

Vocab-T: Enhancing Young Learners' Vocabulary

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Abstract

Due to the emergence of the Information and Communication Technology (ICT), the emphasis on its integration in teaching and learning in all schools throughout Malaysia results in some schools especially those in rural areas as they are being challenged with the usage of ICT to the fullest in teaching and learning of English vocabulary due to inadequate facilities. Therefore, this research aims to investigate the potential of using Vocab-T in enhancing pupils' vocabulary. Vocab -T was designed closely to suit various themes based on the existing curriculum. Data was collected using action research design through pre-test and post-test, and satisfaction questionnaire. A set of worksheets and satisfaction questionnaire were given to 50 Year 5 pupils (*purposive sampling*) from two schools in rural area and one school in suburban area in Sarawak, Malaysia. The results from the pre-test and post-test illuminated that there was a positive increment between pupils' achievement. Data from the satisfaction questionnaire showed that the mean percentage for the Likert Scale implying that Vocab-T satisfied pupils' learning styles. Moreover, the findings showed that Vocab-T benefited the teachers in a way that it could be used in various teaching and learning vocabulary activities.

Keywords: Vocab-T, Potential, Enhancing, Effectiveness, Positive Increment

Introduction

Vocabulary is a fundamental part of language learning that the primary school children need to acquire. It is due to the importance of vocabulary in helping them to read and to understand reading texts, to write phrases, sentences or texts, and to speak in and respond to the conversations. Alqahtani (2015) asserts that learning of vocabulary is an important part in foreign language learning as the meanings of new words are very often highlighted, whether in books or in classrooms. He further added by saying that the vocabulary learning is also vital to language teaching and is of paramount importance to a language learner. Oxford and Crookall (1990) state that vocabulary instruction would be at the top of the agenda for language teacher among the difficulties learning in a second or foreign language. Nation (n.d.) addresses that the utmost problem with vocabulary teaching is that only a few words and a small part of what is required to know a word can be dealt with at any one time.

In Malaysia, the integration of technology in education has brought into the usage of several learning materials for the pupils to use in order to enrich their vocabulary. Yunus, et al. (2013) proclaim that ICT could help learners improve their vocabulary and allow them to find out the meaning of the words that they read in the texts. Hawa (n.d.) states that ICT is one of the productivity tool in teaching. In the teaching of vocabulary, the use of technology is one of the demands which is to make the teaching and learning session becoming more interesting, attractive and meaningful. The words and pictures should be presented together which aim is to enhance pupils understanding of the words and to empower their memorization. ICT integration is often ill-implemented in classroom around the world. In 2007, Hew and Brush described that many teachers are aware that ICT integration in teaching can help the students' learning, most of them are still unwilling to integrate ICT into teaching. In 2016, Hassan et al. (2016) describe that the central role of educational technology is to provide additional strategies that can be used to address the seriousness of educational challenges. In addition, the integration of ICT in teaching vocabulary is nearly impossible in primary schools in the rural area in Sarawak. Research has been conducted in response to the assumption that innovation tools replaced technology's use in the classroom will benefit English language learners in their understanding and retention of vocabulary.

As there is an increasing rate on the use of ICT in many school in Malaysia, some schools especially those in rural areas are challenged with the usage of ICT to the fullest in teaching and learning of English vocabulary due to the inadequate facilities. Therefore, this paper aims to investigate the effectiveness of using Vocab-T in enhancing young learners' vocabulary in a suburban school and two rural schools in Sarawak.

The Vocab-T

Originally, Vocab-T was an idea generated from a once famous mobile game, Piano Tiles. This innovation version does not require internet connection for it to operate. Since it is user friendly, it provide huge opportunities to its users to explore the information on it. Piano Tiles is chosen as the original idea of this tool as it provides sufficient opportunity for the teacher to make modifications on teaching and learning. The authenticity of the materials provides the pupils with extra vocabulary, thus improves their vocabulary and empower their proficiency in using the vocabulary with the help of the worksheets which are purposely designed to test pupils' usage of the vocabulary. Vocab-T works as a very essential tool for instructional delivery which an English teacher should have. It emphasises on the learning which is driven by the words and pictures that come together in printed version on canvas. It is to expose and to introduce as much vocabulary as it can to the pupils. In this action

research, the words and pictures are carefully designed and arranged based on three selected themes which were technology, animal and food. The focused skills were reading and writing.

Piano Tiles is a single-player mobile game where the player's objective is to tap on the black tiles as they appear from the top of the screen while avoiding the white. The game will continue in a faster pace as the player scores more points so the game becomes more challenging. Vocab-T, on the other hand, is a tool to enrich pupils' mastery in vocabulary which applies similar concept to the game. The prototype was used as a teaching aid in language learning, particularly during a reading lesson. Similar to the Piano Tiles game concept, which emphasises on accuracy and speed, pupils were asked to identify all the words based on the given theme correctly within a given time limit, as shown in Figure 1.

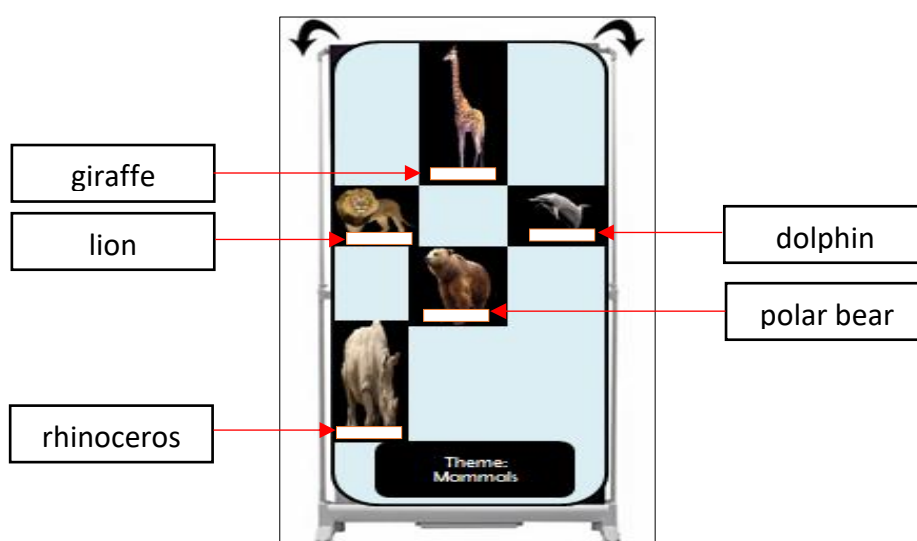


Figure 1: Vocab-T prototype

Vocab-T has detachable banners which were designed to fit three themes which have been selected prior to the language learning for the purpose of this study; technology, animal and food. These themes are presented in the English Language textbooks for Kurikulum Standard Sekolah Rendah (KSSR) syllabus. These themes may vary according to the language content that have been set throughout Year 1 to Year 6. Visual aids were provided to suit pupils' multiple intelligence as it also enables them to understand and retain the vocabulary easier.

Material And Method

Action research design was used in this study. Data from this study were divided into two parts. First, data was derived from the data collection instrument which is in the form of worksheets. These worksheets were distributed to the pupils during pre-test and post-test. Second, data for pupils' satisfaction on the use of Vocab-T was taken from a survey done to all pupils in this study.

A set of four worksheets was distributed to 50 selected pupils (purposive sampling) in three different schools in Sarawak. 20 pupils (10 males and 10 females) were from a school in suburban area in Betong, 15 pupils (8 males and 7 females) from a school in a very rural area in Baram, and 15 pupils (10 males and 5 females) were from a school in very rural area in Julau. These school were labelled as School A, School B and School C, respectively.

A set of four worksheets was prepared and designed carefully to address the potential of Vocab-T in the teaching and learning of vocabulary. Data collected from the instrument was analysed to determine the effectiveness of Vocab-T in teaching and learning of vocabulary. This set of worksheets was given to the participants during pre-test and post-test. The difference in results between pre-test and post-test is recorded as a proof that there is a positive increment between pre-test results and post-test results. It is also to indicate the potential of Vocab-T in the teaching and learning of vocabulary to the pupils.

A few vocabulary-based enrichment activities were designed as a yardstick to measure the pupils' ability to retain the vocabulary learned throughout the language learning. The effectiveness of Vocab-T in enriching pupils' vocabulary through these activities is presented towards the end of this study. To ensure that the pupils have acquired mastery in each theme, they were given complimentary worksheets while conducting the Vocab-T. These worksheets require pupils to give responses such as circling, matching, or ticking, so as not to distract them from the main focus, which is the activity itself. These worksheets are meant to retain their memory towards the newly learned vocabulary and at the same time allow the teacher to observe whether the pupils understand the language content or vice versa. At the post-stage of the lesson, pupils were given comprehension worksheets where they would have to incorporate the newly learned vocabulary in context. The worksheet design was in such a way that pupils needed to fill in the blanks with the correct words, answering comprehension questions or completing sentences using the given words or phrases.

Results

The findings would be discussed in two main sections, which are the comparison of results between the pre-test and the post-test collected from the samples from three different schools – suburban and rural schools, as well as the survey results from the satisfaction questionnaire towards the Vocab-T.

Comparison of Results between the Pre-Test and Post Test

Table 1

Comparison of Results between the Pre-Test and Post-Test.

School/ Location	Pre-Test (Score, %)	Post-Test (Score, %)	Difference (%)
A (Betong)	58.3	88.1	+ 29.8
B (Baram)	66.7	95.4	+ 28.7
C (Julau)	62.5	92.6	+ 30.1

Based on the result in Table 1, it is indicated that there is an improvement in the pupils' vocabulary skills based on the pre-test and post-test being conducted and collected from the samples in three different schools – suburban and rural schools. Pupils in School A showed a positive increment of 29.8% in their score percentage between the pre-test and post-test, while pupils in School B and C showed positive increments of 28.7% and 30.1% respectively. It signifies that the intervention is successful in improving the vocabulary skills among the pupils in all of the three different schools from different settings – suburban and rural.

Figure 2 shows the mean of the differences of score percentage of School A, B and C obtained from the pre-test and post-test results, where it can be seen that there is a

difference of 29.5%, implying that the pupils have improved significantly by using the Vocab-T in the classroom.

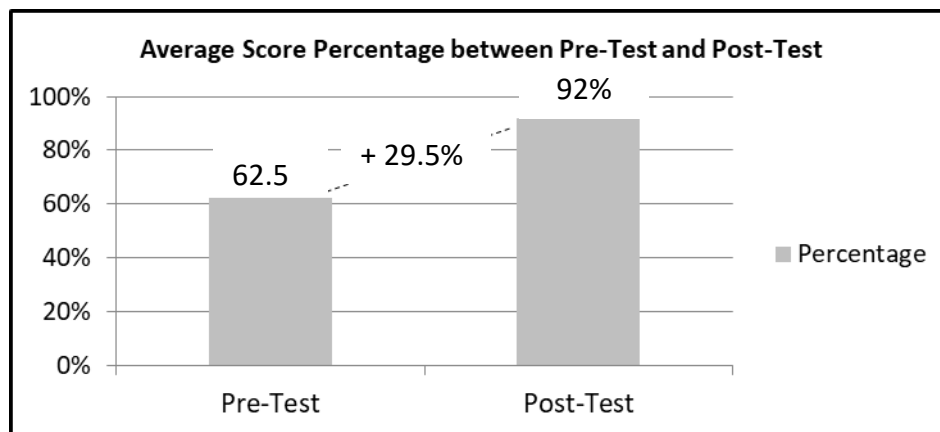


Figure 2. Average Score Percentage between Pre-Test and Post-Test

Satisfaction Questionnaire Results

As shown in Table 2, it was found that majority of the pupils agreed that Vocab-T has brought positive improvement in their learning of vocabulary, where the mean percentage for the Likert Scale Agree and Strongly Agree are 16.4% and 76.8% respectively. Thus, it means that more than half of the pupils feel that Vocab-T is effective in enhancing their vocabulary.

Table 2

Results of the Satisfaction Questionnaire using Likert Scale

No.	Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Learning using Vocab-T is fun.	2 (4%)	0 (0%)	0 (0%)	5 (10%)	43 (86%)
2	I enjoy learning using Vocab-T.	1 (2%)	1 (2%)	0 (0%)	7 (14%)	41 (82%)
3	Vocab-T is interesting.	3 (6%)	2 (4%)	0 (0%)	5 (10%)	40 (80%)
4	Vocab-T is easy to use.	2 (4%)	0 (0%)	1 (2%)	17 (34%)	30 (60%)
5	The words and pictures in Vocab-T are clear and interesting.	1 (2%)	3 (6%)	0 (0%)	10 (20%)	36 (72%)
6	Vocab-T is useful for me to learn vocabulary.	1 (2%)	1 (2%)	1 (2%)	11 (22%)	36 (72%)
7	Vocab-T improves my vocabulary.	2 (4%)	3 (6%)	0 (0%)	13 (26%)	27 (64%)
8	I can write better after learning using Vocab-T.	2 (4%)	2 (4%)	1 (2%)	9 (18%)	36 (72%)

9	Teacher is available to help me on the problems I face in using Vocab-T.	1 (2%)	1 (2%)	1 (2%)	3 (6%)	45 (90%)
10	I will continue using Vocab-T to learn vocabulary.	3 (6%)	0 (0%)	0 (0%)	2 (4%)	45 (90%)

Discussions

The result from Table 1 and Figure 2 showed that the pupils have impacted positively in their performance in vocabulary learning. By implementing the Vocab-T in the teaching and learning of vocabulary, it contributes partially towards autonomous learning as pupils accomplish tasks on their own. Nunan (2000) claimed that autonomous learners have the ability to self-determine the overall direction of their learning, where they can be actively involved in the management of the learning process and exercise freedom of choice in relation to learning resources and activities. In this study, teacher as the researcher did not only play the role of an educator but also as a facilitator to scaffold pupils' development. Vygotsky (1978) explained the concept of Zone of Proximal Development as the difference between what a learner can do without help and what he or she can achieve with guidance and encouragement from a skilled partner. In this research, teacher acts as the skilled partner by providing appropriate assistance that eventually gave the pupils enough "boost" to complete the task.

The data from the post-test result indicated that pupils have shown positive improvement in their vocabulary mastery, particularly in incorporating the newly learned vocabulary in context through sentence completion. Konomi (2014), in her study stated that visual materials enhance the pupils' credibility and makes teaching clear, besides helping pupils to retain more information. In another study conducted by Shabiralyani et al. (2015), it is found that 75% of the students and teachers agree that the visual aids help in clarification of contents. They further explained that visual aids distribute the learners with true knowledge besides concretizing the information to be obtainable and help in making learning practice real, active and vital. In another similar study, John and Yunus (2016) found out that visual aids help to cultivate learning interest in literature among students. Yunus et al. (2013) also agreed that the use of ICT, particularly visual aids, really helps to enhance students' understanding as well as their interest in learning.

Based on Table 2, 86% of the pupils strongly agree that Vocab-T is fun. Wang and Lieberoth (2016), in their study revealed that there was a statistically significant difference in how an audio-visual learning material kept the students' concentration during the lecture and when no audio or points were being used, the concentration was significantly lower compared to the other variants. Furthermore, the result from Table 2 also showed that more than 80% of the pupils strongly agree that Vocab-T is interesting and easy to use. Similar to Kahoot game, Vocab-T encouraged the pupils to be fully engaged as it holds motivational power for them to complete the game within the time limit. Studies from online tasks to learning contexts without "full game" structure have shown some behavioral impact of points in terms of response speed (Attali and Arieli-Attali, 2015) and number of tasks completed (Mekler, Brühlmann et al., 2015), even though this did not necessarily mirror task performance, nor measures of intrinsic motivation or participants' subjective participation motifs.

The survey questionnaire in Table 2 showed that 90% of the pupils strongly agreed that Vocab-T allowed the teacher to act as facilitator in their learning and that they gave

positive acceptance towards using similar method of learning in the future. Vocab-T, which integrates the element of Information and Communication Technology (ICT) in the classroom setting, has impacted on the role of the teacher from the sole knowledge provider to a facilitator or moderator. Yunus et al. (2014), in their study of the future of ICT as a pedagogical tool in ESL teaching and learning, had found out that ICT has the potential to change the methods of instruction from conventional discussions into the use of online forums and other student-centered learning methods. This gradually changes the role of the teacher into facilitator to assist the students in achieving the learning objectives.

Conclusion

Based on the study, the use of Vocab-T in teaching and learning of vocabulary through reading and writing skills has proven that pupils' vocabulary mastery can be improved. For further studies, Vocab-T could also possibly be adapted to other language skills depending on its suitability.

The study has shown that Vocab-T benefits its two main users who are teachers and pupils as it has improved pupils' vocabulary mastery based on the result of the post-test. It therefore promotes meaningful learning whereby pupils can read the words and see the pictures that represent the words at the same time. Although Vocab-T does not provide a lot of vocabulary at one time, it at least provides language learners with vocabulary of different themes. Nation (n.d.) proclaims that teaching can effectively deal with only a small amount of information about a word at a time. He further added by asserting that the more complex the information is, the more likely the learners are to misinterpret it. Teacher plays a very significant role during the lesson as he rolls the Vocab-T and pronounces the words. The teacher can design and carries out various learning activities with the pupils so that the pupils experience active learning. Yunus, et al. (2011) assert that learning has to be active so that the pupils can make connections between their prior knowledge and what they are about to learn. The words and pictures are clearly and colourfully printed on the canvas work as the motivational factors to attract pupils' attention and interest.

Other than that, the study also has shown that 45 out of 50 (90%) pupils strongly agree that they will continue to learn vocabulary using Vocab-T, as shown in the satisfaction questionnaire result. It implies that Vocab-T allows the pupils to take over their own learning. After the lesson, they can roll the Vocab-T and read the words on it. To make their self-independence learning becoming more fun and catchy, they may roll the Vocab-T in different speeds based on their preferences. In addition, Vocab-T also provides pupils with numerous vocabularies as it comes with different themes. Therefore, the pupils have the opportunity to learn as much vocabulary as they are able to. It is also a great chance for the pupils to practice the vocabulary that they have learned whether in communication or reading. According to Alqahtani (2015), in order to understand the language, specifically English language, vocabulary is very important to be acquired by the learner. It is because vocabulary mastery is needed for us to express our thoughts and to be able to understand other people's sayings. The pupils would be very excited with this engaging authentic language learning tool. As a consequence, pupils' vocabulary is improved and enhanced. The worksheets given to them allow them to apply the knowledge they have gained during the lesson.

From the study, a majority of the pupils (60%) strongly agree that Vocab-T is easy to use. It shows that Vocab-T has its commercialisation potential too, where parents can purchase Vocab-T on their own to teach their children at home as extended learning. It is one of good ways to start developing children's motivation and confidence to learn. Parents play

an important role to support and build good learning attitude in their children. Their children will have plenty of time playing the Vocab-T at home. Apart from that, the orphanages, pre-schools, kindergartens, home cares and any other child organizations can use this Vocab-T to introduce vocabulary to the children. Various types of learning activities that suit children's level of proficiency and interests can be carried out. Vocab-T can be easily carried or moved because it is a portable learning tool. It is also durable because it is made from metal and high quality canvas.

The respondents for this study were selected from suburban and rural schools in Sarawak, and the study has illuminated that all of them showed positive increments in their score percentage between the pre-test and post-test. It implies that Vocab-T is designed to support both urban and rural school settings. Statistical data from the Ministry of Education (2018) has confirmed that the number of rural schools in Malaysia surpass that of urban schools. With limited access to technology and online learning software, teachers will be able to use Vocab-T as an interactive tool to teach vocabulary. Vocab-T can be assessed by both urban and rural school teachers and pupils as it does not require electrical power source to operate. In this way, 21st century learning can be adapted into teaching and learning. On the other hand, the ICT gap between urban and rural schools can be reduced.

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