknesses in using this application to learn vocabulary.

Keywords: Digital Storytelling Application (DSA), vocabulary learning, young ESL learners, tablet-based, benefits of DSA, drawbacks of DSA

INTRODUCTION

One of the most important English language skills to be learned and mastered is vocabulary learning as sentences in the English language are made up of vocabularies. The learning and mastering of vocabulary learning is crucial in order to convey meaning and to be comprehensible to the other English language users. Vocabulary skill is essential to be mastered by the ESL learners as a mean to achieve fluency in the language. According to Wilkins (1972), "without grammar very little can be conveyed, without vocabulary nothing can be conveyed". This is supported by Harmon (2002) and Rupley, Logan and Nichols (1999) who posited that the vocabulary skill is needed for the English language learners to make meaning and interpretation of the English sentences, the higher their mastery of the vocabulary skill, the better they can interpret meaning from the sentences.

However, mastering the English language vocabulary proves to be difficult, especially in memorising new, long and seldom used words. Qian (2002), Mezynski (1983) and Anderson and Freebody (1981) said that the main difficulty of in understanding an English text is to interpret meaning of the new words presented in the text. According to Nation (1990), a learner will need to understand at least 2000 English common words in order to read and fully understand a text. Nation (2001) also posited that in order to achieve comprehension in reading an English text, one needs to possess at least 95% of English words. In addition, according to Lin (2002) and Segler, Pain and Sorace (2002), a lack of vocabulary leads to misunderstanding, misinterpretation and inability to comprehend an English text. Thus, possessing vocabulary skill in the English language is very important as vocabulary is the basic skill to acquire in order to understand and infer meaning from English sentences. Without the vocabulary skill, meaning cannot be inferred from the sentences. Hence, language learning failed to be achieved. Hence, it is important to identify one's learning strategy or learning material which enables learners to learn vocabulary effectively.

The ineffectiveness of using the traditional method in learning vocabulary such as using the textbooks and "chalk and talk" forces the educators and learners to seek alternative teaching and learning approaches which are more fun, creative, innovative and interesting by using graphics, illustrations, audio, videos and movies as the classroom teaching and learning materials (McGill, 2010; Orlova, 2003; Kelly, Kelly, Offner, & Vorland, 2002). It is believed that these teaching and learning materials are able to provide novelty and entertainment in the learning to the ESL learners. In addition, these teaching and learning materials is said to be able to gauge learners' engagement and interest in learning the language.

The integration of the use of technology in the education system is popular among educators and learners. The use of technology in the education setting is believed to be able to cater to the different learning styles and strategies, novelty, creative, fun, and interesting learning environment to the learners. In addition, the integration of technology in the teaching and learning process promotes independent learning among the learners in which learners are given the full responsibility to be in-charge of their own learning. According to Trilling and Hood (1999), technologically oriented activities introduced to the learners must be able to engage the learners into learning, in a different and better way, which will not be able to achieve in utilizing the traditional learning activities. The effectiveness in the teaching and learning process using the technological approach is highly dependent on the degree of engagement of the technologically oriented activities. This is supported by Herrington, Oliver and Reeves (2003) that a successful and effective learning is often based on the engaging factor of the learning activities to the learners, the higher the degree of engagement, the more successful and effective the learning will be.

LITERATURE REVIEW

The Vocabulary Learning

Zimmerman (in Coady & Huckin, 1997) stated that vocabulary is the core to language which is important for language learning. Vocabulary is also known as the words needed to convey messages and meaning from one person to another. Hence, it is essential and important to have competency in vocabulary learning. This is supported by Barcroft (2004) that to use a language fluently and grammatically perfect are highly dependent on learners' knowledge on the language and vocabulary competency. Second language (L2) proficiency is believed to be highly dependent on learners' vocabulary competency as the larger the vocabulary knowledge of the learners, the more proficient the learners are in the language as compared to learners with limited vocabulary knowledge (Meara, 1996). Similarly, Carrell and Eisterhold (1983) mentioned that in order to activate the learners' schemata in reading a language text, the learners are provided with the appropriate vocabulary in the text which would be very useful in activating the learners' schemata in reading the text. Hence, this indicates the importance of having high competency in vocabulary in L2 learning.

The vocabulary learning is one of many problems or difficulties faced by the English language learners. As stressed by Nation (2001), the inability of the learners to be proficient and competent vocabulary users poses difficulties to

the learners to learn the language effectively. Vocabulary is not only the most important element to be mastered in order to be able to learn and use the English language effectively, but it is also the language element which learners commit most errors on (Segler, 2001). Even though learning and mastering the vocabulary is very important by looking at its vital role in contributing to effective English language learning, the learning of vocabulary has never been emphasised in the English language teaching and learning process. Vocabulary is expected to be able to be self-acquired by the learners with their own effort. Hence, it can be observed that there were no emphasis on the teaching and learning of vocabulary in the language classroom.

This is evident as study conducted by Fauziah and Nita (2002) showed that of all the nine language activities used in the study to investigate the frequency of use of language activities in the ESL classrooms, vocabulary activity was ranked at number four. In another study done by Teh (2004), vocabulary activity is ranked to be one of the lowest in the list of preferred learning activities of the learners. As posited by Low (2004, cited in Zulfa, 2005), the learning of vocabulary is less emphasized and less preferred by learners is also due to the limited exposure to the language, inability to make English language learning an interesting activity and the negative perception towards the learning of the English language. Research conducted by Hema, Noridah and Noor Zainab (2012), and Zuraina, Mukundan, Roselan and Ahmad Fauzi (2012) revealed that Malaysian learners displayed great interest in learning vocabulary in the ESL classroom when technology is put into use. Thus, vocabulary mastery requires one's great interests, needs and motivation in learning the words in a language and plays a very crucial role in effective language learning.

The Use of Digital Storytelling Application in Vocabulary Learning

There are many strategies suggested in vocabulary learning. Two of the strategies proposed by Hunt and Beglar (1998) are guessing the meaning from the context and teaching the learners on how to use the dictionaries. These two strategies are put into consideration in the learning of vocabulary in this study. In order to get the learners to learn the vocabulary by guessing the meaning from the context and to get the learners to use the dictionary, the use of digital storytelling is put forth in this study.

Digital storytelling is put into use as a strategy to engage learners in language learning. Wright (2000) posited that stories are able to help learners to comprehend the language in order to achieve meaningful language learning. Hence, storytelling is an important tool used for learning purposes, especially for the learning of the

English language. The use of digital storytelling enables implicit teaching of vocabulary to be conducted in an interesting and attractive way. As mentioned earlier, the factor of attractiveness of the learning materials plays a major role in engaging learners' interest in learning the ESL vocabulary (Guthrie & Wigfield, 2000; Little, 1991). The use of digital storytelling not only is able to gauge learners' interest in learning but also enables learning to be carried out implicitly in a fun and relaxing way. According to Kajder (2004), Lambert (2010), McGeoch (2010), Ohler (2008) and Robin (2008), digital storytelling is short narratives involving images, voiceover narration and background music. Digital storytelling enables stories to be told from page to page using the multimedia such as images, graphics, sounds, music and many more. With the advancement of technology, availability of online tools and the largely available software, digital storytelling can be created and used for the purpose of language teaching and learning. Digital storytelling does not only tell stories digitally, it tells stories on-the-go as well.

The use of digital storytelling helps to promote interactiveness and flexibility among the learners. Feedbacks or responses can be obtained immediately and this helps learners to retain and recall input learned better. Besides, learners will be exposed to more learning opportunity as learning is now, not restricted and limited to in-class learning and classroom-hour learning. Digital stories are taking over the role of the traditional verbal and printed stories in conveying and sharing information in language learning. The manner on how the stories are told has been changing from storytelling driven textbooks to digitalised storytelling. Lambert (2003) stated that digital storytelling is a great effective learning tool and learning material in the learning process. The use of digital storytelling as the learning material in the classroom is believed to be able to attract the learners who are now called the "Digital Natives" (Prensky, 2001a, 2001b) to learn the language element, the vocabulary. The use of digital storytelling is able to engage learners in learning as it provides motivation to learners to learn "because of the up-to-date ICT technologies and multimedia functions, which can appeal to young generations" (Tecnam, 2013, p. 27). The use of technology in learning possesses little or no difficulties to the learners as technology is part of the learners' lives now. Hence, the use of digital storytelling on tablet is able to engage them to learning as learners like to use technological devices and use them almost all the time.

The Challenges of Using Tablet-Based Digital Storytelling in Learning

Although digital storytelling has great potential in facilitating ESL language learning, digital storytelling has some limitations that educators and learners need to look into when employing digital storytelling approaches in the ESL learning. Time factor is a challenge faced by the educators in using digital storytelling in

learner's learning process. Creating digital storytelling can be very time consuming, especially if the educators are not technology savvy or when the educators wanted to create high quality digital stories (Jacobsen, 2001). The longer the digital stories and the more interactive the digital stories, more time is needed to create the digital stories. Limiting the duration of the digital storytelling and the features of the digital storytelling will also be limiting the learners to the real features of the digital storytelling. Hence, educators have to indulge in longer time to create a standard digital storytelling.

Besides, digital storytelling could not escape from being infected with internet bugs and viruses. Thus, educators need to spend extra time to solve and remove the bugs and viruses from the digital stories to achieve a bug-free and virus-free digital storytelling (Hofer & Swan, 2006). Removing bugs and virus are not an easy task especially for the educators who are not technology savvy. Hence, it is time consuming in order to produce a perfect application – bugs and virus free. Rounds and rounds of testing (evaluation) on the application need to be carried out until the application is fully and perfectly functional.

The use of digital storytelling requires the use of technology. Technology seems to be posing a challenge to the use of digital storytelling. Some educators and learners may prefer to teach and learn using the traditional method rather than digital storytelling as both educators and learners need to be able to have technological skill in order to teach and learn through digital storytelling (Parker, 2010). Not all the educators and learners possess efficiency and skill in handling technological devices (Sheingold & Hadley, 1990). Most of the veteran educators are not being exposed or taught to use the technology in teaching. Hence, this poses difficulties for the educators to teach using the technological devices.

Affordability of the technological device, the tablet, is also a factor that poses a challenge to the use of digital storytelling. Most of the schools in Malaysia do not provide tablet computer to the learners, therefore, learners need to buy their own tablet computers in order to be able to use the digital storytelling in learning. Affordability of the tablet is a problem to most of the learners as not all of them are able to afford a tablet (Dogan & Robin, 2008). Hence, this hinders learners to use digital storytelling for learning purposes.

Besides, according to "What is the Average Battery Life of a Tablet Computer?" (http://www.tablets.findthebest.com), tablet's battery life is at most 8 hours which makes it insufficient to be used in classroom learning. It will be disrupting the flow of the lesson in the classroom if the tablet is running out of battery. In order to ensure that the tablet will be able to function all the time, learners have to charge

the tablet whenever they are not using them. This is to prevent the battery of the tablet to go flat when the learners are using the tablet for learning. It will take hours to recharge the tablet once the battery go flat and this will distort learners' learning.

Even though challenges in using digital storytelling for classroom teaching have been highlighted in several researches, Sadik (2008) deemed these challenges as only excuses made by the educators who are lacking in enthusiasm and vision in using the technology for teaching and learning purposes as all these challenges can be overcome. The government, policy makers, curriculum planners, the school authorities, the educators and the learners should cooperate and discuss among each other on how to make learning using technology be the best for the learners.

The main objective of the study is to examine the benefits and drawbacks in utilising digital storytelling application on tablet to learn vocabulary among the Malaysian young ESL learners. The findings from this study are able to provide in detail the learners' responses on the advantages and disadvantages of using tablet-based digital storytelling in the learning of vocabulary among the primary five learners.

MATERIALS AND METHODS

Research Design

In this study, qualitative case study was employed as the research design. Hence, the main instrument in this study is the researcher as the researcher plays the role of observer as participant. Qualitative case study is being employed in this study as a mean to obtain in-depth and detailed responses from the young ESL learners on the benefits and drawbacks of using the digital storytelling application in vocabulary learning.

Participants

The participants involved in this study were six young ESL learners of the age of 11, from a public primary school in Perak, Malaysia. The participants were selected using purposive sampling method based on two criteria – learners' age (11-year-old) and learners' level of English language proficiency (high-obtained Grade A in their previous English language examination, intermediate-obtained Grade B, and low-obtained Grade C and below). The participants are referred to as S1, S2, S3, S4, S5 and S6 in this study. The details of research participants are listed in Table 1.

Table 1. Details of research participants

Research participant (11-year-old)	Level of English language proficiency
Student 1 (S1)	High
Student 2 (S2)	High
Student 3 (S3)	Intermediate
Student 4 (S4)	Intermediate
Student 5 (S5)	Low
Student 6 (S6)	Low

Ethical Precautions

Prior to conducting this study, permissions from several authorities were sought. First and foremost, permissions were sought from the state's Education Department, followed by the Headmistress of the public primary school which the learners were used as the sample for this study and finally, permission was sought from the parents of the six learners for their consent to involve the learners in this study as the learners have not reached the legal age for consent for research, the learners were all minors.

The Tablet-Based Digital Storytelling Application

This tablet-based digital storytelling application was designed and developed based on Mayer's (2001) "Cognitive Theory of Multimedia Learning's" three multimedia instructional principles, namely, the multimedia principle, the modality principle, and the signalling principle. This application is a digitalised storytelling application incorporated with multimedia elements in aiding the young ESL learners to learn vocabulary. The tablet-based digital storytelling application is chosen to be used in the ESL young learners' learning of vocabulary as it is believed that the incorporation of multimedia elements enables learners to learn vocabulary more efficiently and effectively. The multimedia principles enables the learners to learn vocabulary better using both visuals and printed texts rather than using only text alone, whilst the modality principle stated that learners should be able to learn better from both visuals and audio rather than from visuals and printed texts. On the other hand, signalling principle stated that highlighting essential items in the learning content would be able to make learners learn vocabulary better. Hence, this digital storytelling application is incorporated with visuals, audio, hypertext, multimedia glosses and texts.

The multimedia principle and the modality principle were being implemented by the digital storytelling application through the integration of colourful images, animations, voiceover narration, songs and texts in the digital storytelling, whereas, hypertext and multimodal glosses are being integrated in the digital storytelling in implementing the signalling principle. Multimedia glosses are glosses integrated with audio and printed text to increase the comprehension of the young ESL learners. These principles implemented on this tablet-based digital storytelling aid the learners to achieve the learning objectives in increasing learners' attention, interest motivation and retention of the digital stories and vocabularies learned in the application.

The learning of the vocabulary through the implementation of these three multimedia instructional principles of Mayer's (2001) "Cognitive Theory of Multimedia Learning" enables implicit learning of vocabulary among the learners. Implicit learning of vocabulary are being carried out when learners are attempting the digital stories such as the display of multimedia elements - colourful graphics, voiceover narration, moving animations and audio. Vocabularies can be learned through the multimedia glosses (the definition, spelling and pronunciation of the vocabularies will be provided verbally and in printed text) in the form of a prompt dialogues box which will pop up with the initiation of a touch on the highlighted vocabularies. There are two vocabularies exercises provided at the end of each digital story.

Pilot Study

A pilot test was conducted on three Primary Five learners who were not involved in the actual study. These three learners were of different level of language proficiency – high, intermediate and low, studying in a public primary school in Malaysia. The use of the digital storytelling was exposed to the learners for duration of two weeks where learners were requested to listen and read the first two digital stories in the application. By the end of the second week, the learners were interviewed in order to check on the feasibility of the interview questions. Simpler terms were used to replace the difficult terms used in the interview questions to enhance learners' comprehension of the interview questions. The pilot test was successfully conducted with the learners.

Data Collection

In this study, data were collected from the learners through interview, documentation and observations. In this qualitative case study, learners were exposed to the use of the tablet-based digital storytelling application for the duration of eight weeks

to be observed and were required to record their usage of the digital storytelling on the logbook daily. Interviews were conducted twice with the learners by the end of the eighth week. Data obtained from the interview, documentation and observations were analysed manually and by using Nvivo software before the data were triangulated and validated by two inter-raters.

The Data Analysis Method

The qualitative data was analysed both manually (examined closely by the researcher personally without the help of any digital or technological software) and by using Nvivo software. First and foremost, the data were analysed systematically and went through the process of data reduction and data coding. Insignificant data were reduced and remaining data were coded based on themes derived from literature review and some themes were emerging themes from the data collected. Two human inter-raters were employed in ensuring the data validity and reliability.

RESULTS

Research Objective 1: To Examine the Benefits of Using Tablet-Based Digital Storytelling Application in Learning Vocabulary Among the Young ESL Learners

Data derived from interviews, logbook entries and observations revealed that the use of the digital storytelling application on tablet in vocabulary learning was beneficial to the young ESL learners. There were eight benefits of using the tablet-based digital storytelling application in vocabulary learning identified from the data obtained from the learners. As posited in the interview sessions, learners displayed liking towards the use of this digital storytelling application in describing their experiences in using the vocabulary learning application. The eight benefits of learning the vocabulary utilising the digital storytelling application as stated by the learners: (i) the multimedia elements, (ii) motivational, (iii) positive learning experience, (iv) the use of tablet as the learning tool, (v) new learning method, (vi) promote independent learning, (vii) replacing the traditional learning materials and tools, and (viii) language learning impacts. The benefits of using the digital storytelling application on tablet were illustrated in Figure 1.
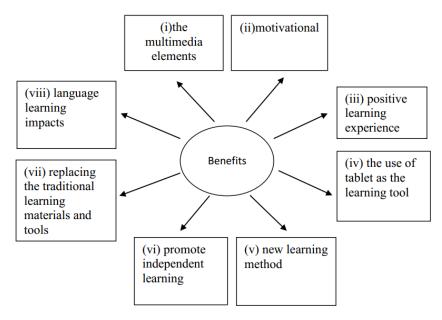
Figure 1. The benefits of using the digital storytelling application on tablet in vocabulary learning

The learners were impressed and portrayed positive attitudes towards the use of the digital storytelling on tablet to learn vocabulary. The learners highlighted that they "like" to use the digital storytelling application on tablet to learn vocabulary as the use of this application was beneficial to the learners. The eight benefits of using the digital storytelling application on tablet were elaborated as follows.

The multimedia elements

First and foremost, the integration of the multimedia elements in the digital storytelling application enables vocabulary learning to be conducted. Learning is made possible, easier and more convenient equipped with the multi-featured, multi-functioned and highly interactive features of the digital storytelling application. The integration of multimedia such as audio, graphics and animations made the application highly interactive as learning is enabled with only a finger-tap on the screen of the tablet as tablet is equipped with the touch screen functionality. Learning is immediate without delay as learning input can be delivered and conveyed to the learners instantly. As mentioned by the young ESL learners:

> "I especially love the pop-up words. It helps me to learn words in an interesting and enjoyable way" (S2, I1: L29–L30)

"Animation and pop-up when we tap on it, it will give us words" (S5, I1: L73)

"…so I just tap and the words will pop-up. It is very useful, easy and effective for learning" (S1, I2: L35–L36)

"Yes, because it has got picture and voice and I can do the spelling test" (S3, I2: L26)

"…I can learn a lot of words and it is pop-ups" (S6, I2: L28)
"… because it is more convenient and only need to slide without needing to turn the pages of the textbook" (S4, I2: L67–L68)

Data obtained from the interview sessions showed that the incorporation of the multimedia elements in the vocabulary learning application on tablet is highly interactive and interesting. The application's interactivity is increased equipped with the multi-featured and multi-functioned features. Vocabulary learning is made easier and more efficient with the use of this digital storytelling application as compared to the classroom learning of vocabulary.

Motivational

As stated by the learners, the use of the digital storytelling application had been said to be able to motivate learners to learn vocabulary and the English language as a whole. Learners displayed great interest in learning after being introduced and exposed to the learning of vocabulary using the tablet-based digital storytelling application. Learners were more eager and interested in learning utilising this learning application. Learners possessed high enthusiasm in learning the vocabulary and posited that the use of this digital storytelling application is highly motivational:

"Yes because I want to read the stories again and again. I like the animation, colours and the pop-up when I touch the screen. So interesting!" (S2, I1: L18–L19)

"Yes, I want to read more and I enjoy reading the story" (S5, I2: L32)

"Yes. It motivates me from the start and I would rate it four-and-half stars to five stars"(S1, I2: L31)

> "Yes, it will motivate me to learn English. I can straight tap and access the information whenever I want" (S6, I1: L78–L79)

> "Yes, I will read the stories again and again, learn and memorize meanings of more words" (S4, I1: L31–L32)

> "Yes, if there are more stories then I will continue reading and learn the language" (S4, I1: L78)

Similarly, learners' enthusiasm in learning can also be observed during the observation learning sessions and was recorded in the observation rubric (See Figure 2).

Figure 2. Observation Rubric (S4: 15th observation learning session)

Looking at the data collected from the interviews with the learners and the data obtained from the observation rubric, the findings indicated that the use of the digital storytelling application on tablet was able to motivate vocabulary learning among the learners. Learners were eager and keen to learn and had started to take the initiative to learn without being forced to after being exposed to the learning of vocabulary using the digital storytelling application.

Positive learning experience

The use of this digital storytelling application on tablet provided an interesting and fun atmosphere for the learning of vocabulary. The learning of vocabulary is not as rigid and as structured anymore with the use of this vocabulary learning application. The high interactivity, multi-featured and multi-functioned specialisations of this application enable the vocabulary learning to be interesting and fun. Hence, learners are interested to learn vocabulary utilising this vocabulary learning application. As posited by the learners;

"It is interesting. The colours, the animation, the reading voices and pop-ups are interesting." (S2, I1: L42–L43)

"Interesting – the content of the story is creative" (S5, I2, L81)

"It is really beneficial because it is very nice and good for me to learn. It is fun. (S1, I1: L91)

"… it is fun when we learn lots of new words and see interesting things in the tablet" (S3, I1: L92–L93)

"I will spend more time learning English because I can keep on reading the stories and it is fun" (S6, I1: L30–L31)

"Learning is a happy process – because the stories are interesting"(S4, I2: L41)

It is obvious that the learners were attracted to use the digital storytelling application on tablet in vocabulary learning as they found the use of this application on tablet interesting, given the multi-featured, multi-functionality and interactivity of the application.

The use of tablet as the learning tool

Another strength of using digital storytelling application on tablet to learn vocabulary as detected by the learners was the high portability and mobility of the tablet in facilitating the digital storytelling. Data derived from the interview sessions with the learners revealed that the use of the digital storytelling application on tablet was highly portable and mobile. Learning of vocabulary is made flexibility as the use of tablet enables the application to be used and accessed by the learners anytime, anywhere at the learners' own convenience. Learning is no longer restricted or limited and this provided the learners with more learning opportunities. As mentioned by the learners on the high portability and mobility of the digital storytelling application on tablet due to its mobility feature during the interview;

"It is light and I can carry it anywhere" (S2, I1: L43)

"I can learn vocabulary anytime, anywhere with just a tap" (S1, I2: L63)

"… because it [tablet] is handy" (S4, I1: L17)

This is also supported by the learners' daily logbook entries which informed the researcher on the location of the learning being conducted. The logbook entries of the learners revealed that learners stated more than one spot/ place which the learners normally use the digital storytelling application on tablet for learning at home.

As in the learner's logbook entries, the examples on how learners recorded their daily entries in the logbook are presented in Figure 3 and Figure 4.
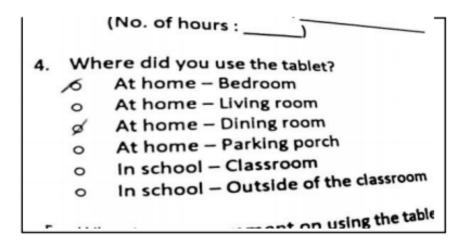

Figure 3. Logbook entries (S1: Day 44)

Table 2. Natural settings where learning took place

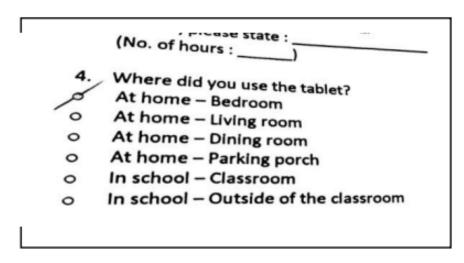| Learners	Place spotted to be in while using digital storytelling application on tablet to learn vocabulary
S1	Bedroom, living room, dining room
S2	Car porch, bedroom, living room
S3	Bedroom, living room
S4	Car porch, bedroom, living room, dining room
S5	Bedroom, living room
S6	Car porch, bedroom, living room

Figure 4. Logbook entries (S5: Day 34)

Table 2 showed that the places where the learners were at while indulging in learning using the digital storytelling application on tablet at home as stated by the learners in their daily logbook entries. All of the learners stated that they attempted the vocabulary learning via the use of digital storytelling application on tablet at more than one spot in the house – be it the car porch, on a swing, the bedroom, the living room or the dining room. Knowing the places/spots where the learners attempted the vocabulary learning using the digital storytelling on tablet was important in validating the portability and mobility of the application on tablet. The higher the portability and mobility of the application on the modern device used, the greater the opportunity of learning among the learners. Learning would not only be limited to a certain place and time anymore, but more to learners' convenience and leisure. Furthermore, during the observation learning sessions, it was clearly shown that there is no pre-determined or fixed place for the learning using the digital storytelling application. Learners took the liberty to be scattered around the house (as researcher did not restrict the learners to only be at one spot in the house in the process of learning the vocabulary using the digital storytelling application on tablet) as the learners were seen to be in the bedroom, the living room, the car porch, and the dining room. In the observation learning sessions, learners were given the freedom to choose wherever they want to be while attempting the digital storytelling application on tablet as the researcher wanted to create the research setting and atmosphere to be as similar to the home of the learners. In this way, the learners would behaved normally as how they would behave at home when using the application on tablet, as the use of this vocabulary learning application on tablet which aimed to create learning opportunities after-school-hours at the learners'

own space and time. Thus, it can be summed up that one of the characteristics of the tablet – high portability and mobility are able to benefit the learners in terms of providing more learning opportunities to the learners. The learners were able to learn at one's own space and time, without any restrictions and limitations when learning the vocabulary using the digital storytelling application on tablet.

New learning method

The learners posited that the use of digital storytelling on tablet in vocabulary was a new method of vocabulary learning. Hence, this new method of vocabulary learning will be able to provide novelty to the current vocabulary learning. It is believed that novelty is one of the good criteria in attracting learners to learn. Novelty creates a new way of vocabulary learning, new style, utilising new learning materials. Everything is different from the current method of vocabulary learning. Hence, it was making a shift from the traditional vocabulary learning method to a new method of learning vocabulary. In other words, it is providing a breath of fresh air in vocabulary learning as compared to the traditional, dull and boring method of vocabulary learning. With learners acknowledging this new method of learning, it is hoped that this new method of vocabulary learning would be able to gain and increase the learners' interest in learning vocabulary. By far, the data collected from the interview sessions indicated that this new method of vocabulary learning had been gearing well to its objectives and purpose. As posited by the learners:

> "…it is a modern kind of vocabulary learning" (S2, I2: L57)

> "It is the modern way of learning" (S1, I1: L35)

Hence, these learners felt that the use of digital storytelling on tablet was an alternative way of learning from the traditional method of vocabulary learning. This new method of learning was able to attract learners' interests and attentions in learning as it was new and interesting as compared to the traditional vocabulary learning method. Thus, the use of digital storytelling on tablet is able to promote and increase learners' interest in vocabulary learning.

Promote independent learning

Other than all these benefits of using digital storytelling on tablet to learn vocabulary among the young ESL learners, there is this one obvious benefit of using this application on tablet for vocabulary learning – the use of digital storytelling application on tablet was able to foster independent learning among the learners.

Learners were indirectly being introduced to independent learning as the use of this application on tablet promotes learning independently, at one's own effort and initiatives, at one's own time, pace and space without the help of others. A learner also has the ability to handle one's own learning without depending on the input delivery or presentation by someone else, mainly teachers. Independent learning among learners can be observed during the observation learning sessions with the learners and through the responses of the learners in the interview sessions. As mentioned by the learners,

> "I can learn vocabulary on my own just with the touch of my fingers" (S2, I2: L74)

> "… I can read the stories on my own and finish reading it easily" (S5, I2: L58)

As mentioned by some of the learners, the use of the digital storytelling application on tablet indirectly, fostered independent learning among the learners. Learners, unknowingly and without realising it, cultivated independent learning in them. This is also similar with the findings obtained from the observation rubric. Based on the criteria judged on the observation rubric, all learners were judged to be very independent in learning via the use of the digital storytelling application on tablet (see Figure 5).

Figure 5. Observation rubric (S3: 9th observation learning session)

During the observation learning sessions, learners were very independent in learning the vocabulary. Most of the time, learners seemed to be learning independently, listening, reading and figuring out the answers for the exercises on their own, without discussing with their friends. They seemed to be very confident on what to do and were able to take charge of their own learning. Learners were very sure of what to do in each of the observation learning sessions without asking for help from the researcher. Hence, it was clear that the use of the digital storytelling application was able to promote independent learning among the learners in the process of learning the vocabulary.

Replacing the traditional learning materials and tools

This digital storytelling application on tablet to learn vocabulary is believed to be able to help overcome the shortcomings of classroom vocabulary learning. This is crucial as the use of this application is able to make vocabulary learning more effective than before. Vocabulary learning process in the classroom is where the teacher would be delivering the learning input to the learners during the English language lessons. During the interviews with the learners, the learners pointed out that the vocabulary learning in the classroom was less effective. Hence, the learners, after being exposed to the use of this digital storytelling application on tablet to learn vocabulary out-of-the-classroom setting and after-school-hour period, had named some possible ways on how the use of this vocabulary learning application was able to help in overcoming the shortcoming of traditional vocabulary learning in the classroom. The learners voiced out that;

> "…we do not need to carry books and the teacher does not need to explain the words" (S5, I1: L22–L23)

> "when students forget to bring books, time will not be wasted" (S5, I1: L91–L92)

> "…it is like the 3-in-1 (a dictionary, a textbook and an apps in one)" (S1, I2: L19–L20)

> "…easy when using the tablet even in a noisy classroom" (S4, I1: L97)

> "I do not have to use a dictionary to find meanings of word. It is popup words" (S4, I2: L28)

Most of the shortcomings of the traditional vocabulary learning mentioned by the learners above were about the shortcomings of the educator's role in conveying and delivering input for vocabulary learning. Learners hoped that the use of digital storytelling application on tablet for the vocabulary learning would be more effective and able to cater to the learners' needs in delivering the learning input. This digital storytelling application on tablet also provided conveniences to the learners as a learning material and tool. The use of the digital storytelling application on tablet was able to cater to the learners' conveniences by replacing the heavy textbooks used for learning in the classroom. As mentioned in the interview sessions, the use of this application on tablet was able to lessen the learners' burdens and problems in bringing heavy bags to school. Learners posited

that with the use of this application on tablet, there will be no more heavy bags to school and learning would not be disrupted with problem of not bringing books to school. The learners were in full favour to use this application on tablet as the use of this application utilised the use of tablet which in the learners' opinion was able to lighten the learners' burden in replacing the textbooks for learning purposes. Replacing textbooks with tablet was one of the few things voiced out by the learners during the interview sessions as the learners hoped that the use of the digital storytelling application on tablet would be able to be infused into the learning in the classroom.

Language learning input

There was one obvious and clear benefit in using the digital storytelling application on tablet to learn vocabulary among the learners. Besides improving the learners' vocabulary competency, the learners mentioned that there were improvements in the learners' listening, speaking, reading and writing skills. The learners had been telling the researcher during the interviews on the language learning improvements that the learners were experiencing after being exposed to the use of the digital storytelling application on tablet to learn vocabulary. Although the main purpose of the use of this application on tablet was aimed to help to improve learners' vocabulary competency, but indirectly the learning of vocabulary was also improving the learners' proficiency in listening, speaking, reading and writing skills. As revealed by the learners regarding the language learning impacts gained with the use of the digital storytelling application on tablet:

> "… I will surely learn more. There are many new and old words with their meanings that I can learn. I can also listen to the stories and improve my pronunciation" (S2, I1: L33–L34)

> "… I can learn more and also use the tablet for learning new words and improve my reading and spelling" (S5, I1:L28–L29)

> "I listen and learn to talk to others using good English (S1, I1: L75)

> "…I like to learn more words for speaking and reading as well" (S3, I1: L74)

> "… I can learn more words…" (S6, I1: L26)

> "It helps me to speak in English" (S4, I1: L86)

Based on the data collected from the interview sessions with the learners, the use of the digital storytelling on tablet in vocabulary not only bring improvements to the language learning, but also taught the learners on grammar and moral values. Besides this, learners also confessed that the use of this application on tablet enabled them to pass the examinations with flying colours. They can also join English language competitions as they were equipped with higher language proficiency and mastery. Thus, it was clear that the use of this application on tablet did bring improvements and assisted learners in their language learning.

Research Objective 2: To Examine the Drawbacks of Using Tablet-Based Digital Storytelling Application in Learning Vocabulary Among the Young ESL Learners

Besides examining the pros of using the digital storytelling application on tablet in vocabulary learning among the young ESL learners, the researcher was also interested in finding out its drawbacks. After examining all the data collected from the interviews, learners' logbook entries and observation sessions, the researcher detected some cons or possible cons of using this application on tablet as revealed by the learners during the interview sessions.

The drawbacks of using this digital storytelling on tablet were:
1. Boredom due to the excessive learning of the application on tablet.
2. The addiction to the use of mobile device and application.
3. Addictions led to bad health.
4. The limitation on the number of vocabularies and stories to be read.
5. The short lifespan of the devices' battery.

The mind map in Figure 6 shows the drawbacks posited by the learners in using the digital storytelling application on tablet to learn vocabulary. Only some of the learners detected these drawbacks mentioned. The rest of the learners had not detected any drawbacks. However, the researcher thought that it was wise to look into the drawbacks mentioned by a few of these learners so as to better improve the usage of this vocabulary learning application on tablet. This can increase the effectiveness on vocabulary learning for the benefits of the learners.
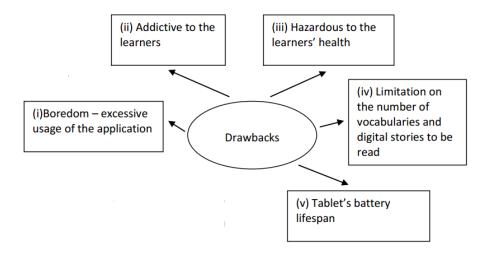
Figure 6. Drawbacks of using digital storytelling application on tablet in vocabulary learning among young ESL learners

Boredom due to the excessive learning with the application on tablet

One of the learners, S1 mentioned that over-usage, excessive usage and repetitive usage of the digital storytelling application on tablet would cause boredom to the learners,

> "Normal, after watching many times already, you will get bored"
> (I2: L83)

However, studies done by researchers such as Mukundan and Anealka (2007) posited that acquisition of new vocabulary among the learners is very much dependent on the repetition of words as "words stand a good chance of being remembered if they have been met at least seven times over spaced intervals" (Thorndike, 1973, p. 24). Hence, the repetitive or excessive usage might seemed to be a drawback in using this application on tablet for vocabulary learning for S1 but at the same time, repetitive usage of the digital storytelling application on tablet is believed to be a way to enhance learning among the young learners.

Addiction to the use of mobile device and application

Besides, S1 also mentioned about the cons of one getting addicted to the use of the digital storytelling application on tablet. S1 stated in the interview that,

"… Maybe if we get addicted, that's not good at all" (I1: L80)

It is believed that over-use of this application on tablet did not only cause boredom among the learners, it also caused addiction among the learners. The application on tablet's high user-friendliness made it really easy to be handled, even by these young learners and these young learners found out that the use of modern devices in learning was very interesting. Hence, their interests in using this digital storytelling application on tablet in vocabulary learning, if it turned ugly, would be an addiction to the learners which would lead to very bad consequences to the young learners such as high dependency on the application on tablet for learning. Such high dependency on the use of the digital storytelling on tablet is bad for many reasons; one of the reasons is hazardous to the learner's health.

Hazardous to the learners' health

High dependency or addiction to the use of the digital storytelling application on tablet could be very hazardous to health just like what was posited by one of the young learners, S1. S1 posited that excessive use or learning using the digital storytelling application on tablet would be very bad for eyes.

"…But sometimes after you used it too much, you will feel your head getting worst and worst, eyesight get worst" (I1: L61–L63)

"Everyday watch it, at night watch it without light, our eyes will hurt" (I1: L80–L81)

It is true how excessive usage or intake of any form could lead to bad consequences. After knowing or learning how bad the excessive usage of the application on tablet could do to the learners, it is advisable for the learners to use the application moderately and wisely and not to abuse it.

Limited number of vocabularies and stories to be read

Another learner, S5 mentioned on the inability of this digital storytelling application to function optimally and effectively in learners' vocabulary learning as S5 found out that the number of vocabularies to be learned and the number of digital stories to be read was limited. S5 mentioned that:

"However, the tablet only has eight stories whereas storybook has a set and it has link to recommend me to buy more books"(I1: L81–L82)

In this case, it is true that only words highlighted in red were provided with the definitions, spellings and pronunciations. Other than these words, words which were not highlighted in red were not provided with the definitions, spellings and pronunciation as learners were assumed to have learned these words before. As mentioned in the chapter before this, the chapter on application development, vocabulary chosen to be learned in the digital stories were based on the survey done on the 11-year-old learners. In addition, S5 also mentioned about the lack of digital stories to be attempted as this application which only consist of eight digital stories. Consequently, learners would not be able to learn more vocabularies as there were only eight digital stories provided. As for this study, learners were only provided with a digital storytelling application consisted of eight digital stories to be used on the platform of the tablet developed by the researcher and two programming experts. However, this drawback could be overcome in the future as it is believed that many more digital stories would be made available for self-download when the use of digital storytelling has been well accepted by the learning society.

The short lifespan of the devices' battery

In terms of technicality, S5 was doubtful on how long could a tablet be used in facilitating the digital storytelling application to be used for vocabulary learning as the multimedia features of the application needed the battery to function well. Most of the tablets in the market have an average battery lifespan of 8 hours if it had been fully charged which is sufficient for one-time learning. It is really rare that a tablet could only last for 1–2 hours of use if it is fully charged. As posited by S5:

> "[storybooks] I can read longer duration and it would not waste battery" (I1: L59)

Hence, S5 felt that durability of the tablet's battery posed as a factor which deterred smooth learning of the vocabulary among the young ESL learners.

DISCUSSION

The multimedia elements used in the application such as the moving animations, colourful graphics, voiceover narration and audio is one of the benefits of using digital storytelling application on tablet among the young ESL learners. This is supported by Tecnam (2013) who posited that digital storytelling is engaging to learner's learning "because of the up-to-date ICT technologies and multimedia functions, which can appeal to young generations" (p. 27). This also echoes the

Modality Principle (Mayer, 2001), as Modality Principle stated that learners will be able to learn with visual and audio rather than visual alone. The use of the tablet as the learning tool in the study made learners feel interested to learn vocabulary using the digital storytelling application. According to McConatha, Praul and Lynch (2008), Motiwalla (2007), Patten, Sanchez and Tangney (2006), and Thornton and Houser (2005) also stated that learners were excited to be able to use tablet in learning as portable devices such as smart phones and tablet are becoming popular nowadays in assisting teaching and learning. Besides, one of the biggest advantages of using a mobile and portable learning tool in learning is the flexibility of learning. Learning can be conducted anytime, anywhere, at learners' own time and pace. According to Vavoula (2005, p. 11), the use of tablet enables m-learning as "any sort of learning that happens when the learners is not at a fixed predetermined location, or learning that happens when the learner takes advantage of the learning opportunity offered by mobile technologies". The use of the digital storytelling application on tablet in the learning of vocabulary was also used as a mean to supplement or act as a good substitution to the inefficiency and ineffectiveness of classroom's vocabulary learning. According to Price (2012), the use of one tablet is equivalent to the use of hundreds of books, workbooks and exercise books as tablet is able to store these learning materials in one device, thus there is no need to carry physical books, workbooks and exercise books for learning to take place. The utilisation of digital storytelling application and tablet in learning is a new learning method deemed by the young ESL learners. Learners were curious, interested and excited to learn using the new method introduced to them. As posited by Suleyman (2008, p. 35) who stated that the new learning method by using digital storytelling in the learning of vocabulary is capable to "break the monotony of traditional class teaching and is enjoyable and stimulating". It is also important that the use of this application on tablet is able to provide an interesting, attracting, exciting and fun learning experience to the learners as learners are more likely to be interested and motivated to learn vocabularies from the highly attractive and interesting learning materials (Guthrie & Wigfield, 2000). The digital storytelling application on tablet really did serve its purposes in providing vocabulary learning to the learners. The use of the application was able to facilitate implicit learning of vocabulary. The Modality Principle and Multimedia Principle of CTML (Mayer, 2001) enables all three multimedia elements – texts, visuals and audio to be incorporated in this application. In addition, the Signalling Principle of CTML (Mayer, 2001) enables vocabularies to be hyperlinked and turn into multimedia glosses. Furthermore, learners were motivated to learn vocabulary and other English Language Skills such as speaking skill, listening skill, reading skill and writing skill via the use of digital storytelling application on tablet. This is coherent with what posited by Dogan and Robin (2008) once stated that the use of digital storytelling is able to improve learners' learning performance and

at the same time, makes learners develop high interest and eagerness to learn. This is also supported by studies conducted by Ohler (2008), Pitler (2006), Dakich (2008), Sadik (2008) and Morris (2011) that the use of digital storytelling, which is integrated with the use of technology, is able to motivate learning among the learners. This shows that the use of this digital storytelling on tablet develops great interest and enthusiasm in learners, hence the motivation to learn the vocabulary and language.

The findings of the study suggest that the benefits in using digital storytelling application is able to assist the learning of vocabulary among the young learners. The evidence from this research suggests that the young learners were motivated to learn the vocabulary using the digital storytelling application as the digital storytelling application is an interesting and fun learning material to be used. Being motivated in learning is an important factor as learners who are motivated to learn will eventually be more interested in learning which will leads to more learning opportunities (Halvorsen, 2011, in Normann, 2011). It is believed that learners will be able to learn better in a stress-free, low-anxiety environment when the learners' affective filters are lowered while learning the vocabulary through the use of this application. The multimedia elements integrated in the digital storytelling make learning more effective and efficient. Learners' learning can be carried out by utilizing just one technological device and application – the tablet and the digital storytelling application. The Multimedia Principle, Modality Principle and the Signalling Principle by CTML (Mayer, 2001) underpinning the digital storytelling enable learning to take place. The use of all three modes – texts, visuals and audio, makes learning effective for the learners. Learners learn better with the presence of the different modes of multimedia elements mentioned above. Besides, the use of this learning application on tablet enables the learners to learn vocabulary effectively in a fun and interesting way. Learners found that the content of the digital storytelling application is lively, attractive, fun and interesting. Moreover, the learners were able to learn, retain and recall more new words. In addition, the use of this learning application had also indirectly improved learners' other language skills such as listening skill, speaking skill, reading skill and writing skill. This is because all the language features are presented in the application in terms of sentence structure, grammatical sentences, pronunciation of words and others (Koisawalia, 2005). Moreover, the findings from this research show that learners are trained to be more autonomous and independent in learning. Hence, learning is more learner-centred and learners are more independent and autonomous in learning.

Besides all the benefits discussed above, one of the drawbacks is the excessive usage of the application which could lead to boredom among the learners. The

over-use of the application is redundant and boring to the learners as learners would have repeatedly learn the same vocabularies and listen to the same digital storytelling for a number of times. The limited number of digital stories and vocabularies intended to be learned is due to the time and financial constraints in designing and developing the application. In order to design and develop more digital stories and vocabularies to be learned, longer time and more money is needed. This is supported by Jacobsen (2001) who posited that in order to create and produce the digital stories, the process is very time consuming. Besides, the excessive use of this application in vocabulary learning is believed to be able to lead to addiction. Addiction towards the use of this application and mobile device will cause health problem such as sore eyes, headache and lack of sleep. It has been reported by New York Daily News in 2012, there were quite a number of health problems caused by the use of these technological devices such as headaches, blurred visions, sore eyes and dry eyes. But, it is known that vocabulary could only be learned through rounds of repetition and revision (Nakata, 2006). The short lifespan of the device's battery seemed to posing problems in disrupting learners' language. Most of the tablets in the market have the battery lifespan of 8 hours at one-time if fully charged. This echoes with "What is the Average Battery Life of a Tablet Computer?", that the battery life of an average of eight hours makes the technological devices not convenient to be used for learning as it needs constant recharging and demands for power outlets.

Looking at the drawbacks mentioned above, this shows that besides all the pros mentioned, the cons in using the digital storytelling on tablet in the learning of vocabulary cannot be denied. All these drawbacks should be looked into and resolved in order to achieve effective and desired learning outcomes.

CONCLUSION

Based on the study findings, it can be summarised that benefits and drawbacks of using digital storytelling application on tablet in learning vocabulary were able to inform all authorities on the possible strengths and weaknesses of using the digital storytelling on tablet in the learning of vocabulary. In conclusion, the use of this digital storytelling on tablet in the learning of vocabulary is beneficial and motivational in the learning of vocabulary and the English language as a whole and possesses great potential to be used as a learning material and tool for after-school-hour as well as out-of-classroom learning.

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